A falls prevention dance programme

Evaluation of the Pilot Programme

February 2017
AmicusHorizon Housing Association and their Lansdowne Green Estate (Stockwell, London),

Jewish Care and their Redbridge Jewish Community Centre

Oxfordshire County Council Adult Social Services and their Abingdon and Banbury Health and Wellbeing Centres

Wulvern Housing Association and their Deva Point Extra Care Sheltered Housing (Chester)

Cheshire Dance

East London Dance

South East Dance

People Dancing/Foundation for Community Dance

Personal Social Service Research Unit, London School of Economics

Centre for Enterprise and Economic Development Research, Middlesex University Business School

Sidney De Haan Research Centre for Arts and Health, Canterbury Christ Church University

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Peter Sowerby Foundation

Later Life Training
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All photos are by Helen Murray. Photos of Dance to Heath sessions are used throughout. The photo on the cover is of the world première of a commission by choreographer Jennifer Irons. The performers were Dance to Health participants and Leap of Faith, East London Dance’s older people’s dance group. It took place at the Royal Festival Hall on 5 February 2016. The occasion was the first national arts in health conference and showcase for health decision-makers.
The arts can transform people’s lives and have the potential to help solve social problems and improve people’s health and wellbeing. The UK is blessed with an arts sector which is world-class and wide-reaching.

Aesop’s mission is to realise this potential to transform. We take society’s challenges as the starting point, and incubate evidence-based, cost-effective, sustainable solutions which use high quality arts. Our initial focus is on health. We are supported by a ‘Pioneer Group’ of experts and philanthropists. The experts include the Chairs of Arts Council England, Big Lottery England and NHS England, Public Health England’s Director for Health and Wellbeing and the Wellcome Trust’s Director of Culture and Society.

Aesop’s programmes

- Market development.
- Knowledge development - conferences, training, tools and policy to help the arts and other sectors work effectively together.

Achievements in 2016

**Market development:**
- Dance to Health is our first ‘aesop’ (arts enterprise with a social purpose). An aesop is an arts enterprise which responds to a major health challenge and is of consistent quality, evidence-based from a health point of view, effective, cost-effective, sustainable and scalable.
- Launch of the Aesop Marketplace (www.aesopmarketplace.org). Like an online dating site, it matches health decision-makers with relevant arts in health programmes in an attractive and time-efficient way.

**Knowledge development:**
- The first national arts in health conference and showcase for health decision-makers (Royal Festival Hall on 5 February 2016). See www.ae-sop.org homepage.
- The Aesop PHE framework for evaluating arts in health programmes. It was commissioned by Public Health England. See www.ae-sop.org/toolbox/aesop-toolbox/.
- An action learning set for 25 arts organisations already being commissioned. Eminent figures meet us – for example, Professor Martin Green, Chief Executive of Care England, and Lord Filkin, Chair of the Centre for Ageing Better.
Aesop set out to create an exemplar ‘aesop’ – an arts intervention which responds to a major health challenge and is of consistent quality, evidence-based from a health point of view, effective, cost-effective, sustainable and scalable.

The chosen major health challenge was older people’s falls and problems with some current falls prevention exercise programmes. The proposed solution, Dance to Health, smuggles evidence-based exercise programmes into creative, social and engaging dance activity.

The Pilot Programme included bridge-building between the worlds of dance and older people’s exercise, training of dance artists, six evidence-based falls prevention programmes with 196 participants, sharing/celebration events and an evaluation programme.

The key results were:

1. A 7-item checklist of required ingredients for an arts programme to be taken up by the health system and made available to every patient who could benefit.
2. The worlds of dance and older people’s exercise can be brought together.
3. Dance artists can be trained in the evidence-based falls prevention programmes.
4. Two groups were inspected for fidelity to the evidence-based programmes. Fidelity was confirmed.
5. The final programme had a waiting list and 73% of participants achieved the target of 50 hours’ attendance over the six months. The national average for completing standard falls prevention exercise programmes is 31% for primary prevention and 46% for secondary prevention.
6. Increases were achieved in dance interest and ability, group identification, relationships and reduced loneliness, functional health and wellbeing, and mental health and wellbeing. A few elements were statistically significant. These outcomes should continue to be measured as Dance to Health develops.
7. Dance to Health is capable of generating better outcomes and being associated with lower overall costs of managing falls compared to the primary prevention programme or no intervention.
8. Five principles established for involving older people: listening to participants; achieving a measurable transfer of power to participants; outcomes defined by the participants and co-produced with them; the outcomes are describable by the participants; participants are involved in assessing the achievement of outcomes.

9. Dance to Health has been codified in preparation for scaling.


11. A business model for early-stage roll-out was devised. This consists of an evidence-based ‘Improvement Programme’ which is funded by the health sector and an ongoing ‘Maintenance Programme’ which is locally sustainable.

12. Translating the evidence-based falls prevention programmes was an enjoyable challenge for dance artists. Without this it would be difficult to see Dance to Health growing; if delivering Dance to Health is boring, dance artists are likely to be reluctant to contribute.
Genesis of Dance to Health

It is a common experience for Aesop: health professionals reveal in conversation that they think of music, dance, painting and the other arts as ‘fluff’ – a nice-to-have extra, peripheral to the serious business of medicine and health improvement.

Aesop exists to challenge this, demonstrate that the arts can make a powerful contribution and realise that power.

Dance to Health was created to demonstrate that an arts intervention can address a major challenge. This prompted a key question: ‘What ingredients must an arts programme have for it to be taken up by the health system and made available to every patient who could benefit?’ Aesop developed a 7-item checklist of ingredients.

Using this checklist, Dance to Health was devised to be:

1. **A response to a major health challenge**

There is a well evidenced urgency to engage older people in exercise in order to prevent falls\(^1\). Falls are traumatic for older people and a major challenge to the health system. They are the most frequent and serious type of accident in people aged 65 plus\(^2\). 10% of ambulance calls are due to older people’s falls\(^3\). After a fall, an older person is 50% likely to have seriously impaired mobility and 10% will die within a year\(^4\). Falls destroy confidence, increase isolation and reduce independence\(^5\). They cost the NHS £2.3 billion per year\(^6\). Audits have consistently revealed patchy falls prevention exercise provision\(^7\). Every extra £1 spent on falls and bone health early intervention services would reduce NHS costs by £2.50\(^8\).

