

www.nottingham.ac.uk/praised/index.aspx

PrAISED

Promoting Activity, Independence
and Stability in Early Dementia

The Promoting Activity, Independence and Stability in Early Dementia (PrAISED) research programme is a NIHR funded project that has been designed to help people with mild cognitive impairment or early stage dementia to remain healthier and more independent for longer. We have designed an activity and exercise programme consisting of a combination of exercises, activities of daily living and memory strategies to help improve and maintain individual physical and mental health.

PrAISED Discussion Paper Series

ISSN 2399-3502

Issue 1, November 2016

Dissemination and Implementation

Harling MR¹ and Gladman JRF²

Author Affiliations:

1. University of Nottingham, Division of Rehabilitation and Ageing.
2. University of Nottingham, Nottingham University Hospitals NHS Trust and CLAHRC East Midlands.

Address for Correspondence:

Dr Martyn Harling, Division of Rehabilitation and Ageing, The School Of Medicine, Queen's Medical Centre, Room B109, Nottingham, NG7 2UH. Email: m.harling@nottingham.ac.uk



'the know-do gap' is 'the chasm between what is known and what gets done – the gap from research to policy and practice – the gap from knowledge/awareness to action/behaviour change' (World Health Organisation [WHO], 2005).

INTRODUCTION

Gaps between the knowledge generated by health research and how it is translated into guidelines, policy and actions is recognised as a major challenge and referred to as the 'know-do gap' ([WHO, 2005](#)). A dissemination and implementation strategy to minimise the know-do gap is required for PrAISED, as for any applied health research.

Our strategy involves three aspects. First, it is important to identify all the new knowledge that is created by a research study, including the tacit knowledge. During a research study, the researchers become true experts in their fields and should seek opportunities to share this expertise such as through education and opinion or commentaries. Second, it is also important to disseminate outputs that the intended audiences, which means producing outputs above and beyond peer reviewed publications, and actively promoting them to the target audiences. Third, the reasons why research knowledge is often not put into practice should be considered so that the production and dissemination of outputs helps to overcome these barriers.

Before describing the specific actions we will employ in the PrAISED programme, we discuss these barriers to implementation and general principles understood to aid implementation. There is no single, consensus theory of the barriers to implementation. We have found the systematic review of emerging theories published by [Flottorp et al \(2013\)](#), who identified seven common themes across several different theories, to be helpful. In the following paragraphs we discuss the challenges facing the PrAISED programme in the light of these seven factors: guidelines; professional; professional interactions; organisational change; patient; incentives & resources; and social, political & legal factors.

BARRIERS TO IMPLEMENTATION

1 Guideline factors

This implementation factor refers partly to the evidence base itself, and also the degree to which it has been made useful. Guidelines are increasingly used in health care, and so many research findings need to

find their place in guidelines if they are to influence practice. Guidelines that might be relevant to the PrAISED programme include those for the management of dementia, the prevention of falls, and the use of exercise. For PrAISED research findings to get into such guidelines, they have to be published, and have to be of credible scientific standards to be taken notice of. Beyond this, the evidence from PrAISED needs shepherding into the minds of those writing guidelines. This is where senior clinical academics who are 'boundary spanners' working across the research and clinical interface can help. There is potentially a fine line between making people aware of research and self-promotion and marketing – but a research study is of no use if no-one is aware of it.

In PrAISED we do not interpret this implementation factor narrowly, and consider it important to mobilise all our findings, tacit and explicit, so that the widest range of potential users of the new knowledge (in terms of their roles in the delivery of health care and geographically) can do so.

2 Professional factors

There will be a range of professionals working with patients involved in the PrAISED programme including mental health nurses, physiotherapists, occupational therapists, exercise instructors and support staff. Such people need more than to understand the new knowledge and its importance, but they require the tools to put it into practice in their working lives. For this reason the intervention in PrAISED was developed to be suitable for subsequent implementation by being designed and tested in real world settings. Furthermore, a manual has been prepared that sets out the intervention in a form to be used by practitioners and other supporting material have been produced.

