The PREPARED (Primary Care Education, Pathways and Research of Dementia) Project: A Synthesis Report

By

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List of acronyms

AIIHPC	All-Ireland Institute of Hospice and Palliative Care
ASI	Alzheimer Society of Ireland
AUDGPI	Association of University Departments of General Practice in Ireland
BPSD	Behavioural and Psychological Symptoms of Dementia
CEUs	Continuing Education Units
CHO	Community Healthcare Organisation
CME	Continuing Medical Education
CMHT	Community Mental Health Team
CNE	Centres of Nurse Education
CPD	Continuing Professional Development
DCU	Dublin City University
DNNI	Dementia and Neurodegeneration Network Ireland
DSIDC	Dementia Services Information and Development Centre
ERG	Expert Reference Group
GMS	General Medical Services
GP	General Practitioner
GPACS–D	General Practitioner Attitudes and Confidence Scale for Dementia
GPCOG	General Practitioner Assessment of Cognition
HSE	Health Service Executive
ICGP	Irish College of General Practitioners
IGS	Irish Gerontological Society
IPE	Interprofessional Education
IPNA	Irish Practice Nurse Association
K-CORD	Kinsale Community Response to Dementia
MCQ	Multiple-Choice Questionnaire
NDEP	National Dementia Education Project
NDO	National Dementia Office
NDS	National Dementia Strategy
NMBI	Nursing and Midwifery Board of Ireland
NUIG	National University of Ireland, Galway
OTs	Occupations Therapists
PCTs	Primary Care Teams
PHN	Public Health Nurse
PREPARED	Primary Care Education, Pathways and Research of Dementia
QUB	Queen's University Belfast
RCGP	Royal College of General Practitioners
S&LT	Speech and Language Therapists
SAPC	Society for Academic Primary Care
TCD	Trinity College Dublin
UCC	University College Cork
UK	United Kingdom
UL	University of Limerick
WHO	World Health Organization

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Executive Summary

As part of the implementation of the Irish National Dementia Strategy, the HSE in May 2015 provided grant funding of €1.2m (50% part contribution from The Atlantic Philanthropies) to UCC for the PREPARED project to be undertaken over a three-year period. PREPARED is a GP-led project, which focused on two broad strands of work: (1) developing and delivering a range of dementia educational programmes for GPs and other primary care professionals, and related guidance and resource materials; and (2) research and evaluation.

The research undertaken by PREPARED was valuable and much needed. The research identified a strong desire among GPs for dementia-specific education and most expressed a preference for peer-facilitated, small group workshops. A study on the educational needs of GPs which included the perspectives of people with dementia, identified five distinct areas to be covered in dementia education for GPs: diagnosis, disclosure, signposting, counselling and managing BPSD. Research was carried out on the management of BPSD including a qualitative study and a systematic review on GPs' knowledge, attitudes and experiences of managing BPSD. A survey on knowledge and attitudes of GPs' identification and management of pain in people with dementia was also undertaken. Research was undertaken by an expert reference group to assist with the development of interprofessional workshops. The report revealed that a robust scientific approach has been adopted in the PREPARED project.

Dementia education for GPs was a mainstay of the PREPARED project. Three specific educational programmes, taking three different approaches, were developed for GPs:

- the ICGP Dementia eLearning Programme for GPs, developed by PREPARED in partnership with the ICGP;
- the Dementia in General Practice Workshop programme, delivered by trained peer facilitators, either at small group workshops organised by the PREPARED facilitators, or at ICGP CME small group meetings;
- the UCC postgraduate CPD module for GPs: Dementia in Primary Care, is university-based and accredited blended learning module.

The ICGP Dementia eLearning Programme for GPs builds on an online GP training programme previously developed by K-CORD and funded by Dementia Elevator. It provides current and practical information for GPs, presented in ten online lessons, each comprising a video presentation approximately ten minutes long. A range of supplementary learning resources are available for each lesson. Since November 2018, 599 users have accessed the online programme, mostly GPs, around a quarter of whom have successfully completed the programme. Feedback on the programme is anecdotal but reported to be positive.

The Dementia Care in General Practice workshop programme comprises two short complementary workshops: Workshop 1 on Timely Diagnosis and Post-diagnostic Care, and Workshop 2 on Managing Behavioural and Psychological Symptoms of Dementia in Primary Care. The interactive face-to-face workshops were delivered by ten trained peer facilitators. CPD credits were used to incentivise GPs to attend the workshops. The workshops were delivered to approximately 500 GPs, represented about 20% of the 2,500 GPs in the country. Responses to workshops were overall extremely positive, with GPs reporting that it had improved their knowledge and confidence of diagnosis and managing dementia.

Additional funding has not been allocated for the future delivery of the Dementia in Primary Care workshop Programme to GP practices. However, the programme is listed under the GP CME scheme, but its delivery is at the discretion of the tutors.

The UCC postgraduate CPD module in dementia for GPs working in primary care was designed in 2017 as a bespoke module for general practice, with an intake of approximately 20 GPs per year. It is a blended module and All aspects of the module were rated very positively by participants. Attitudes of GPs towards dementia were positive. Noticeable increase in scores on confidence suggest that the module helped to improve the GPs' confidence levels in their abilities with respect to dementia.

A separate programme, Dementia in Primary Care: An Interprofessional Approach, was developed for primary care professionals. Initially planned for delivery to distinct, practising PCTs, it evolved into a programme for primary care professionals more generally who may or may not be linked into a PCT. The programme consists of a three-hour, peer-facilitated, practice focused workshop, designed around a case study. A core principle underpinning this programme is interprofessional education and collaborative practice. Primary care professionals are incentivised to attend using CPD credits. From 2018, the NDO has facilitated the ongoing delivery of the interprofessional workshops to around 500 primary care professionals across the country, using a train-the-trainers approach. Data available shows that response to the workshops was overwhelmingly positive.

Guidance and resource materials have been developed by PREPARED. These include a website, http://dementiapathways.ie/, to support GP decision-making, and a suite of electronic dementia audit tools, which are available on GP practice management software systems. A guide to clinical audit for dementia care in primary care has also been produced.

Stakeholders spoke very highly of the PREPARED project. They highlighted the value of the different educational programmes, which they wanted to see continue. They considered a range of issues including programme acceptability, accessibility, flexibility, usability, reach, effectiveness, capacity to deliver, and costs as well as issues related to programme ownership, maintenance and coherence of standards and quality.

Evaluation undertaken by PREPARED of the educational programmes was largely confined to the reactions of participants to the programme, and responses were overwhelmingly positive. In the absence of any other evaluation, this report assessed the programmes delivered according to an existing framework of desirable components and found that the Dementia Care in General Practice workshops and the Dementia in Primary Care Interprofessional workshops had many of the features and the blended learning module has all the features of effective dementia educational programmes. Evaluation on the outcomes and impact of the various dementia educational programmes remains to be undertaken.

The work of the PREPARED team has been extensive and hugely successful and the PREPARED project has clearly delivered on its core aims and objectives. While the project is now complete, the urgent need to train and educate larger numbers of GPs and other primary care professionals in dementia care continues. The quality and efficacy of this training is of upmost important.

Recommendations

- There is an urgent need to train and educate larger numbers of GPs and other primary care professionals in dementia care. There is a need for this training to be ongoing and provided on a more regular basis as educational needs are likely to change over time.
- A coordinated effort involving all relevant stakeholders is required if key issues are to be addressed and barriers to the development and delivery of dementia education programmes for primary care professionals effectively managed.
- The Department of Health in consultation with the National Dementia Monitoring Group should convene a small working group to consider the different options that are available and develop a coherent and strategic plan on the future direction of dementia education and training for primary care professionals, which takes account of the findings from this synthesis report. It is recommended that this plan is a coproduction, co-produced with relevant key stakeholders.
- More evidence is needed on the use and impact of the ICGP eLearning Programme on Diagnosis and Management of Dementia. Given the importance of interaction for learning, future iterations of this programme could give more attention to ways of providing meaningful interaction for participants, if resources are available.
- Funding needs to be allocated for the future delivery of the Dementia in General Practice Workshops programme to GPs.
- The adoption of Dementia in General Practice Workshops programme at all 14 GP training programmes across the country is worth further consideration.
- Dementia training needs to be embedded in the undergraduate and postgraduate training of all medical doctors, nurses, allied health professionals and social care staff.
- Progress on reaching targets set for training of primary care professionals in dementia care needs to be monitored. Where targets are set, care must to taken to ensure that this does not lead to an overemphasis on ‘volume’ trained. The quality and efficacy of the dementia education and training is of utmost importance.
- Ongoing monitoring by the HSE of the adoption and reach of the interprofessional programme is needed, but this needs to be supplemented with evaluation to assess the quality of delivery and outcomes and impact of the programme. Consideration could be given by the HSE to augmenting interprofessional training with service innovation, which could be tested in the nine CHN demonstrator sites that the HSE is establishing.
- Funding is needed for research to evaluate dementia educational programmes. Mixed methods studies using evaluations informed by evaluation models grounded in systems or complexity theory are likely to be best suited for measuring change and impact.
- The provision of dementia training that is both interprofessional and dementia-specific is needed.
- The inclusion of dementia as an illness under the Department of Heath’s policy framework on chronic disease management could help to sustain and build upon the important work undertaken to date by PREPARED.

1. Introduction

This is a report on the PREPARED project, a national dementia research and education initiative which aimed to develop, deliver and evaluate training and education interventions for GPs and other primary care professionals. Funding of €1.2m was granted by the Health Services Executive (HSE) in May 2015 (50% part contribution from The Atlantic Philanthropies) to UCC for the PREPARED project to be undertaken over a three-year period, as part of the implementation of the Irish National Dementia Strategy. At the outset of the project, it was agreed between the HSE and UCC that an independent external evaluation of the overall PREPARED project would be carried out.

The main aims of the external evaluation of the PREPARED project were to:

- Provide an overview of the context within which the project was delivered
- Provide a summary of key findings from the research undertaken as part of the project
- Provide an overview of the PREPARED project and its various programmes and resources, to include information on design and development of the different project components, how they were implemented and adopted, who they were delivered to and how, and what were the outcomes of the project.
- Identify key challenges in designing, developing and delivering the different project components
- Examine the extent to which the PREPARED programmes have been sustained.
- Summarise the key lessons learned from the project and the implications for the future development, delivery and evaluation of dementia education and training programmes for professional in primary care in the Irish context

In planning the evaluation, the following considerations were taken into account. First, through the work of the project, a large amount of information, evidence and knowledge has been generated, much of which had been documented and published, but was dispersed across articles published in a range of peer-reviewed journals and an array of grey literature (e.g. reports, guides, conference papers and poster presentations). Furthermore, the 'tacit' knowledge of the project lead and team gained through the 'doing' remained to be documented.

Second, the project team encountered challenges in developing and implementing the planned set of project components. This is to be expected as the components were being developed and implemented in a highly complex primary care system undergoing reform, itself situated in the wider and equally complex health and social care system, notwithstanding that dementia itself is a highly complex condition. As a consequence, the project and each of its component activities proved to be dynamic, with the project team adapting the planned activities on an ongoing basis. As efforts were being made to develop and implement project components, there was a requirement for these same components to evolve in response to the primary care system into which it was being delivered and arising from interactions with primary care professionals and relevant stakeholder organisations. There has been acknowledged implicitly by the HSE, and with agreement from the NDO, some revision and refocusing of these activities naturally occurred as the project was rolled out. There is learning and lessons to be gained from the 'doing' of this work.

Third, given the level of research and evaluation already undertaken as part of the project, a key consideration was how an external evaluation could be most useful in adding to what already exists. A particular concern, given that dementia is one of the leading societal challenges, was to make the findings and learnings from the project available to better inform the future planning, delivery and evaluation of dementia education and training programmes for primary care professionals, taking into account the Irish context in which such programmes are being planned, delivered and evaluated.