Projections suggest that the number of people aged over 85 will almost double by 2030, with 600,000 more older people developing significant care needs over this period. This means that the threats posed by elderly falls and the demands placed on public healthcare will only increase\(^9\).

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\(^1\) WHO Global Report on Falls Prevention in Older Age, Ageing and Life Course Family and Community Health, World Health Organisation, Geneva; Falls represent over half of hospital admissions for accidental injury [Don’t Mention the F-Word: Help the Aged 2005]; half of those with hip fracture never regain their former level of function and one in five dies within three months [Don’t Mention the F-Word: Help the Aged, 2005]; 50% to 70% of women will have an osteoporotic fracture at some time [Research into Ageing factsheets updated from Dementia UK, LSE, King’s College and Alzheimer’s Society, 2007].


\(^3\) Ibid. p5

\(^4\) Age UK (2013) Falls Prevention Exercise – following the evidence, London: Age UK p4

\(^5\) Ibid.


\(^7\) Ibid.

\(^8\) Ibid. p5

There are two evidence-based programmes available. They improve strength and balance and can reduce the risk of falls by as much as 55%. ‘PSI/FaME’ is suitable for ‘primary prevention’ – for people who have not had a major fall and are living independently but are relatively inactive and in danger of a major fall. It can reduce falls by 55%. The Otago Programme is suitable for ‘secondary prevention’ – for frailer people who have had several, severer falls. Otago can reduce falls by 35%.

PSI/FaME is more demanding and includes floor work and aerobic exercise. Both must be pitched at the right level, taking into account the individual’s falls history and medical conditions.

However:

- The implementation of evidence-based exercise interventions by healthcare providers is incomplete and varies widely across participating sites.
- Only 38% of services provide evidence-based exercise programmes.
- The current exercise programmes are prescriptive and repetitive, do not offer choice and are widely regarded as boring. (The Royal College of Physicians’ Clinical Falls Lead commented to Aesop that they are ‘dull as ditchwater’.)
- Adherence rates for both PSI/FaME and Otago are poor: the national average for completing standard falls prevention exercise programmes is 31% for PSI/FaME and 46% for Otago.
- Assessment at the end of the course and maintenance classes are considered vital. Without them, strength and balance improvements are lost within 12 months. There is clear evidence of the negative impact of a lack of follow-up training. There is a lack of maintenance programmes.

11. Ibid, p4
14. Royal College of Physicians (2012), Older people’s experiences of therapeutic exercise as part of a falls prevention service, London: Royal College of Physicians, p11
15. Age UK (2010), Stop falling: start saving lives and money, London: Age UK p4
18. Ibid, p11
2. **Of consistent quality**
Later Life Training undertook fidelity visits to Dance to Health sessions to check whether they were true to PSI/FaME and Otago. The role of Lead Dance Artist includes responsibility for developing and maintaining artistic quality.

3. **Evidence-based from a health point of view**
Aesop signed a Memorandum of Understanding with Later Life Training, the leading trainer of falls prevention exercise instructors. Later Life Training created a four-day course to train professional dance artists in PSI/FaME and Otago.

4. **Effective**
Standard falls prevention exercise programmes have practical problems of patchy provision, fidelity to the evidence base, recruitment, retention and maintenance. Dance to Health aimed to address these problems. PSI/FaME and Otago are embedded within dance. Aesop wanted also to study other health benefits (reduced GP visits and improved health including mental wellbeing), social benefits (reduced loneliness and increased sense of being part of a group) and artistic benefits (increased interest in dance and ability to dance). For evaluating this, Aesop partnered with the Sidney De Haan Research Centre for Arts and Health at Canterbury Christ Church University.

5. **Cost-effective**
Dance to Health needs to be worth doing (health savings are greater than the cost) and more cost-effective than existing falls prevention programmes. For evaluating this, Aesop formed a partnership with the London School of Economics and Political Science (LSE) Personal Social Services Research Unit.

6. **Sustainable**
Aesop formed partnerships with sustainable dance organisations in Arts Council England’s National Portfolio. Aesop commissioned a Middlesex University Business School report on social enterprise models for falls prevention services and a case study on Slimming World.

7. **Scalable**
(That is, capable of being rolled out so that all relevant patients can benefit) – The pilot programme included codification of Dance to Health, the Middlesex University Business School report and the creation of a business model for roll-out.
Objectives and Theory of Change for Dance to Health

This section introduces the pilot programme’s objectives and Dance to Health’s theory of change.

A. Clear rationale for the initiative
This has already been touched on in the previous section. Aesop wanted to pilot a potential exemplar ‘aesop’: a response to a major health challenge, of consistent quality, effective, cost-effective, sustainable, evidence-based and scalable. Aesop also wanted to test whether the health system could be convinced to see Dance to Health in these terms.

B. A viable pilot programme
These questions needed answers:
- Could evidence-based programmes be delivered?
- What other activities could contribute to strengthen Dance to Health’s role as an exemplar?
- How should the pilot programme be evaluated?
- Could Aesop assemble sufficient financial and human resources?
- Could suitable dance partners be identified?
- Could suitable local host partners be identified?
- How do the worlds of dance and older people’s exercise view each other? Is effective collaboration possible?
- Could professional dance artists be trained in PSI/FaME and Otago?
- What dance team is needed for delivering PSI/FaME and Otago?
- Could dance artists create dance versions of PSI/FaME and Otago?

C. Dance programmes of artistic quality and true to PSI/FaME and Otago
To capture learning from running the dance programmes, Aesop commissioned an independent evaluation from the Sidney de Haan Research Centre for Arts and Health at Canterbury Christ Church University. It ran evaluation sessions with each host partner, each dance partner and the complete dance team. It also drew out lessons on marketing, recruiting and retaining participants, and celebration programmes locally and within the first national arts in health conference and showcase for health decision-makers (presented by Aesop at the Royal Festival Hall on 5 February 2016).
D. Health, social and artistic outcomes in addition to reduced falls
The Sidney De Haan Research Centre also evaluated a range of health, social and artistic outcomes for participants. This was done through a composite questionnaire including established ways of assessing loneliness, general health, mental wellbeing and group identification (based on research showing the health benefits of group participation) and new sets of questions to assess dance interest and ability.