The production of materials alone is likely to be insufficient without activities to encourage use of these materials in teaching, staff training, and on-going CPD, and their embedding into clinical pathways. This is where the practitioners within our wider research group can help the knowledge to be applied within the local workforce and more widely, via their professional organisations and dissemination activities.

3 Professional interactions

The core of the PrAISED study is to bring together expertise in the care of people with dementia, expertise in people who fall, and expertise in exercise. It will be vital for the findings of the PrAISED study to reach all the communities engaged in these areas to establish how best each community should contribute. Thus, dementia services need to become falls aware. Falls prevention services and exercise classes have to be

dementia aware. People working in one area may need the help of those working in other areas, and so clinical pathways between different groups need to be in place. Care must be taken to encourage integrated application of the findings, and to ensure that the knowledge does not remain in one particular 'silo' community. This means targeting the outputs and activities to a wide range of communities and particularly to settings where interdisciplinary working and education takes place. It means describing the clinical pathways that are developed to implement the intervention and the steps necessary to do so and to sustain them.

4 Capacity for organisational change

One of the reasons why new knowledge does not get applied in practice is due to inflexible organisations and organisational processes. Some organisations are less open to new ideas than others. Some well-structured organisations may have processes to bring about change within them that are bureaucratic and slow. However, increasingly the NHS is expected to be flexible and nimble: quality improvement initiatives abound, and innovation is encouraged, such as through organisations such as Academic Health Sciences Networks, and similar organisations exist in other health systems to facilitate change. For this reason, the PrAISED team needs to work with such facilitative organisations and promote their findings within them. For example, to implement the PrAISED intervention for the research, key clinical leads at both Nottingham and Derby sites have been engaged in the planning and development of PrAISED. This has allowed the intervention to be integrated into existing service provision (supported by additional resources). All practitioners at both sites will have access to all documentation on the PrAISED website, thus ensuring consistency in delivery and clarity in terms of governance. Key members of the PrAISED team will be available, either through personal contact or electronic communication, in order to support the practitioners involved in the intervention. Experience gained in putting the PrAISED intervention into practice for the research will be invaluable for the preparation of putting the PrAISED intervention into subsequent more widespread practice if the findings justify this.

5 Patient factors

Sometimes the failure to put research findings into practice is related to patient and public factors. For this reason, the interventions need to be acceptable to users and have no unanticipated negative consequences. This is why qualitative work is part of the development and evaluation, and this is also why patient and public involvement in the research is essential, to mitigate such risks. An example we have already identified in PrAISED is that people with early dementia and their families may not be

interested in exercise to prevent falls as this may seem irrelevant (falls may be something that happen to other people) but they are interested in exercise to maintain or improve their health and wellbeing. Similarly, the word "frailty" which is widely used in clinical circles can be seen as pejorative amongst many older people. Both examples emphasise the importance of addressing patient factors – in this case in our use of language – to facilitate implementation.

Exercise, the intervention in PrAISED, is not something that is done to a patient. Patients need to do it themselves, and so they also need resources to support them in doing so. Thus, further to the professional information referred to earlier, PrAISED documents such as the handbook will be available in a format which enables their use by patients and carers. Brief computer based tutorials (Reusable Learning Objects [RLOs]) will also be developed in order to enable patients to practise exercises, acting as an aide memoir where required.

In terms of the public's view of PrAISED it is envisaged that the findings from the programme will be available in easy to access media such as plain language summaries on a range of traditional and social media forums. Dissemination of such material needs to be considered in terms of the most likely place for it to be accessed and used by patients and carers. Where possible links to, and from, existing the websites of established agencies (such as the [Alzheimer's Society](#)) will be established.

6 Incentives and resources

To deliver the PrAISED intervention, additional staffing resources have been required and are likely to be required if implemented thereafter. The PrAISED programme has a health economics workstream to examine the relevant costs. But further to this, it will be important to establish how the health economic findings, whatever they are, can be applied within existing systems and using current incentive mechanisms. Various incentive schemes operate in the NHS and different ones operate in other health care systems across the world: materials need to be prepared that enable these incentive systems to be exploited.