For the purposes of this report, the following tasks were undertaken:

- A review of relevant policy documents and international literature
- A review of publications related to the project, including journal articles, project reports, conference presentations, poster presentations, etc.
- A range of education and training materials (e.g. workshop guides, online e-learning programmes, project website) that have been produced as part of the project were viewed.
- Compilation and analysis of the output and feedback data on the various education and training programmes collected for the PREPARED project
- Group and individual interviews with the project lead and other team members, to get a better understanding of how the project has worked. Interviews with a small number of other key stakeholders were conducted to get their perspective
- Compilation and synthesis of information from all of the above resources

In summary, this report provides an overview of the PREPARED project. The main strand of work undertaken by the project team focused on designing, developing and delivering a range of education and training programmes on dementia for primary care, as well as related guidance and resource materials. A second related strand of work focused on research and evaluation. This report provides an account of both strands of work. It also seeks to contextualise the PREPARED project. It compiles and synthesises the information available on the project from a range of sources. The work has been undertaken with the intention of bringing the available information on the project together in one report, and presenting and discussing the findings in such a way that it will stimulate debate about the training of health professionals in primary care on dementia in Ireland, and inform decisions about the future directions that this might take.

2. Background and Context

This chapter provides a succinct overview of the primary care system in Ireland, and the role of primary care in dementia care, in which the PREPARED project is located. It describes how policy on dementia education and training for GPs and other primary care professionals has evolved and the factors that have paved the way for the PREPARED project. It identifies key issues for consideration when developing education and training to improve dementia care and what the international research tells us about what effective dementia education and training looks like.

2.1 The primary care system in Ireland

Primary care can be defined as first-contact, continuous, comprehensive, coordinated care provided to the entire population (Starfield, 1994), including people with dementia, and is viewed as a cornerstone of health care (WHO, 2008). Historically, primary care has been a neglected and poorly resourced sector. From the 1980s onwards the significance of primary care in Ireland began to increase. It was not, however, until the publication of Primary Health Care: A New Direction (Department of Health and Children, 2001) that a clear policy statement for reforming and modernising primary care was articulated. It proposed to create interdisciplinary primary healthcare teams (PCTs) that would be made up of GPs, nurses, physiotherapists, occupational therapists (OTs), social workers, healthcare assistants and home helps, who would work out of one location and serve a population of between 3,000 and 7,000 people. A wider network of complementary professionals including speech and language therapists (S&LTs) would be available to support the PCTs in a given geographical area (Dukelow and Considine, 2017). The implementation of the 2001 policy has been beset by problems and reforms envisaged slow to happen, so much so that primary care today remains largely fragmented and under-resourced (Kelly, Garvey and Palcic, 2016). By 2014, 485 PCTs were in operation (HSE, 2015). However, primary care currently consists mainly of self-employed GPs and largely fragmented networks of health professionals (Dukelow and Considine, 2017). Despite the advantages associated with PCTs, many are poorly functioning (O'Riordan, 2011). There are currently about 2,500 GPs in Ireland, working in single practices, group practices, primary care centres, and health centres around Ireland,[1] but there are a range of barriers to GPs' involvement in PCTs (O'Riordan, 2011).

In 2017, the "Sláintecare" report, which sets out a high-level policy roadmap for health care reform, was published (Oireachtas Committee on the Future of Healthcare, 2017). This roadmap has two key aims. The first is the phased introduction of universal health care. The second is the reorientation of the health system towards 'integrated primary and community care', which includes a restructuring of primary and community care services. Under Sláintecare, the 'fundamental unit of organisation for the delivery of services' will be Community Healthcare Networks (CHNs), geographically-based units delivering services to an average population of 50,000. It is envisaged that each CHO will have between eight and 14 CHNs, with a total of 96 CHNs. When implemented, the CHNs are expected to lead to a coordinated multidisciplinary approach to care provision, providing better outcomes for people requiring services and supports both within and across networks. However, the complexity and challenges involved in moving towards effective coordination should not be underestimated (Browne, 1992). The particular difficulties for integration in primary care

[1] https://www.hse.ie/eng/services/list/2/gp/.

arising from the independent status of GPs in Ireland have long been recognised (Ruddle et al., 1998). This is significant as coordination and integration around the needs of the patient/family has been identified as an important attribute of high-performing primary care. Others are active patient engagement in care, relational continuity with a trusted primary care provider, and comprehensive whole-person centred care (Spenceley et al., 2015). The latter is particularly pertinent given the emphasis in the Irish National Dementia Strategy (NDS) on personhood (Department of Health, 2014).

2.2 The role of primary care in dementia care

Primary care services are essential services in the provision of care to people with dementia. The majority of people with dementia live in the community and, for most, their health care needs can be met in primary care (Burke, 2009). Timely assessment and diagnosis, fundamental to the improvement of services for people with dementia, is an area where GPs play a distinctive role, as most people first present their symptoms of dementia to their GP. Communicating the diagnosis with dignity is also part of their role. After diagnosis GPs continue to play a central role in the ongoing management of the person's care, including providing information and advice, and supporting the person and their family including where there are responsive behaviours (Moore et al., 2018). The GP's involvement will often continue for many years after the diagnosis has been made. Although sometimes overlooked, GPs usually play a vital role in long-stay residential care settings, where the majority of residents are people with dementia, and where they are sometimes supported by specialists. While primary care services have centred around GP services, a wide range of primary care professionals engage with people with dementia including most often PHNs, but also OTs, physiotherapists, S&LTs, dieticians, and social workers. GPs may act as a gateway to and collaborate with these primary care professionals to plan and deliver services and supports needed. Caring for people with dementia requires a multi-professional, collaborative approach and no one professional can provide comprehensive care independently (Moore et al., 2018). Primary care professionals play a similar role in many other chronic health conditions. How well the diagnosis is made and disclosed and the quality of care that people with dementia receive post-diagnosis from primary care professionals depends to an extent on how well GPs and other professionals are informed and trained.

2.2 The path to the PREPARED project

The need to have primary care professionals trained in dementia care can be traced in Irish social policy to The Years Ahead Report (Working Party on Services for the Elderly, 1988), which emphasised the role of GPs and PHNs in case finding and screening for dementia. Finding that screening for dementia was not carried out uniformly across the country, Ruddle et al. (1998) recommended that a training programme to achieve this should be organised, identifying the ICGP and An Bord Altranais as appropriate bodies for developing the training.

While most GPs appreciate the value of making a diagnosis, it is not straightforward and most find it challenging. The capacity of GPs and challenges they face in detecting and diagnosing dementia was highlighted in An Action Plan for Dementia, as was the lack of attention afforded to training (O'Shea and O'Reilly, 1999). The Action Plan concluded that GPs need to have knowledge about dementia itself, understand the need for cognitive assessment, have knowledge of the assessment process, and of the reasons for seeking

specialist assessment. It also concluded that GPs need an awareness of carer stress and a route to sources of help. It recommended 'information and training for GPs to facilitate and encourage the early diagnosis of dementia', to be allocated with an estimated budget at that time of IR£0.6m (O'Shea and O'Reilly, 1999: 130). It recommended that clinical standards and competencies for early diagnosis of dementia should be developed. However, no major improvements in dementia education and training followed for GPs and it would be another 15 years before clinical standards for GPs would be developed. Education and practical skills training for other primary care professionals were included among the main priorities identified by the Action Plan. In particular, dementia-specific training for PHNs on dementia detection and assessment was highlighted. The need for developing greater collaboration between GPs and community nurses was identified, an acknowledgement that education on its own may not be sufficient to improve dementia care (O'Shea and O'Reilly, 1999).

The case for dementia education and training for GPs was strengthened by empirical Irish research. A survey of 300 GPs revealed that the vast majority (90%) had never undergone dementia-specific training, but most expressed a desire for it (Cahill et al., 2006). The main barriers to dementia diagnosis facing GPs identified were difficulties differentiating normal age from dementia, lack of confidence, and concerns expressed by more than one quarter of GPs about the impact of the diagnosis on the patient. The proportion of GPs who reported that they never or rarely disclosed a diagnosis (41%) was far greater than the proportion who often or always disclosed a dementia diagnosis (19%). The most frequent reason given for non-disclosure was a perception that the person would not have the ability to comprehend the information. Key elements to be covered in dementia education programmes included assisting GPs to differentiate symptoms of dementia from those of mild cognitive impairment, and age-related memory problems; and equipping GPs with strategies for communicating news of a dementia diagnosis to the person and family caregivers (Cahill et al., 2006).

In a related article, Cahill et al. (2008) reported on the attitudes and practices of GPs in Ireland in relation to dementia diagnosis, highlighting some of the more challenging aspects of GP practice. GPs identified themselves as being most frequently responsible for late presentation and diagnosis of dementia. Reasons given for delays included lack of confidence, lack of time, 'therapeutic nihilism', lack of education and personal responsibility. Indeed, a small minority of GPs saw no value whatsoever in early diagnosis. Long-standing relationships between the GP and patient, and stigma associated with dementia were also identified as barriers by rural GPs participating in focus groups, who additionally reported that they believed GP training to be insufficient (Cahill et al., 2008). Cahill et al. (2008) identified other critical areas to be addressed including changing ideologies and practices, eradicating professional nihilism, improving skills in medication reviews, managing Behavioural & Psychological Symptoms of Dementia (BPSD) and referral to outside services, areas that are complex and take time to address.

The limited opportunities for dementia education in Ireland had around this time been recognised by the HSE, which identified a 'tremendous need for a national dementia education programme in Ireland, spanning all care groups and areas of work' (de Siún and Manning, 2012: 8). Funding was granted for the National Dementia Education Project (NDEP), a three-year project, commencing in 2008 to develop and implement a person-centred education programme for staff caring for people with dementia in acute, mental health, residential and community settings. Overall the programme was found to have

provided an excellent model for improving staff knowledge, attitudes and care practices for dementia in Ireland. However, while the training spanned a range of health care settings, it was focused on a narrow subset of professional disciplines, i.e., nurses and care attendants. One-fifth of participants in the pilot programmes were community nurses (de Siún and Manning, 2010).

Investment by The Atlantic Philanthropies, particularly from 2011, could be heralded as the beginnings of a transformation in the area of dementia care in Ireland (O'Shea and Carney, 2017). Central to initial investment was the report Creating Excellence in Dementia Care (Cahill et al., 2012), which highlighted that, despite the known benefits of an early dementia diagnosis, less than optimum dementia diagnostic practices continued to be the norm, and developments in relation to dementia-specific training for GPs were minimal. Echoing An Action Plan for Dementia, the report identified dementia education and practical skills training for primary care professionals as a priority (Cahill et al., 2012).

Between 2012 and 2015, The Atlantic Philanthropies invested €10m in a range of projects with co-investment from the HSE of €6m (O'Shea and Carney, 2017). This included investment for the first phase of the HSE & Genio Dementia Programme (Genio, 2016). Kinsale Community Response to Dementia (K-CORD), a primary care-based project led by Dr Tony Foley, was one of four projects selected for inclusion in this programme. Dementia education was one of the project's organising themes. The project successfully generated a heightened focus on dementia among PCTs involved. The development of dementia registers[2] in local GPs practices was another significant achievement (O'Shea and Murphy, 2014). O'Shea and Murphy (2014), however, questioned whether there were enough influences from outside the PCT sphere on different ways of thinking about dementia care, particularly in relation to psychosocial interventions.

> 'It is not enough to simply know more about dementia. We have to know more about the personhood aspects of dementia and what that implies for connectivity at all levels of society from the personal to the public' (O'Shea and Murphy, 2014).

Through his work in K-Cord, Dr Tony Foley was invited to help develop dementia-specific reference material for GPs. The dementia reference guide for general practice (Foley and Swanwick, 2014) was issued in July 2014, by the ICGP. It was developed to provide an overview of current guidelines and clinical evidence in the management of dementia in general practice. These guidelines and their inclusion in the National Continuing Medical Education (CME) programme for GPs was identified by O'Shea and Murphy (2014) as a significant step in focusing the attention of GPs on dementia.