E. Dance to Health’s cost-effectiveness
Aesop commissioned the LSE to assess whether Dance to Health is cost-effective relative to the standard exercise versions and whether the cost of Dance to Health is more than paid for by health savings.

F. Dance to Health’s wider impact
Whilst the primary focus was on outcomes for beneficiaries, Aesop was interested to see what wider impact might be achieved: on dance partners, host partners, the dance sector and the health sector.

G. A viable business model for scaling Dance to Health
The main questions here were:
• Is it possible to create a viable business model for scaling Dance to Health?
• Is it possible to move Dance to Health straight from the pilot programme to being fully commissioned by the health system? If not, what intermediate steps are required?
• How can falls prevention services be delivered using social enterprise models?
• To what extent can Dance to Health be codified? What is the best mix of fidelity and flexibility?
Dance to Health’s theory of change

As with any theory, change must be considered when new evidence becomes available. The version here was produced at the end of the six pilots. It was greatly influenced by all the experiences and lessons learnt from the pilot programme.
Objective A
Clear Rationale for Creating Dance to Health
By the end of the pilot programme, the rationale for creating Dance to Health was clearer.

The relevance of the ‘Aesop’ ingredients
The seven ingredients listed in pages 7 to 9 remained valid. No case emerged for any ingredient to be deleted or added. All were relevant to the needs and expectations of patients and the health sector.

A natural concern for patients is availability of an effective intervention which can improve their health and wellbeing. This highlights the importance of consistency of quality and scalability. Currently no arts intervention is available to all patients who could benefit. Most developed is the Reader Organisation (www.thereader.org.uk) which is active in Liverpool and the Wirral, London, the South West, the South East, the North East, Scotland, North Wales and in criminal justice settings across the UK.

A further concern for patients is sustainability. They do not want to lose successful health programmes in their area. Many arts organisations rely on public funding. Reductions in recent years have made loss of programmes a real danger. Several regional dance organisations have ceased operating in recent years.

Cost-effectiveness is understandably important to health commissioners charged with achieving value for money. This requires health economics analysis. Aesop led the first initiative to bring together arts in health organisations and health economics. That was in 2011. Cost-effectiveness evaluations are becoming more common now but are not widespread.

Potential wider impact
The longer-term, wider impact goals of Dance to Health for the health and arts sectors were laid out. These appear in the theory of change on the previous page. Aesop believes that programmes such as Dance to Health can be a source of earned income for arts organisations. The pilot programme generated £150,000 of earned income for dance artists and dance organisations. For the health sector, the story of Dance to Health was successfully used to move health professionals’ perception of the arts from ‘fluff’ to a resource for health improvement and reducing demand for acute services and social care.
Objective B  
A Viable Pilot Programme

Introduction
The pilot programme addressed the questions:

- Could evidence-based programmes be delivered?
- What other activities could contribute to strengthen Dance to Health’s role as an exemplar?
- How should the pilot programme be evaluated?
- Could Aesop assemble sufficient financial and human resources?
- Could suitable dance partners be identified?
- Could suitable local host partners be identified?
- How do the worlds of dance and older people’s exercise view each other? Is effective collaboration possible?
- Could professional dance artists be trained in PSI/FaME and Otago?
- What dance team is needed for delivering PSI/FaME and Otago?
- Could dance artists create dance versions of PSI/FaME and Otago?

Could evidence-based programmes be delivered?
4 PSI/FaME programmes in London, Cheshire and Oxfordshire and 2 Otago programmes in Cheshire and Oxfordshire were delivered. The London programmes ran from July 2015 to February 2016, Cheshire from October 2015 to April 2016 and Oxfordshire from November 2015 to June 2016. Phasing the PSI/FaME and Otago programmes happened by chance. They proved useful as they enabled earlier lessons to be applied later.

What other activities could contribute to strengthen Dance to Health’s role as an exemplar?
Arts programmes involving members of the public often culminate in performances. These can be a valuable opportunity to present what has been achieved to family, friends and the wider public.

Two forms were piloted, both successfully.

The first was an 8-minute work commissioned from choreographer and London Lead Dance Artist, Jennifer Irons. This was produced by East London Dance and premièred at London’s Royal Festival Hall as part of Aesop’s first national arts in health conference and showcase for health decision-makers. This involved 12 participants from the two London programmes and 18 members of East London Dance’s older people’s dance group, Leap of Faith (4 of whom are also Dance to Health Peer Motivators). The performance took place in front of 450 people including the Secretary of State for Health, Chair of Arts Council England and Chair of NHS England.

The second was a joint celebration of the Abingdon PSI/FaME group and Banbury Otago group. Each performed in front of the other plus special guests.
How should the pilot programme be evaluated?

Aesop took overall responsibility for monitoring and evaluation. It saw the need for independent expertise in three areas and made the following appointments:

- Process and outcomes – the Sidney De Haan Research Centre for Arts and Health, Canterbury Christ Church University.
- Health economics – the Personal Social Service Research Unit, London School of Economics.
- Business modelling – the Centre for Enterprise and Economic Development Research, Middlesex University Business School.
- Dance Artists’ fidelity to PSI/FaME and Otago – Later Life Training.

Their contributions appear later in this document.

Aesop collected data on every participant in the PSI/FaME and Otago programmes. It conducted review sessions with each dance partner and each host partner.

Could Aesop assemble sufficient financial and human resources?

Aesop created a budget of £357,455. Income came from early adopter host partners (AmicusHorizon Housing Association and Jewish Care), Arts Council England and six charitable foundations (City Bridge Trust, Esmée Fairbairn Foundation, Garfield Weston Foundation, Guy’s and St Thomas’ Charity, Oxfordshire Community Foundation and Peter Sowerby Foundation).

Aesop appointed a full-time Dance to Health Project Manager, Karen Hamilton. She brought considerable experience of working with older people and volunteers combined with an arts degree, arts knowledge and interest.
Could suitable dance partners be identified?