In PrAISED, the intervention will be tested within a health service system: potential patients will be identified through health care systems, and exercise will be prescribed by and initially supervised by trained health professionals. However, the vast majority of the population who do exercise are not doing so in a health context (as part of the treatment of their disease), many who do so for health reasons do this via the private sector (e.g. private physiotherapists), but most do so through the leisure industry. PrAISED will need to give consideration to the extent to which

any positive research findings could be gainfully applied through the private and leisure sectors, and the economic consequences of doing so.

7 Social, political and legal factors

Some research interventions encounter social, political or legal factors that are barriers to implementation – research on genetics, stem cells, embryos and abortion, for example. Fortunately, the intervention in PrAISED, exercise, is largely uncontentious and unfettered by significant rules or laws.

One area that could be relevant in PrAISED is the issue of risk. Increased exercise and activity could lead not only to health benefits, but harm from injury while doing it. We are aware that one way for a vulnerable person to be protected from risk is to avoid any significant challenge: people with dementia, their families and perhaps some professionals may be reluctant to support exercise at the intensity necessary to create beneficial physiological change for these reasons. The issue is made more complex in PrAISED because of the issues of the potential loss of capacity to give informed consent. In PrAISED, we expect participants to have the mental capacity to give or withhold consent at outset. But over time such capacity may be lost and this may produce a dilemma. PrAISED will be guided by the principles of the Mental Capacity Act to ensure that decisions are made in the person's best interests, and will need to produce outputs that address this issue in due course. Qualitative research will consider the issues of risk assessment and the preservation of liberty explicitly.

FACILITATION OF IMPLEMENTATION

Just as there is no single, consensus, understanding to the barrier to implantation so too is there no consensus approach to successful implementation.

We consider that successful implementation requires an understanding of how knowledge is assimilated into professional practice. Professionals working in health care draw on both explicit knowledge, such as knowledge gained from research, and tacit knowledge, knowledge gained in practice, in order to make decisions on best practice. The process is also collectively constructed, with practitioners gaining from the experience of colleagues, patients, key opinion leaders etc... ([Gabbay & le May, 2004](#)). This is why we emphasise the importance of mobilising such tacit knowledge.

We also recognise that the notion of networks is critical in understanding the diffusion of knowledge in health care settings. There are extensive theoretical perspectives relating to the composition, function and purpose of networks, which are relevant to PrAISED. Etienne Wenger developed a useful concept and method of social learning which he entitled a 'Community of Practice' [CoP]. The wider PrAISED team, comprising researchers, managers, and our patient, public and carer members, is a community of practice. The maintenance of this community of practice in terms of mutual engagement, joint enterprise and a shared repertoire will be nurtured within the PrAISED programme.

'networks are one of the key determinants of whether an innovation is successfully diffused into use. Many of the micro-processes of diffusion into a local, specific context are negotiated' Fitzgerald et al. (2002).

In addition to communities of practice, there are also 'Communities of Interest'. These are wider and often less well-defined networks of interested parties with which the community of practice engages. These include communities of practice elsewhere, research societies, professional organisations, charities, other dementia and exercise services, and the wider public. The community of interest represents our wider target groupings. Since the outputs of PrAISED outputs are intended for them, it is important to listen to their need and where possible consider the co-production of such outputs. Activities to facilitate these actions might include administrative support, a website, specific events, newsletters, and so on.

IMPLEMENTATION ACTIVITIES IN PrAISED

Taking account of the theoretical issues discussed above, our plans for the implementation of new knowledge developed in PrAISED are to optimise dissemination, the first part of knowledge mobilisation, through a process commencing immediately after publication of an output, which includes:

- updating the PrAISED website
- the targeted delivery of the paper to relevant local, national and international stakeholders and representative groups
- the production of lay summaries and their dissemination to relevant lay groups
- the development of other short knowledge summaries such as CLAHRC BITES
- the use of social media to bring our research findings into this domain of conversation
- the presentation of the findings at research, professional and other stakeholder conferences and

- the judicious use of conferences organised by the PrAISED team.