Another discrete project in which The Atlantic Philanthropies invested was the Dementia Elevator Project, an educational programme aimed at upskilling health and social care professionals including GPs, and other frontline workers. A bespoke GP training programme, covering diagnosis, disclosure, treatment (medical and social), carer support, ethical and legal issues, therapeutic communication for dementia and formulation of person-centred care, was identified as a priority by the project (Irving et al., 2014). K-CORD was funded to develop the GP training programme, in collaboration with the ICGP, as an online dementia

[2] An electronic tool to enable GPs to easily identify people with a diagnosis of dementia in the GP practice.

eLearning course, comprising two modules. Between May 2015 and August 2018 423 GPs accessed Module 1 and 266 accessed Module 2.[3]

While the K-CORD project was significant in paving the way for the PREPARED project, the NDS provided the impetus at a policy level along with funding. In line with many national dementia strategies (Alzheimer Europe, 2018), 'Training and education' was set as a priority area of action of the NDS, with the following stated objectives:

- all staff, including those in primary care, would receive ongoing training to ensure that they have the necessary skills (including communication skills) and competencies to provide high quality, person-centred care and support; training that is specific to individual professional groups and supported by relevant professional bodies;
- educational material developed to be informed by the experiences of people with dementia and their carers; and
- training and educational programmes to be evaluated to ensure that training leads to a change in attitudes, practice and quality of life.

GP education and training was singled out for mention. After highlighting the role that GPs play for people with dementia in primary care, the Strategy states that: 'Accordingly, GPs should be facilitated and supported to develop the specific knowledge and skills needed to effectively cater for patients presenting with dementia or possible dementia' (Department of Health, 2014: 31). Making the dementia-specific reference material available to broaden the skills base of GPs was included as a priority objective of the NDS. The HSE was given responsibility for encouraging and facilitating training and education. However, no targets were set for the numbers to be trained.

The NDS is underpinned by the dual principles of personhood and citizenship. Their inclusion has been described by Hennelly and O'Shea (2017) as a major breakthrough in the effort to develop a counter-frame to the traditional biomedical model that has dominated dementia care in Ireland. By embedding these principles in dementia policy, the NDS commits to seeing 'the person' in every individual irrespective of how advanced the dementia is and to ensuring that the person remains central to how dementia care services are developed, designed and delivered (Hennelly and O'Shea, 2017). This includes dementia care services in primary care. It has implications for the development and delivery of dementia education programmes, which must follow the principle of person-centred care, and indeed the evaluation of such programmes.

Following the publication of the NDS, The Atlantic Philanthropies provided funding for the implementation of key elements of the NDS (O'Shea and Carney, 2017), considered vital for ensuring that action followed quickly after the publication of the Strategy (O'Shea et al., 2017). The total funding allocated to dementia was €27.5 million, €12 million of which was provided by The Atlantic Philanthropies, with the rest from matched funding by the Department of Health. Of the total funding, €1.2 million was allocated for primary care, used to grant fund the PREPARED project to implement actions focusing on GP and primary care professional training (O'Shea and Carney, 2017). Three other areas were allocated funding: Health and Well-Being (€2.7 million), Intensive Home Care Packages (€22.1 million) and

[3] Communication from the PREPARED project, 17.04.2019.

€1.5 million for the establishment of the National Dementia Office to support the implementation of the NDS.

2.3 Dementia training and education in primary care: What works?

Dementia educational programmes for GPs and other primary care professionals are heterogenous (Perry et al., 2011; Surr et al., 2017; Jackson et al., 2016). At a minimum, clinical guidelines on dementia care can be regarded as a simple educational approach, but beyond this there are a wide range of different approaches / modes of training from which to choose. These include online learning programmes, practice-based workshops, and decision support software (Turner et al, 2003). One of the many decisions when developing, designing and commissioning dementia education for primary care professionals is the approach to be taken, and whether to offer the course wholly face-to-face, as a blended course, or wholly online. In making such decisions, it is useful to consider the potential reach of different programmes, but their quality and efficacy is always of utmost importance. In England, there is an emphasis on improving dementia education and training and on developing 'a clear evidence base for what works in dementia training for health and social care professionals, which can be used to develop smarter education and training programmes' (Department of Health, 2015: 38). This brings us to the question of what is the evidence for what works in dementia education?

Several studies (e.g. Downs et al., 2006a; Vollmar et al., 2007; Wilcock, 2013; Chodosh et al., 2006; Rondeau et al., 2008; Waldorff et al., 2003) provide evidence on the effectiveness of individual dementia educational programmes for primary care. Systematic reviews seek to provide a high level of evidence on effectiveness. In a systematic review on the effectiveness of dementia educational programmes on primary dementia care, Perry et al. (2011) found moderately positive effects of dementia educational interventions on the diagnosis and management of dementia, based on five studies identified for inclusion. The review showed that dementia educational programmes are more effective when they require active learning from participants. Koch and Iliffe (2011) conducted a narrative review of studies reporting on dementia educational interventions and service innovations designed to improve the performance of primary care professionals in the early detection and management of dementia in primary care. They found that only facilitated small group learning and decision-support software were effective in improving GPs' diagnosis of dementia. Both reviews emphasise that educational intervention alone leads to modest changes and there is a need to augment educational interventions with service innovation through organisational change and restructuring healthcare systems to improve dementia care and achieve best outcomes for people with dementia and their families (Perry et al, 2011; Koch and Iliffe, 2011).

It is not always possible for systematic reviews to draw definitive conclusions, because educational programmes are often sketchily described, there is much variation between programmes and some studies are of poor quality (Koch and Iliffe, 2011). A particularly useful review of the evidence by Surr et al. (2017) helps us get beyond the impasse of systematic reviews. In undertaking the review, the authors aimed to identify factors associated with effective dementia education and training for the health and social care workforce so as to draw out the implications for those involved in dementia education. The review was concerned not just with primary care, but all health and social care sectors. As with other systematic reviews, this study found limitations with existing research.

Nevertheless, it succeeded in identifying a number of key features that seem to exist in effective dementia education and training (see Box 1), features that are useful for consideration when designing dementia education programmes (Surr et al.,2017). For facilitated small group learning to be effective, it also highlighted the need for skilled trainers and identified the qualities required of facilitators, including their ability to tailor training to individual groups (Sur et al., 2017).

Box 1 Key features for effective dementia education and training for health and social care workforce

Training / education most likely to be effective:

- Is relevant to role, experience and practice of learners rather than a one-size-fits-all training program.
- Includes active participation
- Underpins practice-based learning with theoretical or knowledge-based content
- Ensures that experiential and simulation-based learning includes adequate time for debriefing and discussion
- Is delivered by an experienced trainer/facilitator who is able to adapt to the needs of the group
- Does not involve reading written materials (paper or Web-based) or in-service learning as the sole teaching method
- Is of a total duration of 8+ hours with individual training sessions of at least 90 minutes.
- Includes active, small or large group face-to-face learning either alone or in addition to another learning approach
- Includes learning activities that support the application of training into practice
- Provides staff with a structured tool, method or practice guidelines to underpin care practice

Surr et al. (2017)

When developing dementia education and training, a consideration is whether to provide discipline-specific education, interprofessional education (IPE) or a combination of both. Integrated services and supports is a priority area of and is emphasised in the NDS (Department of Health, 2014: 24). The need for integrated care pathways is also highlighted. A long-held definition of IPE is health professionals learning about, from and with each other to enhance collaboration and improve health outcomes. The WHO has stressed the importance of IPE in developing a health workforce. However, there are differing views, with some arguing that IPE cannot be a replacement for education specific to each profession. McPherson, Headrick and Moss (2001: ii50) suggest that 'IPE is not to have everyone learn the same things, but rather to learn to understand and capitalise on the different competencies various professions bring to patient care'.

2.4 Training requirements for GPs, nurses and allied health professionals

A contextual issue that adds another layer of complexity when developing dementia education and training programmes for primary care professionals is the statutory and regularly requirements for the professional development of various professions, and the role and influence of the differing bodies responsible for overseeing this. As of 2011, GPs (and other doctors) are legally required to maintain their professional competence by enrolling in a professional competence scheme. The new system creates a formal process for the engagement of GPs in continuing professional development (CPD). The ICGP is the body

responsible for overseeing the professional development of GPs and operates a professional competence scheme for GPs under arrangement with the Irish Medical Council. The annual requirement is for one clinical/practice audit and 50 CPD credits, which must be obtained through personal learning, internal practice evaluation and development, and external learning through, for example, participation in CME small group meetings, or attendance at conferences. There is no requirement for the clinical/practice audit or engagement in CPD to focus on dementia. The Nursing and Midwifery Board of Ireland (NMBI) plays a pivotal role in the education of nurses in Ireland. It approves CPD courses run in a variety of settings as well as online courses. Nurses who complete approved CPD courses can earn Continuing Education Units (CEUs). CORU, a relative newcomer, is a multi-profession health regulator. OTs, physiotherapists, S&LTs and social workers are among the professions it currently regulates. A key aspect of CORU's role is setting, promoting and enforcing high standards of professional education, training and competence, including by ensuring that registered professionals keep their professional knowledge and skills up to date through CPD.

2.5 Summary

The PREPARED project is situated in primary care in Ireland with its own unique primary care system and attending complexities. Endeavours to reform primary care and the wider health system have been long-running and are continuing. Primary care services, which play a pivotal role in dementia diagnosis and care, have centred around GP services, alongside which, there are a wide range of primary care professionals including nurses, OTs and physiotherapists supporting the ongoing care of people with dementia. How well the diagnosis is made and disclosed and the quality of care that people with dementia receive post-diagnosis depends to an extent on how well GPs and the other primary care professionals are informed and trained. There have been calls for dementia training and education of GPs and PHNs for many years. The form that this education and training should take has become more clearly defined over time and calls has been made to extend training to include other primary care professionals. The development of such training has however been slow to materialise and change has been incremental. Joint funding from The Atlantic Philanthropies and the HSE for the PREPARED project under the NDS implementation plan provided a unique opportunity for change in this area to take place. In developing and planning dementia education for primary care professionals, it is important to give consideration to what is needed to make dementia education effective, to attend to the complexities of providing IPE and to contextual issues. The next chapter outlines the dementia education and training programmes that were developed and delivered by the PREPARED project with the funding that was made available.

3. The PREPARED Project

The PREPARED project is a GP-led project, based in the Department of General Practice at UCC. It is led by Dr Tony Foley, an experienced and practising GP with a specialist interest in dementia, and a lecturer in general practice at UCC. It is supported by GPs, researchers and a project manager working in the Department of General Practice at UCC. The agreement made under the grant funding from the HSE stipulated the range of activities to be undertaken by the PREPARED project. The project was predicated on an extensive and ambitious range of nine key activities, which are inter-linked and relate to four key areas:

- Clinical guidelines on dementia for general practice;
- Design and delivery of dementia education and training for general practitioners (GPs), and primary care teams (PCTs);
- The use of IT to support GP decision-making; and
- Development of local dementia care pathways.

These four areas could be considered to fall within a broad strand of work focused on developing and delivering a range of dementia educational programmes, and related guidance and resource materials. PREPARED proposed to underpin all of this work with research and evaluation to provide an evidence base that could be used for future policy and service development. Accordingly, a second strand of the project focused on research and evaluation. This strand included research to address key gaps in the literature and inform the development of the educational programmes and resources for strand one. There was also a focus on evaluating the impact of the core activities (i.e. education, IT, and engagement).
A weakness of the NDS is that it lacked an explicit consideration of outcomes, including in relation to dementia education and training, making it difficult for those implementing the strategy to interpret what exactly is required to effect change (O'Shea et al., 2017: 21). However, post the publication of the Strategy, two outcomes were agreed for the PREPARED project, both of which focused on health care outcomes at the patient level:

- Patients receive optimal, evidence-based, dementia care in General Practice by GPs who are up-skilled to assess, diagnose, and care for patients with dementia and who are empowered by clear, accessible dementia care pathways.
- Patients receive an integrated, collaborative dementia care response from a prepared, proactive Primary Care Team

These outcomes were agreed before the establishment of the NDO, which when established was given responsibility for addressing implementation and outcomes in respect of the NDS. The NDO and the NDS Implementation Board monitored the outputs from PREPARED.