Mindful of the importance of artistic quality, Aesop decided that Dance Partners must be experienced in working with older participants and part of Arts Council England’s National Portfolio (a core group of 663 arts organisations with guaranteed funding to 2018). Cheshire Dance, East London Dance and South East Dance were recruited and it was agreed with them that each would recruit a team to develop and deliver programmes, tailored to the particular needs for older people in danger of falling and consisting of:

- One Lead Dance Artist per dance organisation to lead on content development and quality assurance.
- Dance Artist for each programme to contribute to content development and lead sessions.
- Assistant Dance Artist for each programme to support the delivery of sessions.
- One/two Peer Motivators (older volunteers already involved in dance activities) to support session delivery.

Could suitable local host partners be identified?

The six partners were:

- AmicusHorizon Housing Association and their Lansdowne Green Estate (Stockwell, London),
- Age UK Cheshire and their Castle Community Centre
- Jewish Care and their Redbridge Jewish Community Centre
- Oxfordshire County Council Adult Social Services and their Abingdon and Banbury Health and Wellbeing Centres
- Wulvern Housing Association and their Deva Point Extra Care Sheltered Housing (Chester)

Criteria for Host Partners were developed. A supportive and enthusiastic Host Partner is vital for success. The following essential ingredients emerged during the pilot. The Host Partner should be an organisation with a history and reputation for working proactively with older people and involving them in decision-making. It must be trusted by older people, have a strong network of existing service users and contacts and play a lead role on recruitment of participants. It must be willing to take an active role in the development and delivery of Dance to Health. They are not just providing the space; Dance to Health cannot be “just another hirer”. They should provide a member of staff to support each session. In the case of the Host Partner providing the venue (for example a community, day or health and wellbeing centre), the project takes place on site. Although the staff member is not required to sit in on every session, they must be available should any queries or problems arise during the session.

Venue requirements were clarified:

- Clean, temperature controlled and bright.
- Non-carpeted floor preferred – ideally a sprung wooden floor.
- If carpeted, the carpet must be fitted, the surface smooth and no rugs.
- The floor must be regularly cleaned. The programmes involve activities on the floor.
- Able to accommodate a group of 12 for an Otogo programme (for guidance, 90m²) and of 20 for a PSI/FaME programme (for guidance, 150m²)
- Power socket for sound system. (Music is provided by the Dance Artist.)
- Drinking water available during sessions.
- Refreshments at the end of sessions.
- A chair available for each participant.
How do the worlds of dance and older people’s exercise view each other?

Early in the planning, the name of Professor Dawn Skelton came up several times: as creator of the PSI/FaME programme, Professor of Ageing and Health at Glasgow Caledonian University, contributor to several influential reports on falls prevention, and Assessor/Director/Tutor at Later Life Training (provider of specialist, evidence-based, effective exercise training for health and exercise professionals working with older people, frailer older people and stroke survivors). By the end of the pilot programme, Dance to Health had signed a Memorandum of Understanding with Later Life Training; liaised closely with Professor Skelton; her colleague, Dr Sheena Gawler, had trained professional dance artists in PSI/FaME and Otago; and Dance to Health had benefited from extensive advice.

It became clear that the worlds of dance and older people’s physiotherapy and exercise were different, little connected and seen by some as competitive towards each other. Differences include training and career paths, research methodology and attitudes to scientific evidence. Connections needed to be made to build mutual understanding and trust.
Is effective collaboration possible?

A bridge-building process began with a ‘Lab’ which brought together Aesop, Later Life Training tutors, Dance Partners and the dance artists they had proposed for delivering Dance to Health and the relevant members of the evaluation team (dance experts from the Sidney De Haan Research Centre for Arts and Health). The Lab was facilitated by Luke Pell (maker and curator in dance, theatre and live art) and took place at the South East Dance Studios in Hextable.

The Lab programme followed a path starting with each world presenting to the other, followed by joint discussion and practical exploration in the studio on how to translate PSI/FaME and Otago into dance, and arriving at agreement that the next step (training in PSI/FaME and Otago) should continue the Lab’s approach of ‘knowledge transfer’ and creative exploration. Key discussion points along the way included:

- Dance to Health participants using awareness of their own bodies to measure progression and feeling empowered.
- Developing choreography from everyday scenarios and gestures.
- Participants working together physically would be new to PSI/FaME and Otago.
- Body resistance from a fellow participant as a viable substitute for therabands (elastic resistance bands).
- Using everyday and imagined scenarios and gestures to encourage movement, curiosity and play, and to overcome hesitancy about dance.
- How to achieve the physical progression which is integral to PSI/FaME and Otago.

Everyone was clear that the end result must be something that looks like dance, and not some compromise between a dance programme and a physical exercise programme. The consensus was that such an end result is feasible. Questions remained, though: what it means to be ‘true’ to PSI/FaME and Otago; whether ‘doing’ PSI/FaME and Otago meant ‘looking like’ PSI/FaME and Otago. These questions are addressed on pages 25-27.
Could professional dance artists be trained in PSI/FaME and Otago?

Following the Lab, Later Life Training created a four-day training programme. Dr Sheena Gawler (Lab participant and Later Life Training Assessor/Tutor) successfully delivered this over two days in April 2015 and two in May. As well as dance artists from the three Dance Partners, an invitation was extended to DanceEast and Dance in Devon. All received an Aesop/Later Life Training certificate confirming their eligibility to deliver Dance to Health classes.

Each Dance Partner, with Aesop, was then responsible for cascading training to Assistant Dance Artists and Peer Motivators.

What dance team is needed for delivering PSI/FaME and Otago?

Discussion with dance partners established that each programme would have:

- A Lead Dance Artist responsible for programme development, dance artist support and quality assurance of the programme’s dance aspects.
- A Dance Artist responsible for leading sessions.
- An Assistant Dance Artist responsible for supporting the Dance Artist.
- One or two ‘Peer Motivators’ – older people already involved in dance who support and encourage participants, and also support the Dance Artist and Assistant Dance Artist, helping with the individual attention that participants often need.
Could dance artists create dance versions of PSI/FaME and Otago?

Later Life Training visited two groups to inspect for fidelity to PSI/FaME and Otago. Fidelity was confirmed. ‘This session was a pleasure to watch ... you have very effectively translated the evidence base into dance. Well done.’