We are fortunate in PrAISED to have a research fellow with a dedicated role to support this work, but it also requires active engagement of the other researchers.

We will need to be proactive in our engagement with the wider community of interest. There will be discussions with these potential users of our research knowledge, to ascertain their needs and understanding of what PrAISED has to offer. For example, this could include discussion with exercise instructors in leisure centres who already provide exercise classes for older people, or those doing so through the voluntary and non-statutory sectors such as the Alzheimer's Society. Some of this will fall within the PrAISED research work programme (interviews, focus groups) but some of it could be through informal discussions or semiformal consultation events. Professionals and managers in dementia and falls prevention services, and other potential stakeholders such as GPs could be consulted.

To some extent, our activities may often be opportunistic. For example if we become aware of a new campaign related to dementia, health, exercise or falls, it is important for us to identify it, and engage constructively with it.

Finally, we are mindful that the implementation of the specific intervention tested in the PrAISED programme will depend upon whether the results of the eventual RCT are favorable. However, this does not mean that we should await the findings of the RCT and prepare only to implement positive findings. In PrAISED we will learn a great deal about how to perform exercise safely, how to work with people with dementia acceptably, how to sustain engagement in exercise over time and so on. Much of what we learn could be applied in practice to help the health and well-being of our patients and carers, irrespective of whether the PrAISED intervention is effective or not. By taking this stance, the PrAISED programme will be a valuable use of research funding irrespective of the findings of an eventual RCT.

BIBLIOGRAPHY

Fitzgerald, L., Ferlie, E., Wood, M. and Hawkins, C. (2002). Interlocking interactions, the diffusion of innovations in health care. *Human Relations*, 55(12), pp. 1429-1449.

<https://www.researchgate.net/publication/33041209> Interlocking Interactions The Diffusion of Innovations in Health Care

Flottorp, S., Oxman, A., Krause, J., Musila, M., Wensing, M., Godycki-Cwirko, M., Baker, R. and Eccles, M. (2013). A checklist for identifying determinants of practice: A systematic review and synthesis of frameworks and taxonomies of factors that prevent or enable improvements in healthcare professional practice. *Implementation Science*, 8(35), pp. 1-11. <http://download.springer.com/static/pdf/515/art%253A10.1186%252F1748-5908-8-35.pdf?>

Gabbay, J. and le May, A. (2004.). Evidence based guidelines or collectively constructed “mindlines?” Ethnographic study of knowledge management in primary care. *BMJ*. 329, 30 October, pp.1-5. <http://www.bmj.com/content/bmj/329/7473/1013.full.pdf>

Health Knowledge: Education, CPD and revalidation from PHAST. (2009). <http://www.healthknowledge.org.uk/public-health-textbook/organisation-management/5b-understanding-ofs/social-networks>

NICE Guidelines. (2015). Older people with social care needs and multiple long-term conditions. <https://www.nice.org.uk/guidance/ng22/resources/older-people-with-social-care-needs-and-multiple-longterm-conditions-1837328537797>

Wenger, E. (2006). Communities of practice; a brief introduction. <http://wenger-trayner.com/introduction-to-communities-of-practice/>

World Health Organisation [WHO]. (2005). Bridging the “Know-Do” Gap Meeting on Knowledge Translation in Global Health. 10–12 October 2005. http://www.who.int/kms/WHO_EIP_KMS_2006_2.pdf

There are several hyperlinks to sources of information throughout the text of this document. Click on the links highlighted in blue or copy and paste the link into your browser to gain access to the original source.

ACKNOWLEDGEMENTS

This document has been reviewed by members of the PrAISED team. John Gladman is a theme lead in CLAHRC East Midlands and grateful for members of that organisation which have shaped the views expressed in this article.

This paper presents independent research funded by the National Institute for Health Research (NIHR) under its Programme Grants for Applied Research Programme (Reference Number RP-PG-0614-20007). The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health.