This chapter summarises the research that was undertaken to inform the development of the various PREPARED education and training programmes and to address gaps identified in the literature (Section 3.1). Section 3.2 provides a simple classification of the programmes developed, followed by a brief description of each of the programmes developed and information on their delivery. Information on the reach of programmes is provided and findings from programme evaluations undertaken by PREPARED are summarised. The resources developed for GPs and other primary care-based health professionals are described in Section 3.3. The final section of this chapter summarises the key issues identified from a small number of interviews with stakeholders (Section 3.4). While this chapter focuses on the core activities of PREPARED, it is important to note that the

PREPARED team have been active on many other fronts with a view to making a positive impact on policy and practice relating to dementia in primary care, details of which are included in Appendix 1.

3.1 Research to inform the development of PREPARED education programmes

A large volume of research was undertaken by the PREPARED team to guide and inform the dementia training materials and their mode of delivery.

The dementia educational programmes for GPs are a mainstay of the PREPARED project. Much of the research to inform the development of the education programmes focused, at least initially, on dementia education for GPs. This was driven in part by research for an MD thesis undertaken by Dr Foley, which was completed as part of the PREPARED project, and focused on the design, development and evaluation of an educational intervention to improve dementia care in general practice. A PhD thesis by Dr Aisling Jennings was also completed during the project. This focused on reviewing the management of BPSD in general practice and the development of an education intervention for GPs.

3.1.1 GPs' desire for dementia education and preferred mode of delivery

From the research undertaken, the PREPARED project identified a strong desire among GPs for dementia-specific training, reflecting findings from earlier Irish research (Cahill et al., 2006; Cahill et al., 2008). All 15 GPs participating in a qualitative study expressed a desire for further dementia education and training (Foley et al., 2017a). The majority (81%) of the 95 GPs/GP trainees responding to an online survey, carried out under the auspices of the PREPARED project, had never received dementia-specific training, but welcomed an opportunity for training (Dyer et al., 2018).

Having established that GPs continued to have a strong desire for dementia education, the PREPARED team turned their attention to the mode of delivery for the programmes, a topic covered in several of the studies conducted by the PREPARED team. The PREPARED team took into consideration the findings from existing research regarding effective modes of delivery, but was also aware of the importance of listening to GPs about what they wanted, as had been stressed by Cahill et al. (2006). When asked about their preferred mode of delivery, most of the GPs participating in a qualitative study expressed a preference for small group workshops, facilitated by a peer, although some GPs favoured online learning with desktop guidelines for dementia care readily available. GPs felt that sessions delivered in their own practice would encourage attendance and that a one-hour session would be feasible for most GPs (Foley et al., 2017a). GPs' preference for small group workshops was also evident in the findings from the survey of 95 GPs and GP trainees. Over half stated a preference for face-to-face workshops or seminars, although one-fifth opted for having a paper-based or online guideline. A smaller minority expressed a preference for eLearning, with some preferring a webinar format and others a lecture format (Dyer, 2018). The finding that small group workshops are the preferred mode of delivery of most GPs coincides with findings from a recent survey of GPs in Ireland which revealed that the involvement of GPs in small group education has increased substantially over the past 30 years. The survey found that in 2015, the majority (88%) of GPs were involved in small group medical education, up from 41% in 1982, with most reporting that CME meets their educational needs, although this varied by age and gender (O'Kelly et al., 2016).

3.1.2 The educational needs of GPs

To inform the development of its primary care dementia education programmes, the PREPARED team set about to undertake a study to assess the educational needs of GPs (Foley et al., 2017a). In designing this study, the team took cognisance of the Thampy's work (2013) which highlighted the importance of triangulating evidence on the educational needs of GPs from multiple sources. They wanted to include people with dementia and family carers as a key source for the following reasons. The team were aware of the impact of the condition on both the person with dementia and their family carers, and the important role that people with dementia play in self-care and the family carers in supporting the person with dementia. The importance of including accounts of people with dementia and family carers when developing dementia educational programmes had previously been highlighted by the Dementia Elevator project (Irving et al., 2014). Research in the UK has shown that family carers accounts can provide very useful insights into their experiences of general practice and levels of satisfaction with GPs (Downs et al., 2006b). It also met one of the objectives of the NDS, which is the development of educational material for health and social care professionals informed by the experiences of people with dementia and their carers (Department of Health, 2014).

The PREPARED team found little research on the educational needs of GPs that incorporated the perspective of people with dementia and family carers and sought to address this gap in their study on the educational needs of GPs (Foley et al., 2017a). A qualitative approach was adopted, which involved one-to-one interviews with 14 GPs, five people with dementia and 12 family carers (Foley et al., 2017a). Whereas GPs highlighted dementia as a highly complex condition in their interviews, and the challenges it presents, family carers expressed concern about GPs' lack of knowledge about dementia. Based on the interviews with GPs, family carers and people with dementia, the study identified five distinct areas to be covered in dementia education for GPs: diagnosis, disclosure, signposting, counselling and managing BPSD, areas highlighted as important by other studies on the educational needs of GPs.

Following the identification of an initial list of 42 topics – under the five headings of diagnosis, disclosure, signposting, counselling and managing BPSD - from the qualitative interviews with GPs, people with dementia and family carer, an e-Delphi consensus study was conducted with clinical experts in dementia (GPs with a specialist interest in care of older people, geriatrician, neurologist and old age psychiatrists) for the purpose of ranking the topics according to their clinical importance and relevance to general practice. Consensus was reached in the first round to include 28 topics, six topics were excluded, and five new topics were added to the list. Consensus was reached in the second round to include nine and exclude three of the remaining topics. In total, 37 topics were identified as essential for the dementia curriculum (Chang et al., 2017).

The educational needs assessment identified areas of concern for GPs in the area of diagnosis. These included differentiating between mild cognitive impairment and dementia, the protracted nature of the diagnostic process, and challenges in using cognitive screening tools. Both GPs and family carers wanted GPs to be trained in how to sensitively disclose a dementia diagnosis to patients, and GPs also wanted guidance on when to disclose a

dementia diagnosis (Foley et al., 2017a). The online survey of 95 GPs and GP trainees shed further light on the current practices of GPs in Ireland with respect to the detection and diagnosis of dementia (Dyer et al., 2017; Dyer et al., 2018). It identified other aspects for dementia training of GPs. The important role that family members play in bringing signs of cognitive impairment to the attention of GPs was highlighted. The survey revealed that in their initial assessments for cognitive impairment the vast majority of GPs take a detailed history and use an appropriate diagnostic screening tool, although the use of GPCOG, devised specifically for use in GP practice, was rare (Dyer et al., 2018). The vast majority also obtain an informant history, which they rate as very useful in their clinical assessment of cognition. GPs reported the informant history is readily available and rarely refused and that the environment of the general practice was well suited for obtaining informant histories. However, only a tiny number used a structured tool (e.g. the informant section of the GPCOG) to guide the informant history. Moreover, few had received training in obtaining information histories and the majority responded that they would welcome training in this area (Dyer et al., 2017).

With respect to signposting, the qualitative study found that directing people with dementia and their family carers to primary care health professionals was viewed as important by family carers and GPs (Foley et al., 2017a). Family carers also pointed to the value to them of supports such as day care, home support and respite care. However, the study found that many GPs are not directing people with dementia and family carers to appropriate health professionals and community supports, largely due to uncertainty about where and how to access them. GPs recognised the emotional and psychological support needs that people with dementia may need following a diagnosis of dementia, while family carers believed counselling skills should be a priority area for GP dementia-specific training. GPs were well aware of the stress that caring for a person with dementia can place on family carers, but the support role that GPs played for families was described by family carers as limited, and they would like to see GPs play a more proactive role in supporting family carers.

3.1.3 GPs and management of BPSD

A major challenge highlighted by GPs in the qualitative study was management of patients with dementia who have BPSD. The GPs largely saw their role as prescribers of medications to manage BPSD, and wanted more education and guidelines around prescribing psychotropic medication. In contrast, family carers were more interested in GPs having a role in guiding family carers towards non-pharmacological approaches to managing BPSD (Foley et al., 2017a). Although the GPs highlighted the management of BPSD as a particularly challenging aspect of dementia, little is known about GPs experiences of this matter or what impact their experiences have on the care that GPs provide to patients with BPSD. To address this gap, further research led by Aisling Jennings was carried out on this topic for the PREPARED project. This included a qualitative study with a purposively selected sample of GPs (Jennings et al., 2018a). As with the earlier qualitative study, the main concerns raised by GPs in this study focused on medication as a response to managing BPSD. These included the absence of clinical guidelines and difficulty accessing clinical advice to guide GPs on making prescribing decisions, and the reliance on sedative drugs largely attributed to inadequate resources. They also reported difficulty in managing the expectations of family carers and nursing home staff (Jennings et al. 2018a).

A mixed-methods systematic review was undertaken on GPs' knowledge, attitudes and experiences of the management of BPSD (Jennings et al., 2018b), to 'establish a thorough understanding of the existing problem', as a first step in the design of an educational programme on the management of BPSD for GPs (Jennings et al., 2018c: 1164). Eleven studies conducted between 1995 and 2017 were included, four of which were qualitative studies, six quantitative and one a mixed-methods study. Three overarching themes were identified from the review. These were unmet primary care needs, justification of anti-psychotic prescribing, and the pivotal role of families. In addition to these themes, Jennings et al. (2018c) discerned noticeable shifts in the focus of the studies over the 22-year period covered. Whereas the initial focus was on finding the right psychotropic to use, over time the focus first turned to questioning whether psychotropic medications should be used, and then to studies calling for the use of psychotropic medication to stop. In parallel, the focus on non-pharmacological approach was increasingly emphasised over time.

GPs' knowledge and self-efficacy were covered in the systematic review under the unmet primary care theme (Jennings et al., 2018c). Consistent with the findings from the Irish qualitative study (Jennings et al., 2018a) previously mentioned, the review found that GPs considered BPSD to be difficult to deal with and doubted that GPs had sufficient knowledge and skills to diagnose and manage BPSD. In particular, GPs' knowledge on prescribing psychotropic medication was questioned, and poor knowledge was seen as a major factor contributing to GPs' lack of confidence when prescribing such medication. While some GPs were knowledgeable about both pharmacological and non-pharmacological approaches, most lacked knowledge of and confidence to recommend non-pharmacological approaches. GPs wanted to be able to access advice from experts about BPSD, but were hindered in doing so by waiting lists, and often felt isolated. Those who knew who to approach for advice experienced difficulties accessing other health professionals, and wanted improved communication and collaboration between different health professionals. The time-intensive nature of assessing and managing BPSD and supporting family carers in the busy general practice environment was also identified as an issue (Jennings et al., 2018c).

The systematic review identified reasons why GPs prescribe anti-psychotic medication. Primarily, it was believed that anti-psychotic medication enabled nursing home staff, community care staff and family carers manage and cope better with the 'behaviours' of people with dementia. Some GPs erroneously believed that anti-psychotic medication positively impacts on the person's quality of life, and underplayed or overlooked the harmful effects. These perceptions together with concern that 'challenging behaviours' would return meant that GPs were often reluctant to discontinue the medication. Another finding was that GPs, especially less experienced GPs, could easily succumb to pressure from nursing home staff to prescribe anti-psychotic medication and use it rather than non-pharmacological approaches as a first line of treatment for nursing home residents. Where GPs did recommend non-pharmacological approaches as a first resort in nursing home settings, their adoption and implementation depended to a large extent on the readiness of nursing home staff. The prescription of anti-psychotic medication by GPs was also found to be linked to their role as prescribers of medication, with GPs disclosing that, unlike the use of non-pharmacological approaches, writing a prescription was the 'easy', normal and often expected thing for GPs to do (Jennings et al., 2018c).

The systematic review also revealed perspectives of and interactions between GPs and family carers as being critical in the management of BPSD, especially when the person with dementia was living at home. GPs talked about attending and responding to distressed families, some of whom may put pressure on GPs to prescribe anti-psychotic medication. A view held by some GPs was that the responsibility for managing BPSD lay with families, and not GPs. Some GPs, however, recognised that the distress shown by family carers was an indication of their support needs. GPs highlighted the importance of community supports for family carers, but either such supports did not exist, GPs did not know how to access them or sometimes believed that linking people in with community supports was not within their remit (Jennings et al., 2018c).