Lead Dance Artists and Dance Artists came together in each of the three pilot regions to undertake further work on translating PSI/FaME and Otago into dance and to begin planning sessions.

As the pilots ended, Dance Artists came back together for a Review Day with Aesop and Later Life Training. All agreed on the importance of sharing the experience of delivering Dance to Health.

What a fabulous day it was on Monday. I came home refreshed and newly inspired!! It was super to see everybody and share information.' [Dance Artist]

Dance Artists learnt much throughout the programme:

• They accumulated successful methods of translating PSI/FaME and Otago into dance, drawing on the training programme and their own expertise and experience.
• They found it possible to use different dance genres.
• Music was crucial and its selection required great care.
• Participants commented that creative dance enabled them to ‘forget’ the exercise repetitions, physiotherapy elements and discomfort of pushing their bodies.
Objective C
Dance Programmes of Quality and True to PSI/FaME and Otago

Recruiting and retaining participants

Aesop set itself the challenge of recruiting willing participants, rather than relying on referrals from GPs and others in the health system.

A communications plan was commissioned. This underlined the importance of marketing materials being available well in advance of the start of sessions. There was a delay in finding a suitable marketing professional to implement the plan. An appointment was made just before the London programmes finished, during the Cheshire programmes and just as the Oxfordshire programmes began. The difference between the London and Oxfordshire programmes was marked. This was due not only to marketing input but also increased expertise in involving supportive host partners. For example, while recruitment and retention in London was challenging, the final programme (in Banbury) had a waiting list and 73% of participants achieved the target of 50 hours’ attendance over the six months. This compares very favourably with the completion rate for standard falls prevention exercise programmes.

The importance of programme-wide branding and marketing was evident as the pilots progressed. The marketing mix consisted of:

- Logo (see front cover) and design.
- A5 recruitment flyers distributed by Host Partners and Dance Partners.
- A website (www.dancetohealth.org) which includes a promotional trailer.
- A generic A4 folder plus inserts suitable for participants and potential partners, funders and commissioners.
- Pop-up stands.
- Local media (newspaper advertising, and newspaper and radio coverage – local television was targeted but not achieved).
- On-foot promotion and postering.
- Social media (Facebook and Twitter).
Involve older people in programme development

There were many opportunities to involve participants. To prepare for this, Aesop studied principles of engagement, co-design and co-production, and settled on five principles:

1. Listening to participants.
2. Achieving a measurable transfer of power to participants.
3. Outcomes defined by the participants and co-produced with them.
4. The outcomes are describable by the participants.
5. Participants are involved in assessing the achievement of outcomes.

Here are some examples of putting these into action.

The prevailing view amongst standard falls prevention exercise professionals is that falls should not be mentioned. For example, the Help the Aged 2005 report ‘Don’t Mention the F-Word’ 19 advised: ‘Rather than focusing on the risk of falls – the very mention of which can be anathema to older people – and the possible consequences, it is always better to start by stressing the benefits of improving strength and balance.’ Aesop followed this approach but found it unsatisfactory. Participants needed a convincing reason why they should follow an intensive programme of two 90-minute sessions per week. They were consulted and their view that it was patronising not to be explicit about the programme’s purpose. Falls were discussed openly and successfully.

The pilot courses also provided opportunities for involving participants in programme design and delivery. They drew on awareness of their own bodies and so felt empowered. They were able to find and use choreography in the everyday and through creative visualisation. They applied their imagination to turn the ankle weights required by Otago into beautiful anklets.

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19 Age UK/Help the Aged (2005) Don’t mention the F-word - Advice to practitioners on communicating falls prevention messages to older people, Age UK
**Developing older people’s dance practice**

Aesop asked Professor Dawn Skelton the questions left hanging at the end of the Hextable Lab: what it means to be ‘true’ to PSI/FaME and Otago, and whether ‘doing’ PSI/FaME and Otago meant ‘looking like’ PSI/FaME and Otago. She advised that being ‘true’ meant incorporating all elements of PSI/FaME and Otago, and the end result must look like dance, and not a compromise between a dance programme and a physical exercise programme. The consensus amongst dance artists is that such an end result is feasible.

The Sidney De Haan Research Centre’s report highlights several ways in which the dance and older people’s exercise connects. For example, ‘the majority of the Otago and PSI/FaME movements and exercises resonated with the dancers as routinely embodied dance movements’. It goes on to set out some of dance’s particular contributions: ‘Developing body awareness and sense of one’s balance within posture and everyday pedestrian movements are primary resources that dance might offer. The key difference and advantage of dance was its holistic approach and the potential use of creativity, imagination, group connection and music. ... The potential for using bodies as a viable substitute for therabands and weights in the resistance sections was also explored.’

**Value of Peer Motivators**

Older volunteers with some previous experience of and interest in dance were trained as Peer Motivators, their role being to support and encourage group members. Their involvement had a significant impact on the Peer Motivators themselves, the Dance Artists’ dance practice and the engagement of the participants. They talked of feeling valued and developing their own confidence and skills whilst helping others. Dance Artists valued their demonstrating how an older body moves and responds.

> ‘It’s no use a fit young dancer sitting in front of them saying ‘you can do this’, but if a volunteer who is one of their peers can do it, then they know it’s possible.’ [Dance Artist]

Some frailer participants needed one-to-one support and Peer Motivators assisted. Less frail members appreciated a more experienced Peer Motivator to follow:

> ‘You’re motivated by the people around you or the artist. You just keep going back for more.’ [Participant]
Objective D

Outcomes in Addition to Reduced Falls

Approach to reduced falls
The approach taken was to focus on fidelity to PSI/FaME and Otago. If this could be achieved, then the results in the evidence-base could be reasonably claimed: 55% in falls for PSI/FaME participants and 35% for Otago participants.

As is discussed on pages 37-40 below, collection of falls data will be introduced in the first roll-out phase when partnerships have been established with clinical commissioning groups, public health departments and falls prevention services.

Artistic, social and other health outcomes
The Sidney De Haan Research Centre’s evaluation team devised a 39-item, self-administered questionnaire for completion at base and end-points to record any changes in participant’s perceptions. This consisted of a five-item bespoke section on dance interest and ability, and five validated health and wellbeing-centred questionnaires covering group identity, social relationships and loneliness, general health, functioning health and wellbeing, and mental health. Administration of the questionnaire was complemented by qualitative evidence drawn from participant focus groups and dance artist interviews.

The total sample numbered 67 people. Out of a total number of 198 participants registered with the Dance to Health programme, just under 30% contributed to the evaluation. 43 participants completed the base-point and end-point questionnaires. 33 participants, including two day-centre managers and four dance practitioners contributed to the focus group discussions.

The results (detailed below) are encouraging with statistical significance for improvements in group identity and positive support for physical control and coordination and the ability to undertake regular activities. The findings support the need for further research on the effect of Dance to Health programmes and highlight the potential benefit of embedding dance programmes into prevention and enablement services relating to falls prevention.

The study would have benefited from a larger sample. Aesop aims to address this in Roll-Out Phase 1.

Dance interest and ability
‘Over time mean scores either remained the same or were lower indicating increased agreement with the statement. Only for the last item ‘I can control/coordinate my body’ is this change statistically significant (p0.028) showing that participants felt that the intervention enhanced their feelings of control over their movements.’ The focus groups revealed the attractiveness of dance, trepidation for some, the sense of achievement and increased confidence, and opportunities for expression and creativity. One said ‘when I started I could not stand up off a chair, now I can do it quite happily, that is one of my party pieces.’ Dance artists underlined the physically progressive aspect of the sessions and whole course.
Participant comments:

- 'You’re motivated by the people around you or the artist. And you just keep going back for more.'
- 'I love dancing round the house and I remember what I have done here. Better than sitting around and reading.'
- 'If someone said to me do you want to exercise or dance, I would say I want to dance.'
- 'It’s making us work, its making us think.'
- 'It is the best thing I ever did...walking through that door that day because it has improved my mobility so much.'
- 'It also gives you a taster. I’ve never been to the Salsa so we’ve had a taster of that. The Indian dance, where would you get a taster of that? Same with the jive I think.'
- 'I am still under the Falls Clinic and they are saying we can send you transport to come and get you and go to a place in Oxford and I am saying No! I would rather come here, I know the people, I like the people and you are doing things for falling, by walking backwards and forwards. So very good for me!!'

Participant stories:

- Frank is 94. He has always loved dancing and first started in the 1930s. At first he felt self-conscious when invited to improvise and create moves himself. Now he enjoys using his imagination and dancing in ways he has not tried before.
- Brian joined because he knew he had to keep active to stay healthy. 'Dance to Health is all new to me. It’s not like anything I’ve done in my life before. But I love it and I look forward to coming twice a week. I enjoy doing it and dancing doesn’t feel like I’m forcing myself to do exercise. I couldn’t have done what I can do now 6 months ago.'
- Following the end of the pilot in Lambeth, several members joined East London’s Leap of Faith older people’s dance group.

Dance Artist comments:

- 'The dancers [participants] were very open-minded during the creative process always inputting ideas and suggestions for the choreography.'
- 'The level of dance appreciation of participants was increased.'
- 'The confidence to improvise and express creativity was drastically increased across the life of the programme.'
- 'The complexity of the dance content that was delivered by the lead artists increased dramatically during the processes and this demonstrates the improvements and achievements of the dancers.'
- 'I have never seen a group change, develop and progress as much as this.'
**Group identification**
‘For three of the four items, correlations were significant but the values are moderate in size. Mean scores across all of the dance groups were lower at T2 [end of programme] than at T1 [start of programme] indicating increased agreement with the GIS [Group Identification Scale] positive statements. Changes on all four items were statistically significant at T1 vs T2, with the strongest changes occurring for the items ‘I’ve a sense of belonging to my group’, ‘I’ve a lot in common with my group’, and ‘I feel a bond with my dance group’.’

**Dance Artist comment:**
- ‘The group was non-judgemental. Everyone had their own goals. All were supportive of each other - they saw when each other were struggling and had respect for each other.’

The group element of Dance to Health proved to be an important factor in its success. A core group of regular participants developed in each pilot and they welcomed other members. This group dynamic was a useful tool for recruitment and retention and participants were powerful advocates of the projects.

**Relationships and loneliness**
‘With the exception of the item ‘I often have feeling of emptiness’, which shows a slight but nonsignificant rise, all other means lowered hinting towards a minor reduction in loneliness over time but no scores are of statistical significance.’

**Participant comments:**
- ‘Everyone gives you a bit of confidence.’
- ‘It’s getting out of your house, meeting new people, new faces.’
- ‘The teachers treat us well. They’re friendly. They’re very inclusive.’
- ‘My son says he sees a difference in me, because I was fast becoming the woman in the dressing gown. I didn’t go out or do very much.’
- ‘I was reluctant to give it a try at first because I was nervous about coming into a room full of strangers. But I’m so glad I did. Now when I come to Dance to Health, I am coming to see my friends.’

**Dance Artist comments:**
- ‘Social groups and relationships were formed at both centres, and between Dance to Health participants and peer motivators.’
- ‘Participants travelled to another town to check on the wellbeing of another participant who had not attended for a couple of sessions.’

Groups have continued to meet socially after the pilots finished. Abingdon participants meet weekly at the local gym. Banbury participants meet every Tuesday for coffee.

**Functional health and wellbeing**
‘Findings indicate an improvement in physical activity/energy and a slight improvement to their peace of mind over the six-month duration of the intervention.’
Mental health and wellbeing

All aspects ‘changed minimally in a positive direction but none of these changes were statistically significant.’