3.1.4 GPs' assessment and management of pain

Given GPs' pivotal role in assessing and managing pain in people with dementia, the PREPARED project conducted a postal survey to explore the knowledge and attitudes of GPs in Ireland to the identification and management of pain in people with dementia (Jennings, Linehan and Foley, 2018). A total of 157 GPs responded to a survey questionnaire, adapted by the PREPARED team for use with GPs. The overwhelming majority of respondents agreed that the presence of dementia can make pain difficult to assess. The majority agreed that observing behavioural and physiological indicators of pain and getting informant reports were important. Most, however, believed that a person with dementia could not provide an accurate self-report of pain, suggesting that GPs are not attempting to elicit a self-report from the person with dementia. With regard to the management of pain, among the GPs surveyed, there was some uncertainty regarding the use of analgesics with patients with dementia for the treatment of pain and much uncertainty about the use of opioids. The authors highlight the need to focus on pain assessment and management in educational programmes for GPs and the importance of interprofessional education in this area (Jennings, Linehan and Foley, 2018).

3.1.5 Research to inform interprofessional education

While the educational needs of GPs was the initial focus of research undertaken by the PREPARED team, the overall aim of the project was to develop dementia education for GPs and for PCTs. This is in keeping with the objective of the NDS that all staff, including those in primary care, would receive ongoing training to ensure that they have the necessary skills (including communication skills) and competencies to provide high quality, person-centred care and support. Dementia education and training can also be used as a tool for reforming primary care, and from the outset, the need to develop interprofessional education to support collaborative care for people with dementia living in the community was a focus of the project, although the form that this took changed over time, which is explained in more detail in Section 3.2.6. For this part of the project, an interprofessional dementia workshop for primary care was developed by the PREPARED team in collaboration with an experienced Clinical Nurse Specialist in dementia (Foley et al., 2017c; Jennings et al., 2018d). To assist with the development of this programme, an expert reference group (ERG) comprising a PHN, OT, physiotherapist, dementia clinical nurse specialist and two GPs was established. This group used the findings from the educational needs analysis with GPs (Foley et al., 2017b). They undertook additional educational needs analysis, which involved each member of the ERG reviewing the literature on dementia education needs and consulting with their peers. A consensus meeting was held at which the ERG used the information gathered to

identify core themes for the workshop, the educational approach to be taken and the desired training outcomes. The four core themes identified were knowledge, with a focus on diagnosis; professional roles and responsibilities, particularly post-diagnosis; team collaboration; and interprofessional communication skills, particularly in advanced care planning. There was consensus among the ERG that small group learning with a focus on case-based discussions would be most beneficial for PCTs, and, therefore, clinical case studies and vignettes were incorporated into the workshop design. Four desired outcomes of the workshops were identified: improved knowledge, improved skills, behaviour change, collaborative care (Jennings et al., 2018d).

3.1.6 Dementia care educational needs of physiotherapists

The PREPARED team posited that in addition to the need for IPE, health professionals in primary care from different disciplinary backgrounds may have unique educational needs. One such group are physiotherapists. Given the paucity of research from the perspective of physiotherapists that explores their role in dementia care and whether or not they have specific educational needs, Foley et al. (2018) conducted a qualitative study involving six semi-structured focus group interviews with 35 physiotherapists, purposively sampled from hospital and primary care. The study aimed to get a better understanding of their clinical experiences and educational needs around dementia care. The physiotherapists described a large dementia-related workload, but only a minority had received dementia education either at undergraduate or postgraduate level and many expressed a desire to receive further dementia education. Areas of particular education needs identified by physiotherapists are falls prevention, fracture rehabilitation, cognitive screening tools, communication techniques and the roles of other allied health professionals. The study concluded that in light of increasing prevalence of dementia, and the central role that physiotherapists play in collaborative, multidisciplinary dementia care, dementia education tailored to physiotherapists should be developed and implemented (Foley et al, 2018). However, a formal dementia educational programme for physiotherapists has not yet been developed.

3.1.7 Research to inform development of dementia educational resources

The research undertaken by PREPARED also highlighted the need for dementia educational programmes to be supported by a range of resources (Jennings et al., 2018c). This is consistent with a view that education is an important but not sufficient component on its own, that a multi-pronged approach to dementia education is needed (Perry et al., 2011; Koch and Iliffe, 2011), and practical resources are needed to underpin care practice. Developing practical resources was an important element of the PREPARED project, and these too were informed by evidence from research. One example is the development of an online resource, www.dementiapathways.ie, which was informed by the educational needs analysis (Foley et al., 2017a) and was developed with two distinct components, i.e. educational content and resources, and a directory of locally based services and supports (Jennings, Boyle and Foley, 2018). Another example is production of a guide to assist in the clinical audit of dementia care. As part of the formal process of CPD, GPs are required to conduct one clinical/practice audit annually. The PREPARED project wanted to support GPs to audit their care to people with dementia against evidence-based criteria including those published by the ICGP (Foley and Swanwick, 2014). To this end, a rapid review of the literature was undertaken with a view to synthesising the knowledge from existing international research (McLoughlin et al., 2016), the findings from which were used to inform the development of a

guide to clinical audit of dementia care in general practice (McLoughlin et al., 2017). The resources developed are described in more detail in Section 3.3.

The next section focuses on the different dementia education and training programmes developed by PREPARED. Although produced prior to the PREPARED project, a brief description of the ICGP Dementia Reference Guide for General Practice is included, as it formed a basis for and an important component of each of the GP education and training programmes.

3.2 PREPARED dementia education and training programmes

The findings from the various studies summarised above were used by the PREPARED team to inform the design and development of a range of educational programmes for GPs and primary care professionals, which are described in more detail in this section. Figure 1 presents a simple classification of the PREPARED training and education programmes, according to the professions targeted and their primary mode of delivery. While the programmes are presented as distinct programmes, there are some overlaps between them, for example, informed by findings from educational needs analysis.

Figure 1: Classification of PREPARED Continuing Professional Development programmes

Mode of delivery / Professions	E-learning modules	Facilitated Workshops		Blended learning modules
GPs / GP practices	Online Dementia e-learning Module for GPs	Dementia in General Practice – Peer Facilitated Workshops	Dementia in General Practice – CME Small Group Meetings	UCC Blended Learning PG Dementia in General Practice CPD Module
Interprofessional		Dementia in Primary Care – An Interprofessional Approach		
Allied Health Professionals in Primary Care	Online Dementia e-learning Module for OTs Online Dementia e-learning Module for S&LT (in development)			

Specific programmes were developed by PREPARED for GPs. Three approaches were taken. The first was the development of a wholly web-based Dementia eLearning Programme for GPs, developed by PREPARED in partnership with the ICGP. It built on earlier iterations of the two eLearning modules for GPs developed by K-CORD with funding from the Dementia Elevator project. The second was the development of the Dementia in General Practice Workshop programme, delivered by trained peer facilitators, either at workshops organised by the PREPARED facilitators, or at small group meetings as part of

the ICGP CME scheme. The third was the UCC postgraduate CPD module for GPs: Dementia in Primary Care, which can be distinguished from the other two programmes in that it is a blended learning module (combining electronic and online learning with traditional face-to-face teaching), and is university-based and accredited.

A separate programme, Dementia in Primary Care: An Interprofessional Approach, was developed for allied health professionals in primary care. Initially planned to be a programme delivered by trained facilitators to distinct, practising PCTs, it evolved into a programme for primary care professionals more generally who may or may not be linked into a PCT. Two dementia eLearning modules for specific disciplines, OTs and S&LTs are currently being developed as a collaboration between PREPARED, the DSIDC and the NDO.

3.2.1 Use of IGCP Dementia Reference Guide for General Practice

Clinical practice guidelines[4] are considered to be central to the implementation of evidence-based medicine. Dementia practice guidelines are an important tool to assist in the evidence-based diagnosis and management of dementia. Clinical guidelines can also be regarded as a simple educational approach. The availability and dissemination of clinical guidelines does not guarantee that the recommendations will be implemented in general practice and guidelines do necessarily bring about behavioural change. However, using clinical guidelines as a basis for further professional education and training can form part of a strategy aimed at improving their implementation. This was the approach adopted by the PREPARED project. It used the Dementia Reference Guide for General Practice, produced in partnership with the ICGP (Foley and Swanwick, 2014), as a basis for and an important component of each of its GP dementia educational programmes. It made the guidelines available as a resource in the online education programme and on the dementiapathways.ie website. A survey of 95 GPs found that they were very welcoming of the dementia reference guide for general practice (Dyer, 2018). However, the PREPARED project did not examine if the educational programme led to greater adherence of GPs to the recommendations in the dementia clinical guidelines.

This original ICGP Dementia Reference Guide for General Practice has been revised and considerably updated. The updated Reference Guide was issued in April 2019 (Foley, Jennings and Swanwick, 2019). It places a greater emphasis on the roles of PCT members and new sections have been added, e.g. Dementia & driving, Dementia & Down Syndrome and De-prescribing in advanced dementia. Input from the PREPARED project and its team informed the update. The updated Reference Guide is available from the dementiapathways.ie website.[5]

3.2.2 ICGP eLearning Programme on Diagnosis and Management of Dementia in Primary Care

Development and description of the programme

A new web-based eLearning Programme on Diagnosis and Management of Dementia in Primary Care was developed by the PREPARED project team and the ICGP. This programme builds on the online GP training programme that had originally been developed

[4] A clinical practice guideline is defined by the Institute of Medicine as statements that include recommendations intended to optimise patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options (Ngo et al 2015). https://academic.oup.com/ageing/article/44/1/25/2812354.

[5] http://dementiapathways.ie/_filecache/e74/e54/839-dementia_qrg_15th_april_2019-1.pdf

by K-CORD and funded by the Dementia Elevator project. The original eLearning programme comprised two modules with four lessons in each.

Initially, the PREPARED project intended to extend the original programme by adding an additional two lessons. Working in collaboration with the ICGP, a medical educator experienced in developing online training for GPs was engaged to create the two add-on lessons. Following a review of the existing modules by PREPARED, ICGP and the medical educator, it was decided to create a new online programme by reworking and upcycling the existing modules. This decision was taken to make the programme 'fit for purpose' and to take account of findings from the research undertaken for the PREPARED project and address issues that GPs had identified as areas of learning needs and barriers to care including difficulties in making and disclosing a diagnosis, problems with management of BPSD, and difficulty with sensitive legal and end-of-life matters. The upcycling of the programme involved a process of reusing parts of the original programme such as the content, script, voice-overs, images and video footage and incorporating them into a new extended programme. Some of the existing script was edited to better fit with the new programme. New script was prepared, and some additional voice-overs were recorded and extra filming was undertaken. Working closely with the PREPARED team (who, with their expert knowledge of dementia, of general practice and the evidence from research, acted as the content experts), the medical expert created the online programme, and pulled the various elements of the programme together. Other experts were brought in, as required, e.g., a legal expert to prepare the content for the module on legal issues, and a palliative care physician to speak about dementia palliative care. Using an iterative process, the modules were edited and changed by the medical educator and PREPARED team as input and feedback were provided by clinical experts.

This programme provides current and practical information for GPs. The new programme is presented in ten separate online lessons (see Box 2), which follow the patient-journey from diagnosis, through advancing dementia and the associated challenges, to palliative care, addressing all aspects of dementia care – including diagnosis and management, the challenges posed by BPSD, and sensitive legal issues, nursing homes and palliative care. Each lesson comprises a video presentation conveying key learning points and is approximately ten minutes long.

Box 2: The 10 lessons of the ICGP web-based eLearning Programme on Diagnosis and Management of Dementia in Primary Care

Background, Aetiology & Prevention
How to Make the Diagnosis (Supplementary video in Lesson 2 – Disclosure)
Post-Diagnosis Care
The Role of PCT/Allied Healthcare Professionals
Pharmacotherapy
Behavioural and Psychological Symptoms of Dementia
Legal Issues
Continuing to Drive
Nursing Home Care
Palliative Care

In developing the online modules, it was recognised that the knowledge and skills being imparted to users is complex and hard to teach using an online format. To try to overcome this, the information was broken down into practical chunks, and supplementary resources were included. Additional videos are included in the Supplementary Resources section of each lesson, of experienced GPs and other clinicians speaking to camera about complex issues such as stopping driving, or using role play to demonstrate important skills such as disclosing a diagnosis of dementia in a sensitive and person-centred manner. A great amount of other supporting material accompanies each lesson including reading material, useful links, practical advice and tools, patient or carer-centered material, and audit suggestions and guidance. While the lessons are short, it is likely that viewing and reading through all of the supplementary information and resources would be quite time-consuming.

GPs can access this eLearning programme through the ICGPs website which requires registration and login with ICGP membership credentials. The content of the programme is also available to practice nurses through the IPNA website. Assessment by way of a summative Multiple-Choice Questionnaire is included for CPD purposes. Successful completion of this programme (via summative MCQ) allows for 10 CPD credits.

The key Dimensions of ICGP eLearning Programme on Diagnosis and Management of Dementia in Primary Care are summarised in Table 13.

The programme went live in November 2018, and since then 599 users have accessed the online programme, the vast majority (96%) of whom were GPs. Of the users, 167 (28%) successfully completed the MCQ and received a certificate of completion.[6] Therefore, of the approximately 2,500 GPs in the country, 23% have accessed the online programme and 7% have completed it. Feedback on the programme is reported to be positive but is anecdotal.

Since it is the largest of all the eLearning modules on offer by the ICGP, it has been given the title of a programme to distinguish it from the smaller eLearning modules on other topics. The Dementia eLearning programme will continue to be included on the IGCP's wider eLearning programme and can be accessed by registered GPs through its website and by registered practice nurses through the IPNA website.

3.2.3 Dementia in General Practice Programme – Facilitated Workshops for GP practices

Description of the Workshops

Informed by the findings from the educational needs analysis and evidence from international research, the Dementia Care in General Practice workshop programme was designed as face-to-face workshops, to be delivered across the country by experienced and trained peer facilitators to small groups of GPs and other practice staff from a single practice or from neighbouring practices. The content covered five distinct areas, delivered in two short complementary workshops: Workshop 1 on Timely Diagnosis and Post-diagnostic Care, and Workshop 2 on Managing Behavioural and Psychological Symptoms of Dementia in Primary Care. The workshops were designed as short workshops each lasting between 60 and 90 minutes. Following the principles of adult learning theory, the workshops

[6] Personal communication from Niamh Killeen, ICGP, 14.06.2019.

incorporated practice relevant clinical scenarios, which were used to encourage participants to interact, reflect and adopt a problem-solving approach (Foley et al., 2017b).

To support the delivery of these workshops, a train-the-trainers approach was adopted. Experienced GPs were recruited and trained by members of the PREPARED team as facilitators to run the workshops across the country. A guide and workshop materials were developed for the GP facilitators (Foley and Jennings, 2016). These included PowerPoint (PPT) presentation slide images, notes to support facilitators, and detailed references and explanatory notes. The workshops were delivered by the ten trained facilitators from across the country, nine of whom were GPs, including two GPs attached to the PREPARED project, and one a consultant in old age psychiatry with an interest in dementia and links with services for people with dementia in the community. The facilitators generally delivered both Workshops 1 and 2, but one facilitator opted to deliver Workshop 1 only. A similar 'train the trainer' model was adopted for the delivery of the interprofessional workshops for primary care professionals across the country (see Section 3.2.6).

A range of approaches were used to identify GP practices for the delivery of the workshops. Most often, the PREPARED team identified GP practices and sent out letters of invitation. They tended to target the geographical areas surrounding the location of facilitators. Larger GP training practices were also targeted, as it was suspected that the uptake by these practices and numbers attending might be higher. Individual GPs used their local contacts, mainly colleagues and / or groups of practices with whom they collaborated to recruit further practices for training. GP training programmes were also identified and targeted for the delivery of the programme to GP registrars.[7]

CPD credits were used to incentivise GPs to attend the workshops, with a better incentive built-in to encourage GPs to attend both workshops. For attending a workshop, GPs were given CPD credits (1.5 hours per workshop). For those who attended both workshops, the 3 CPD points would then also allow the GP to claim for an additional ½ day GMS study leave.

The key dimensions of the Dementia Care in General Practice Programme – Peer facilitated workshops for GP practices – are summarised in Table 13.

Attendance and reach of the Workshops

The Dementia in General Practice workshop progamme was provided over a two-year period, beginning in June 2016 and ending in September 2018, with the majority of workshops held in 2016 and 2017.

Workshop 1 on the Timely Diagnosis of Dementia and Post-diagnostic Care was delivered 50 times over this 28-month period and a total of 315 individuals attended these workshops (Table 1). Of these 50 workshops, 42 workshops were held for GP practices, with 199 practice staff attending. The remaining eight were delivered to groups of GP Registrars, as part of the GP training programmes in several areas. Some 116 GP Registrars attended these eight workshops.

[7] A GP Registrar or GP trainee is a qualified doctor who is training to become a GP through a period of working and training in a practice, closely supervised by senior GP or trainer, and attendance at training programme.

Table 1: Number of Dementia in General Practice workshops held and individuals attending by workshop type, and CHO area

CHO area	Workshop 1					Workshop 2				
	Practice workshops		GP Registrar workshops		All	Practice workshops		GP Registrar workshops		All
	Workshops (n)	Attendees (n)	Workshops (n)	Attendees (n)	Workshops (Attendees)	Workshops (n)	Attendees (n)	Workshops (n)	Attendees (n)	Workshops (Attendees)
CHO 1	1	9	2	24	3 (33)	1	9	2	24	3 (33)
CHO 2	2	6	1	21	3 (27)	2	7	1	21	3 (28)
CHO 3	-	-	1	29	1 (29)	-	-	1	20	1 (20)
CHO 4	17	90	3	27	20 (117)	15	83	3	27	18 (110)
CHO 5	6	38	-	-	6 (38)	-	-	-	-	0 (0)
CHO 6	6	21	-	-	6 (21)	5	18	-	-	5 (18)
CHO 7	3	14	-	-	3 (14)	2	8	-	-	2 (8)
CHO 8	3	6	1	15	4 (21)	3	6	1	15	4 (21)
CHO 9	4	15	-	-	4 (15)	2	4	-	-	2 (4)
Total	**42**	**199**	**8**	**116**	**50 (315)**	**30**	**135**	**8**	**107**	**38 (242)**

Note:
CHO 1: Donegal, Sligo/Leitrim/West Cavan, Cavan/Monaghan
CHO 2: Galway, Mayo, Roscommon
CHO 3: Clare, Limerick, Tipperary North
CHO 4: Cork, Kerry
CHO 5: Tipperary South, Waterford, Carlow/Kilkenny, Wexford
CHO 6: Wicklow, Dun Laoghaire, Dublin South East
CHO 7: Kildare/West Wicklow, Dublin West, Dublin South West, Dublin South City
CHO 8: Laois/Offaly, Longford/Westmeath, Louth/Meath
CHO 9: Dublin North, Dublin North Central, Dublin North West

Workshop 2 on Managing Behavioural and Psychological Symptoms of Dementia in Primary Care was delivered 38 times and a total of 242 individuals attended Workshop 2, about 25% less than the number attending Workshop 1 (Table 1). As with Workshop 1, Workshop 2 was held for both GP practices (30) and groups of GP registrars (8). A total of 135 individuals attended Workshop 2 for GP practices, almost one-third (32.2%) less than the total number of individuals attending Workshop 1. Most of the GP Registrars attending Workshop 1 also attended Workshop 2, as the two workshops for these groups were delivered in a single educational session.

Almost three-quarters (71.4%) of the 42 GP practice groups that took Workshop 1 also availed of Workshop 2. The lower participation in Workshop 2 for GP practices is likely to be linked to the approach initially taken in the way the workshops were offered. When first delivered, Workshops 1 and 2 were more often run as two separate sessions for GP practices on two different days. The facilitators for the most part commenced by delivering Workshop 1. However, when trying to arrange a second meeting to deliver Workshop 2, facilitators encountered practical and logistical difficulties with some practices, largely due to time constraints on the part of GPs practices. To address this, the facilitators began to offer Workshop 1 and 2 on the same day in a single session, which proved to more attractive to GP practices. This approach also proved to be attractive to GP facilitators, since less time was needed for coordinating and delivering the workshops. It is by and large a more cost-effective way of delivering the programme, especially where facilitators have to travel long distances to remote parts of the country to deliver the workshops. As the project progressed and adapted (i.e. the running of the two workshops together, as well as better incentives for attending both workshops), it seems that it became less likely for practices to opt for Workshop 1 only and uptake of both workshops increased.

With respect to the geographical spread of workshops, at least one Workshop on the Timely Diagnosis of Dementia and Post-diagnostic Care (Workshop 1) was delivered in eight of the nine CHO areas, reaching nine out of the 26 counties of the Republic of Ireland. The spread in the delivery of Workshop 2 on Managing BSPD of Dementia in Primary Care to GP practices was fairly similar to Workshop 1, although Workshop 2 was not delivered for any GP practices in CHO 5 or CHO 3, and a slightly smaller number of counties was reached. There was much variation in the number of workshops held by location. With respect to the workshops for GP Practices, the number ranged from one workshop in CHO 1 to 17 in CHO 4, 12 of which were provided in Cork and the remaining five in Kerry (Table 1). GP practices in CHO 4, particularly Cork, were best served by the PREPARED project, with almost one half (45.2%) of Workshop 1 attendees and almost 40% of Workshop 2 attendees being Cork based. Since the project tended to target the geographical areas surrounding the location of GP facilitators, there is a concentration of workshops in CHO 4, which is where the Cork-based PREPARED project and most GP facilitators were located.

With the delivery of eight workshops to groups of GP registrars in six different counties, the geographical reach of workshops for GP Registrars was lower. In addition to geographical distribution of the workshops for GPs practices, there was also much variation in the size of the workshops for GP practices. While on average, five individuals attended each of these 72 workshops, the numbers attending ranged from one to 19 individuals (Table 2). In approximately 10% of cases, the programme was provided to one person, likely to be GPs working in single-handed GP practices or a GP working in a group practice but with a

particular interest in dementia. Just over half of the workshops had between two and four attendees, which included either GPs from a single practice, or GPs from two or more neighbouring practices. Approximately one-third of the workshops had between five and 10 individuals attending, which took the form of staff from a single practice attending a workshop, or staff from neighbouring practices coming together for the workshop, an approach that was adopted in both urban and rural areas. More than 90% of the workshops had between one and 10 individuals attending. The exception was one workshop in which more than 10 staff from a Primary Healthcare Centre attended along with GPs for a number of co-located practices who all worked within a single large health premises. This wide variation reflects the approach taken by the PREPARED project team and the trained GP facilitators to accommodate the different ways in which GP practices are organised in Ireland, the locations in which there are based, and preference of GPs and practices, and to some extent on the approach adopted by the facilitator.

Table 2: Size of Dementia Care in General Practice workshops for GP practices

No. of attendees	No. of workshops	Percentage	Total number attending
Workshop 1 for GP practices			
1	4	9.5%	4
2-4	22	52.4%	
5-10	15	35.7%	
>10	1	2.4%	19
Total	**42**	**100%**	**199**
Workshop 2 for GP practices			
1	4	13.3%	4
2-4	16	53.3%	52
5-10	9	30.0%	75
>10	1	3.3%	14
Total	**30**	**100%**	**135**

The workshops for GP registrars generally tended to be larger in size, with an average of 15 GP registrars attending Workshop 1 (range: 6-29) and the vast majority (92.2%) of GP registrars remained on and participated in Workshop 2.

Outcomes: Participants' reactions to the Workshops

Of the 315 individuals who attended Workshop 1, just over half (n=172) completed and returned an evaluation form. The majority of these respondents (82.6%) had attended Workshop 1 for GP practices, and the remainder (17.4%) Workshop 1 for GP registrars. As mentioned, some respondents had participated in Workshop 1 on the same day as Workshop 2, but most respondents (almost two-thirds) had attended both workshops on different days. For the purposes of the analysis for this report, all responses from the evaluation forms were analysed together.