Participant comments and stories about general health and mental health

• ‘It makes you feel lighter. It takes the weight from wherever you’ve come from in the morning.’
• ‘Fresh mentally. Like if I stayed at home, because I’m a carer I would always find things to do but this gets me out of my caring duties for a bit. And then when I go home, my husband he says, ‘Oh you sound; you look very fresh; you look very good’, you know.’
• ‘I found that occasionally if I was to stand up and walk around I would not be wholly steady. I don’t feel that way now.’
• ‘I wasn’t keen on doing all the things here as all the time I kept thinking I was falling. Not now.’
• ‘Dance is very good for your memory coordination, stimulates you, makes you happy, more flexible.’
• ‘You train your brain through the process.’
• When Sheila joined Dance to Health, she walked with two crutches. Two months later she was down to one, and now she walks without assistance. ‘It’s all down to Dance to Health. I can feel my legs are stronger. I went to a family christening at the weekend and my relatives couldn’t believe the difference in me. My entire posture has changed.’
• I felt as though I am capable of doing more than I thought. I enjoyed it because I didn’t realise how much mobility I still had, it gives me hope. It made me feel free
• ‘It’s the first time I have laid down on the floor since I was in hospital. I didn’t think I could get up but I can and did.’
• ‘I have noticed I am finding it easier to get out of my chair at home and I care about that, it’s those things that make a difference.’
• ‘Margaret had given up driving because she had lost her confidence. Her husband drove her to the classes. She has now started driving again.’

The Sidney De Haan Research Centre’s report concluded with the following recommendations on how Aesop might develop the rigour and outcomes of further evaluation:

• Considering robust research design for example comparing PSI/FaME and Otago physiotherapy intervention with PSI/FaME and Otago creative dance intervention.
• Including in the research physical measures at base-line and end-point such as strength, mobility, balance and co-ordination.
• Increasing the size and diversity of the sample.
• Including a higher proportion of people with existing co-morbidity that negatively affects their mobility.
• Building on the multi-centre and multi-partnership nature of the current evaluation to include more, geographically spread partners to maximise local research input.
• Planning rigorous training for the dance organisations/volunteers/ people involved in helping with data collection to maximise the completion of full data sets and managing focus group sizes.
**Objective E**

**Dance to Health’s Cost-Effectiveness**

**Introduction**

Aesop ran the first programme linking arts in health to health economics. These different disciplines needed to learn how to collaborate and, looking ahead, build an evidence-base for arts in health programmes’ cost-effectiveness in health terms. The need for collaboration is more pressing today when the health system is under greater financial pressure and clinical commissioning groups, public health commissioners and health providers must find savings.

That first programme involved Professor Martin Knapp and his colleagues at the Personal Social Service Research Unit at the London School of Economics and Political Science (LSE) and it was natural to ask them to contribute to this evaluation.

**LSE Report**

A preliminary brief analysis was received in May 2016 and an economic note in October 2016. A key conclusion is: ‘In a modelling analysis Dance to Health [PSI/FaME] has the potential to be cost saving, i.e. have lower costs and better outcomes than conventional exercise programmes. Costs and engagement rates are taken from the Dance to Health evaluation.’ It is also pointed out that ‘There will be other benefits associated with participation in group based activities such as a reduction in loneliness, with benefits to mental health, which have not been included in the economic model.’

**Next steps**

Aesop recognises that further economic analysis is required, including the cost-effectiveness of the Otago programme.
Impact on the dance sector
Aesop believes that exemplar arts in health programmes such as Dance to Health can be a source of earned income for arts organisations. For example, the pilot programme alone generated £150,000 of earned income for dance artists and dance organisations.

The Dance to Health theory of change proposes one artistic impact: health commissioning becomes a viable funding stream for the arts sector. The pilot programme was not designed to test this. More relevant was Arts Council England’s separate but concurrent Cultural Commissioning Programme which was founded on the belief that, when arts and cultural organisations team up with public authorities, they can deliver better outcomes for people and communities. Learning was shared between Aesop and the Cultural Commissioning Programme, helped by Aesop’s Chief Executive serving as Vice Chair of the Cultural Commissioning Programme Advisory Group.

Impact on the dance teams
Translating PSI/FaME & Otago was an enjoyable challenge for Dance Artists. All observed developments in their knowledge and experience as the projects progressed: increased confidence; improved team work and sharing of ideas; richer understanding of working with older people; the physical development aspect, including aiming for specific health outcomes, is now part of some Dance Artists’ planning.

- ‘I push other older people’s groups much harder now than before.’
- ‘I now have a more confident approach to articulating the health benefits of what I do and being able to speak about what I do from a more informed perspective.’
- ‘It pushed my own facilitation practice. I felt enriched. Every time I went in I learned a lot. The biggest challenge was integrating the PSI/FaME and Otago into dance practice.’
- ‘I learned from the specificity of why you do a movement and the benefits – I will carry this over into other work.’

Peer Motivators reported changes too: greater respect for others’ work; greater consideration; and more aware of their own movement.

Impact on host partners
Being a new programme, Dance to Health posed challenges such as coping with staff capacity and time pressure. Nevertheless, Host Partners reported benefits. They increased their network of services and organisations. Dance to Health participants joined other activities. Interest in dance grew.
Impact on the health sector

The Dance to Health theory of change proposes five health impacts:

1. Reduced falls among participants.
2. Reduced use of health and social care services.
3. The arts are no longer seen as ‘fluff’ or ‘nice to have’ but as provider of effective and cost-effective services to health.
4. Acknowledgement that investment in preventative programmes reduces demand on acute services and care homes later.
5. Dance to Health is one of the leading services commissioned by health and social care in the area of falls prevention/frailty.

Reductions in falls can be anticipated because participants fitted the profile of people who could benefit from PSI/FaME and Otago and the evidence base advises that those who complete the minimum 50 hours are significantly less likely to fall.

Moving health professionals’ attitude to the arts from ‘fluff’ to offering effective and cost-effective services to health will be a slow process. A paper has shown that translating scientific research into patient benefit takes 17 years on average. The arts do have advantages and these were exploited in the Dance to Health pilot programme. Health professionals curious about Dance to Health could visit a session and take part. For example, the Chief Executive of West Cheshire Clinical Commissioning Group and Cheshire West and Chester Council’s Director of Public Health visited a session, took up the Dance Artist’s invitation to join in and could briefly experience dance’s ability to improve strength and balance. Another advantage is that, while watching the performance of repetitive physical exercises would be tedious, a creative, sociable, engaging dance version of PSI/FaME and Otago can easily translate into an engaging performance for an audience. This was demonstrated at the sharing and celebration in Oxfordshire when the Abingdon PSI/FaME and Banbury Otago groups came together to perform dance pieces to each other and an invited audience. This idea was taken further with an 8-minute commissioned work premièred at Aesop’s Royal Festival Hall event.

It is not possible to say that Dance to Health has encouraged health professionals to acknowledge that investment in preventative programmes reduces demand on acute services and care homes later. Nevertheless a clear message from the NHS Five Year Forward View is that prevention must grow if the health system’s financial challenges are to be addressed. This makes Dance to Health timely.

The pilot programme, and particularly the work discussed in the next section, strengthened Aesop’s belief that Dance to Health could be one of the leading services commissioned by health and social care in the area of falls prevention/frailty.

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20 Morris, Z.S., Wooding S. and Grant, J. (2011). The answer is 17 years, what is the question: understanding time lags in translational research. Journal of the Royal Society of Medicine vol. 104 no. 12 510-520
Codification

Aesop has benefited from Later Life Training’s expertise and access to its codification of training dance artists in PSI/FaME and Otago.

Codification of certain other aspects of Dance to Health is possible, and has been done. These cover the Dance to Health model, recruiting participants, training programmes, roles, requirements and selection criteria for partner organisations and individuals, venue requirements, data collection and analysis, and legal document templates. They incorporate lessons from the pilot programme. For example, data collection will in future be part of the training provided for Dance Partners and Host Partners. Also, collection of falls data will be introduced in the first roll-out phase when partnership have been established with clinical commissioning groups, public health departments and falls prevention services.

Not everything can be codified especially when the arts are involved. Aesop has adopted the principle of ‘fidelity and flexibility’. For example, Dance to Health must be faithful to the essential elements of PSI/FaME and Otago. At the same time, and as the pilot programme has revealed, fidelity to the evidence-based programmes leaves plenty of scope for creativity and different dance styles.

Objective G
Roll-Out Model for Dance to Health

Is it possible to create a viable business model for scaling Dance to Health? To what extent can Dance to Health be codified? What is the best mix of fidelity and flexibility? How can falls prevention services be delivered using social enterprise models? Aesop took two steps:
Business model
The devised model consists of an Improvement Programme which is funded by the health sector – through health commissioning, for example – and an ongoing Maintenance Programme which does not require health funding.

Improvement Programme
(The commissioned ‘treatment’): dance programme which uses the evidence-based falls prevention exercise programmes. PSI/FaME (primary prevention) reduces falls by 55% and can accommodate 20 participants. Otago (secondary prevention) reduces falls by 35% and can accommodate 12 participants. The evidence requires 50 hours over six months. Older people can be referred to the service and/or recruited by Dance to Health and its dance partners and host partners.

Maintenance Programme
A local ongoing Dance to Health group, free of health funding and part of the Dance to Health family. It receives dance, falls and organisational support from Dance to Health and local partners. Dance to Health takes responsibility for costs of set-up and transition to a sustainable group.

This work was supported by three commissioned reports, further health market research and a study of dance supply.
Two reports were commissioned: a main report on how falls prevention services can be delivered using social enterprise models and a supplementary study on Slimming World’s business model.

The main report analysed 20 cases of falls prevention social enterprise (independent organisations that are trading with a core social purpose) distinguishing between health-led, leisure- and fitness-led, and dance-led providers, between larger enterprises and self-employed/micro businesses and between different income sources (the NHS, local authorities, grant-making funders, and individual user payments).

Successful delivery of a quality service that is financially sustainable was found to require the following factors:

1. Social interaction – reducing isolation and building a community to attract people and help with retention.
2. Appropriateness of venues.
3. Addressing the issue of participant transport.
4. Recruitment through referrals and marketing.
5. The costs of assessment of potential participants is covered.
6. Balancing financial viability with maximising the attention given to clients and achieving quality health outcomes.
8. Financial reserves to accommodate delays in the payment of public contracts.
10. Responsiveness to the needs of commissioners of falls prevention services.

The Slimming World report studied this UK-based organisation which has a recognisable brand and uses a franchise model where each group leader/consultant is a franchisee working within a clear Slimming World framework. Slimming World runs NHS weight management referral schemes in 80 English local authorities with GPs referring patients for 12 weeks of group therapy. It contributes to weight management research and has NICE approval. Its website has virtual tools and support for those who cannot or chose not to attend meetings. There is a mobile app. Franchisees, called ‘consultants’, are self-employed and Slimming World graduates. They pay fees to Slimming World for central franchisor support. Above them are Senior Consultants, District Mangers and a Head office with around 250 employees.

At the time of the report being prepared, members/service users were charged £9.95 to join a group and then £4.95 per a weekly session. Company products such as magazines, branded food and recipe books are sold.
Commissioning the first UK survey of older people’s dance activities

To inform the development of Maintenance Programmes, Aesop worked with People Dancing/ Foundation for Community Dance to commission the first UK survey of older people’s dance activities and launched this on 7 November 2016 at the House of Lords. This has informed the business model. For example, the prices charged per session are mostly in the range £2.50 to £7. Financial sustainability is achievable: 90% of activities were described as ‘ongoing’ and ‘regular’.

Further health market research

While the PSI/FaME and Otago programmes were running and the Middlesex University Business School was preparing its report, Aesop studied research on adoption and diffusion of innovations in the health system and ran a consultation programme with clinical commissioning groups, public health departments, falls prevention services and senior executives in NHS England and Public Health England. At the time of writing, this work is close to completion.

Study of dance supply

Dance supply was investigated from two angles.

The first question was: ‘If health demand for Dance to Health comes from a particular part of England, is there a suitable dance organisation who could be a Dance to Health partner?’ This led to conversations with most dance organisations which are Arts Council England National Portfolio Organisations. While about 75% of England is covered, supply will need to be addressed in the other 25%.

The second question was whether dance artists would be interested in increasing delivery of Dance to Health. Fortunately, translating PSI/FaME and Otago was an enjoyable challenge for dance artists. Without this it is difficult to see Dance to Health growing; if delivering Dance to Health is boring, dance artists are likely to be reluctant to contribute.

Is it possible to move Dance to Health straight from the pilot programme to being fully commissioned by the health system? If not, what intermediate steps are required?

The move was found to be too great. Aesop decided to develop ‘Roll-Out Phase 1’ using a mixed funding model of earned income from the health sector and fundraising.