The majority of those attending the workshops were GPs, but in some cases practice nurses, other practice staff, and GP registrars or medical students on placement in the practice also attended. A small number of workshops included the PHN from the local area. Table 3 presents the profile of attendees based on responses to the evaluation forms.

Table 3: Profile of Dementia in General Practice Workshop respondents

	Workshop 1	Workshop 2
Job title, n (%)	(n=172)	(n=128)
GP	118 (68.6%)	89 (69.5%)
GP Registrar	39 (22.7%)	32 (25.0%)
Practice Nurse	6 (3.5%)	4 (3.1%)
Other	9 (5.2%)	3 (2.3%)
Sex	(n=171)	(n=128)
Male	76 (44.4%)	59 (46.1%)
Female	95 (55.6%)	69 (53.9%)
Years of experience in general practice (GPs)	(n=117)	(n=89)
<5 years	10 (8.5%)	7 (7.9%)
5-10 years	17 (14.5%)	13 (14.6%)
10-15 years	19 (16.2%)	14 (15.7%)
15-20 years	25 (21.4%)	21 (23.6%)
20-25 years	9 (7.7%)	11 (12.4%)
>25 years	37 (31.6%)	23 (25.8%)

More than two-thirds of respondents were GPs (Table 3) and approximately one-quarter GP Registrars. This largely reflects the provision of Workshops to groups of GP Registrars, although GP Registrars on placement in general practice also took part in some workshops for GP practices. Overall, the proportion of women respondents was higher than men. However, there was an even male-female split among GP respondents. All of the Practice Nurses were female and approximately two-thirds of GP Registrars were female.

GPs participating in the workshops tended to be experienced with more than three-quarters having ten or more years of experience in general practice and between one-quarter and one-third having greater than 25 years of experience. The number of Practice Nurses responding was small, and their level of experience in general practice was varying. As expected, all of the GP Registrars had less than five years of experience in general practice.

Responses showed much variability among GPs regarding the number of practice patients newly diagnosed with dementia each year. A total of 86 out of the 118 GPs responded to this question and the most frequent response was 1-5 patients per year (n=37), closely followed by 6-10 patients per year (n=34). The numbers given by 15 respondents ranged from 11 to 30 patients per year, but it is not clear if these numbers related to individuals GPs or their practice as a whole.

The majority (81.9%) of GPs responding (n=116) reported that they routinely direct patients with dementia and/or family carers to local dementia-specific services and supports. However, one-fifth (19.0%) stated that they did not, and the most frequent reason given was lack of awareness of such services and supports.

Respondents were asked their views about the workshops and its impact on their knowledge, views and confidence levels relating to timely dementia diagnosis and post-diagnostic care and services. Response rates were very high and responses were overall extremely positive (Table 4). Over 90% of respondents agreed or strongly agreed that Workshop 1 had improved their knowledge of when to make a timely diagnosis of dementia,

enhanced their view of the benefits of making a timely diagnosis of dementia and had improved their confidence in post-diagnostic dementia care.

Respondents were asked their views on their willingness to use resources developed by the PREPARED project. More than 90% also agreed or strongly agreed that the dementiapathways.ie website would be a valuable resource to them in providing post-diagnostic care to patients with dementia. A majority (84.2%) agreed or strongly agreed that they had better knowledge of how to access local services and supports as a result of the workshop.

Table 4: Responses of participants to Dementia in General Practice Workshop 1

This workshop has …	Agree / Strongly Agree	Neither Agree nor Disagree	Disagree / Strongly Disagree
… improved my knowledge of when to make a timely diagnosis of dementia (n=171)	160 (93.6%)	10 (5.8%)	1 (0.6%)
… enhanced my view of the benefits of making a timely diagnosis of dementia (n=172)	162 (94.2%)	7 (4.1%)	3 (1.7%)
… improved my confidence in post-diagnosis dementia care (n=171)	154 (90.1%)	15 (8.8%)	2 (1.1%)
I feel the dementiapathways.ie website will be a valuable resource in post-diagnosis dementia care (n=168)	162 (96.4%)	5 (3.0%)	1 (0.6%)
… improved my knowledge of how to access local services and supports for dementia care (n=171)	144 (84.2%)	20 (11.7%)	7 (4.1%)

Of the individuals attending Workshop 2, 128 completed the evaluation form. Overall, more than two-thirds (69.5%) were involved in the ‘management of nursing home residents with dementia’, and this rose to three-quarters for GPs (73.0%) and GP Registrars (75%).

Practically all respondents (n=127) reported that they ‘manage people with BPSD’, although the frequency varied. A total of 14 GPs stated that they ‘manage people with BPSD’ daily, all of whom were involved in the ‘management of nursing home residents with dementia’. It was more frequently reported (n=46) by GPs and GP Registrars that they ‘manage people with BPSD’ weekly, the vast majority (84.8%) of whom were involved in the management of nursing home residents with dementia. A slightly greater number including GPs, GP Registrars and practice nurses reported (n=51) that they ‘manage people with BPSD’ monthly, with proportion who were involved in the management of nursing home residents with dementia falling to 58.8%. A small minority (n=11) including GPs and GP Registrars reported that they ‘manage people with BPSD’ annually, about half of whom were involved in

the management of nursing home residents. Only five reported that they 'never' manage people with BPSD, most of whom were GP Registrars or medical students. This group were least likely to be involved in the 'management of nursing home residents with dementia'.

Table 5 presents responses from participants about the extent to which they agreed or disagreed with statements relating to improved confidence in assessing and managing BPSD and their knowledge of options for managing BPSD as a result of their participation in Workshop 2. It also presents the extent to which respondents agreed or not with statements relating to plans following the workshop to review and reduce anti-psychotic prescribing and intentions to adopt an antipsychotic monitoring tool in practice.

Over 90% of respondents agreed or strongly agreed that Workshop 2 had improved their confidence in both assessing and managing BPSD and had improved their knowledge of the options available to them for managing BPSD. The proportion of respondents who agreed or strongly agreed that they planned to review or reduce the practice of prescribing anti-psychotic medications was also high at 84%. However, just over one half intend to introduce an anti-psychotic monitoring tool in practice, with approximately 10% indicating that did not intend to do so. The reasons for this are unclear.

Table 5: Responses of participants to Dementia in General Practice Workshop 2

This workshop has …	Agree / Strongly Agree	Neither Agree nor Disagree	Disagree / Strongly Disagree
… improved my confidence in assessing BPSD (n=128)	121 (94.5%)	7 (5.5%)	0 (0.0%)
… improved my confidence in managing BPSD (n=128)	119 (93.0%)	8 (6.3%)	1 (0.7%)
… improved my knowledge of the management options available to me when dealing with a patient with BPSD (n=125)	120 (96.0%)	5 (4.0%)	0 (0.0%)
I plan to review and reduce the practice of prescribing anti-psychotics (n=125)	105 (84.0%)	18 (14.4%)	2 (1.6%)
I hope to introduce a practice anti-psychotic monitoring tool (n=127)	71 (55.9%)	41 (32.3%)	15 (11.8%)

3.2.4 Dementia Care in General Practice - CME small group meetings

One way in which practicing GPs partake in CME is through attendance at small group learning meetings. These meetings are run as part of the GP CME scheme, which is funded by the HSE National Doctors Training & Planning Unit. The CME scheme is an established national programme, and had a total of 172 local groups across the country in 2016. The

scheme is recognised as an important way of reaching a large number of GPs.[8] The meetings are organised by local CME tutors, of which there were 37 in 2016.[9]

Although it was not planned at the outset of the project to use the GP CME scheme as a vehicle for the delivery of the Dementia Care in General Practice workshops, over time it became apparent that it could potentially offer an expedient route through which the PREPARED project could deliver dementia education to GPs, as the small group learning method is reported by the ICGP to be popular among GPs. Indeed, ICGP has stated that the CME small group meetings are 'by some margin the most popular educational activity engaged in by College members.' The meetings are thought to be an effective way for GPs of keeping up to date with the many changes occurring in medical practice. They have been identified as a preferred method of CME for GPs,[10] and the demand for this type of learning by GPs appears to be increasing, as evidenced by the growth in scheme's membership. Each year, the CME tutors organise seven or eight monthly meetings per annum for each of three or four local groups of GPs in their area. They also attend training workshops every year and assist each faculty board in devising the educational programme for that faculty. GPs have a say in what topics they would like included the CME group meetings.

The feasibility of using the GP CME scheme as a vehicle for the delivery of the Dementia Care in General Practice workshop programme was explored at meetings in 2016 and 2017 with the ICGP. This was also explored with GPs tutors on the GP CME scheme, one of whom was also a GP facilitator for the PREPARED project. Other PREPARED facilitators had close working links with CME tutors locally and/or were in a position to promote and contribute to the actual delivery of the PREPARED workshops at local CME small groups meetings organised by the CME tutors. As an outcome to these meetings and discussion, the Dementia Care in General Practice programme was made available by the PREPARED project to the CME tutors for delivery at one or two of their monthly CME meetings.

The decision to deliver the Dementia in General Practice programme at the CME meetings was entirely optional and at the discretion of the CME tutors. A local level approach was initially taken to test the feasibility of delivering the PREPARED programme at GP CME meetings by PREPARED GP facilitators. Later, to inform the CME tutors about the programme and encourage a wider uptake, one of the PREPARED GP facilitators, also an experienced tutor on the GP CME scheme, presented and delivered the two Dementia in General Practice workshops to ten CME tutors at their annual meeting in Athlone in 2018.

The CME sessions are two-hour evening sessions with both Workshops 1 and 2 delivered at the same meeting

The key dimensions of the Dementia Care in General Practice Programme – GP facilitated workshops for CME small group meetings – are summarised in Table 13.

[8] In 2016, there were 3,128 GPs on the GP CME scheme's mailing lists. Most are members of the ICGP. However, the programme is not restricted to ICGP members and is available to all GPs in active practice in a given geographical area. In 2016, at total of 1,319 meetings were held.

[9] The tutors have a role as education officers for their faculties of the ICGP. They work on a part-time basis, and most have a full clinical commitment.

[10] ICGP website: https://www.icgp.ie/go/courses/cme_small_group_meetings [Last accessed 07.03.2019].

Attendance, reach and reactions to the workshops at CME small group meetings

Data is not available on the full complement of the PREPARED dementia workshops that were actually delivered through CME scheme, as CME tutors do not report back to the PREPARED project. It is known that the Dementia in General Practice workshops (1 and 2) were delivered to at least eight CME small group meetings between August 2016 and February 2018 and that approximately 200 GPs took part in these eight meetings. The actual number of workshops delivered through the scheme is thought to be somewhat higher.

A total of 58 evaluation forms were completed by those attending the CME small group meetings at which the workshops were delivered. All participants were GPs including a small number of Locum GPs, semi-retired and retired GPs.

Table 6: Profile of respondents to Dementia in Primary Care Workshops at CME small group meetings

	Workshop 1 and 2
Job title, n (%)	(n=57)
GP	57 (100.0.%)
Sex	(n=58)
Male	21 (36.2%)
Female	37 (63.8%)
Years of experience in general practice (GPs)	(n=57)
<5 years	10 (17.5%)
5-10 years	10 (17.5%)
10-15 years	10 (17.5%)
15-20 years	5 (8.8%)
20-25 years	6 (10.5%)
>25 years	16 (28.1%)

Unlike the GP facilitated workshops for general practices, where there was an even male-female split among GP respondents, almost two-thirds of the respondents at the CME small group meetings were female GPs and slightly more than a third male GPs. GPs participating in the CME small groups meetings were on average slightly less experienced (just under two-thirds (64.9%) had more than 10 years of experience in general practice) compared to GPs attending the workshops for general practice (more than three-quarters of whom has more than 10 years of experience in general practice).

The majority (81.8%) of GPs responding (n=55) reported that they routinely direct patients with dementia and/or family carers to local dementia-specific services and supports. However, almost one-fifth did not, and the most frequent reason given was that they did not see any or many patients with dementia. Only one respondent gave lack of knowledge as a reason and one believed that patients did not need such referral.

When asked about the impact of Workshop 1 on their knowledge, views and confidence levels relating to timely dementia diagnosis and post-diagnostic care and services and on their willingness to use resources developed by the PREPARED project, responses were overall very positive (Table 7). However, the proportion of respondents who agreed or strongly agreed that Workshop 1 had improved their knowledge of when to make a timely diagnosis of dementia, enhanced their view of the benefits of making a timely diagnosis of

dementia and had improved their confidence in post-diagnostic dementia care was slightly less than the proportion of those attending the workshops for general practices who had given this response. However, like the respondents in the workshops for general practice, the majority (90%) of GPs responding (n=55) agreed or strongly agreed that the dementiapathways.ie website would be a valuable resource to them in providing post-diagnostic care to patients with dementia. The proportion of CME small group meeting respondents who agreed or strongly agreed that they had better knowledge of how to access local services and supports as a result of the workshop was similar to the majority in the workshops for general practices.

Table 7: Responses of CME small group meeting participants to Workshop 1

This workshop has …	Agree / Strongly Agree	Neither Agree nor Disagree	Disagree / Strongly Disagree
… improved my knowledge of when to make a timely diagnosis of dementia (n=58)	48 (82.8%)	7 (12.1%)	3 (5.2%)
… enhanced my view of the benefits of making a timely diagnosis of dementia (n=58)	48 (82.8%)	5 (8.6%)	5 (8.6%)
… improved my confidence in post-diagnosis dementia care (n=57)	50 (87.7%)	3 (5.3%)	4 (7.0%)
I feel the dementiapathways.ie website will be a valuable resource in post-diagnosis dementia care (n=55)	51 (92.7%)	1 (1.8%)	3 (5.5%)
… improved my knowledge of how to access local services and supports for dementia care (n=58)	48 (82.8%)	6 (10.3%)	4 (6.9%)

Only 25 of those who attended the workshops delivered through the CME small learning groups completed the evaluation questions/statements relating to the management of BPSD. Nearly all (96.0%) reported that they 'manage people with BPSD', although like the participants in the workshops delivered to general practices, the frequency varied. It was most frequently reported by the GPs that they 'manage patients with BPSD' monthly, with more than half (52%) giving this response. Only one of the 25 respondents reported 'never' managing people with BPSD. Almost two-thirds (62.5%) of respondents reported being involved in the care of nursing homes residents.

Responses to statements on improved confidence and knowledge relating to the management of BPSD were positive (Table 8). Close to 90% of respondents agreed or strongly agreed that Workshop 2 had improved their confidence in assessing and managing BPSD and their knowledge of the options available to them for managing BPSD. The proportion of respondents who agreed or strongly agreed that they planned to review or

reduce the practice of prescribing anti-psychotic medications was much lower, but still in the majority at just over two-thirds. Less than one half intend to introduce an anti-psychotic monitoring tool in practice, with more than 10% indicating that did not intend to do so. As for the respondents in the workshops for general practices, the reasons for this are unclear.

Table 8: Responses of CME small group meeting participants to Workshop 2

This workshop has …	Agree / Strongly Agree	Neither Agree nor Disagree	Disagree / Strongly Disagree
… improved my confidence in assessing BPSD (n=22)	19 (86.4%)	3 (13.6%)	0 (0.0%)
… improved my confidence in managing BPSD (n=23)	21 (91.3%)	2 (8.7%)	0 (0.0%)
… improved my knowledge of the management options available to me when dealing with a patient with BPSD (n=19)	17 (89.5%)	2 (10.5%)	0 (0.0%)
I plan to review and reduce the practice of prescribing anti-psychotics (n=23)	16 (69.6%)	6 (26.1%)	1 (4.3%)
I hope to introduce a practice anti-psychotic monitoring tool (n=22)	9 (40.9%)	10 (45.5%)	3 (13.6%)

The Dementia Care in Primary Care programme is now listed as a programme under the GP CME scheme, and available to the CME tutors. However, its delivery continues to be at the discretion of the tutors.

3.2.5 UCC GP postgraduate CPD dementia blended learning module

Development and description of the programme

The final dementia educational programme developed for GPs by PREPARED is the UCC postgraduate CPD module in dementia for GPs working in primary care.[11] It was designed in 2017 as a bespoke module for general practice. It is one of three standalone general practice modules offered by the Department of General Practice in UCC and accredited by UCC. The module commenced for the first cohort of students in September 2017, with an intake of 20 participants. A second cohort of 16 GPs completed the course in 2018.

The module is designed to be practical and clinically relevant and aims to develop the knowledge and skills of GPs in the identification and management of dementia. In contrast to the other programmes already described, which were either wholly face-to-face or wholly online, this programme was designed as a blended module. The key components of the blended module are a module pack (with readings), a 12-week Blackboard online discussion board, and two face-to-face study days. Module content (see Box 3) was informed by the

[11] https://www.ucc.ie/en/gp5102/

educational needs analysis. Blackboard's discussion board feature is a key way of encouraging interactive dialogue between participants throughout the 12-week module. It allows module participants to carry on discussions online, at any time of the day or night, with no need for the participants to be logged into the site at the same time. The discussion is recorded on the course site for all to review and respond at their convenience. Online facilitators include GPs, gerontologists, psycho-geriatricians and a palliative care specialist, all of whom helped to develop course materials. Participants are expected to participate in the discussion board at least two to three times each week and to engage with their peers and the facilitators in the discussion and analysis of case-based studies. The study days are another key way in which the module seeks to encourage interactive dialogue between the participants and between them and the facilitators. The study days were facilitated by GPs, a psycho-geriatrician, a gerontologist, an OT and a person with dementia.

Box 3: UCC CPD Postgraduate Module Dementia in Primary Care - Module Content

Introduction, awareness raising and risk factors
Dementia sub types
Investigations and cognitive assessment tools
Approaches to person centred care; communication and disclosure
Diagnosis, referral and memory clinics
Dementia management in the community
Pharmacotherapy
Management of behavioural and psychological symptoms
Driving and dementia
Medico-legal issues
Advanced dementia and palliative care
Carers of persons with dementia

There are two components to module assessment. The first is continuous assessment of participation and quality of responses in the online discussion boards over a 12-week online learning period (50% of total marks). The second is assessment of three short written submissions and an essay (50% of total marks), based on practical learning from the course and undertaking a quality improvement initiative or clinical audit on dementia in practice.

The key Dimensions of UCC CPD Postgraduate Module Dementia in Primary Care are summarised in Table 13.

Evaluation of the module

Evaluation of the module is based on feedback from module participants from 2017 intake. This included completing an evaluation form at the end of the module. Participants were given an opportunity to comment on the overall module as well as specific module components. Changes in attitudes and confidence levels of GPs were assessed using a pre-test/post-test design.

Of the 20 GPs enrolled onto the course in 2017, 19 completed and passed the course. These participants were generally experienced GPs, with 85% having at least five years of experience working in general practice. Eleven of the participants considered themselves to

be a GP with a specialist interest in dementia. The majority had a nursing home commitment.

Table 9: Profile of participants on UCC GP blended CPD module

Job title, n (%)	(n=20)
GP	20 (100.0.%)
Sex	(n=20)
Male	11 (55%)
Female	9 (45%)
Years of experience in general practice (GPs)	(n=20)
<5 years	3 (15%)
5-9 years	5 (25%)
10-14 years	0 (0%)
15-29 years	5 (25%)
20-25 years	3 (15%)
>25 years	4 (20%)
Nursing home commitment	
Yes	14 (70%)
No	6 (30%)

On completion of the course, all 19 GPs stated that the module met their learning needs. The course design was rated very positively by participants. Participants found the module to be practical and clinically relevant: “The best aspect of this module was how practical and applicable to everyday practice” and it was described as ‘excellent’ (Module participants, 2017 intake). All agreed or strongly agreed that the written and online course materials were clear and useful. In their comments, participants indicated that the reading material was relevant and highly valued, but some highlighted that a big time-commitment was required to get through all the reading materials. Some participants remarked that being such a complex topic, substantial input was needed from participants to maximise their learning, which could be challenging given GP work commitments.

More than three-quarters (78%) agreed or strongly agreed that the online discussion board was easy to use. The vast majority (89%) agreed or strongly agreed that the learning from the discussion board units will inform their clinical practice. Interestingly, the discussion board generated most comments from module participants. Some enjoyed the interactions on the discussion board and found the discussions beneficial, describing it, for example, as ‘lively and informative’ (Module participants, 2017 intake). Others pointed to the challenges encountered in using the discussion board including its design and format, difficulty following threads, and repetitive discussions. Some disliked that engagement with the discussion board demanded more ‘on-screen time’ after finishing a busy day, especially after using computers throughout the day. Others highlighted that frequent engagement with the discussion board was needed for active and purposeful discussion but finding time to get online challenging and tiresome with an extremely busy GP schedule, and disliked the pressure it placed on them. Discussion board rules, e.g. contributing on non-consecutive days, did not help.

Nearly all (93%) of those who attended the first study day and the majority (88%) who attended the second study day stated that the content was relevant and useful. Comments

from module participants about the study day were resoundingly positive. For example, one module participants stated: 'The study days were very enjoyable as the tutors and presenters had obviously prepared very well for same. Interaction with other group members was stimulating and truly educational'.

Participants were invited to complete the General Practitioner Attitudes and Confidence Scale for Dementia (GPACS–D). GPACS-D is a relatively new 20-item measure of GP attitudes and confidence towards dementia developed by Mason et al. (2016). It is self-rated using 5-part Likert scales. The 20 items in the measure fall into two broad components: attitudes (13 items on support for quality of life and care, fears and frustrations, and communication about dementia progression) and confidence in clinical abilities (7 items). The scale was used to measure the attitudes and confidence levels of GPs at baseline as well as on completion of the educational intervention, using a simple pre-test/post-test design. Twenty GPs completed GPACS-D pre-course and 18 completed it post-course.

Results show that on completion of the module, the average scores for the attitude sub-scale (13 items) remained largely unchanged for GPs and that GPs' attitudes towards dementia were largely positive. For example, all agreed or strongly agreed that 'much can be done to improve the quality of life of people with dementia'. The vast majority (approximately 90%) agreed or strongly agreed that 'the early detection of dementia benefits the patient' and that 'patients with dementia should be informed early so that they can plan for the future'. However, despite these positive findings, on completion of the module a concern was still expressed by many about the impact of communicating the diagnosis, with only one half of the GPs disagreeing or strongly disagreeing with the statement 'I fear communicating the diagnosis of dementia will damage the doctor-patient relationship'.

In contrast to responses on attitudes, there was a noticeable increase in scores for each of the seven items on confidence, with an increase in self-rated confidence of about 1 point for most of these items (Table 10). Although the results are limited due to the small sample size, this change suggests that the module helped to improve the GPs' confidence levels in their abilities with respect to dementia. It is hoped that improvements in confidence may indicate an intention by GPs to change their practice and will lead to potential improvements in clinical care for people with dementia. It is also hoped the audits/quality improvement initiatives performed by GPs in practice will lead to further improvements.

Table 10: **Responses of module participants to UCC GP CPD blended learning module**

Confidence Item	PRE-COURSE AVERAGE SCORE (1 - Strongly Disagree to 5 -Strongly Agree) (n=20)	POST-COURSE AVERAGE SCORE (1 - Strongly Disagree to 5 - Strongly Agree) (n=18)	Difference	% change
I feel confident in my ability to discuss legal issues associated with a diagnosis of dementia	2.95	3.89	+0.94	32%
I feel confident in my ability to diagnose dementia	3.26	4.17	+0.91	28%
I feel confident in my ability to communicate a diagnosis of	3.42	4.24	+0.82	24%

dementia to a patient				
I feel confident in my ability to provide appropriate medical care for a person with dementia	3.63	4.33	+0.70	19%
I feel confident in my ability to provide advice about managing dementia related symptoms	3.26	4.39	+1.13	35%
I feel confident in my ability to provide advice about managing risky behaviours associated with dementia (e.g. driving, wandering)	2.95	3.94	+0.99	34%
I feel confident in my knowledge of local resources to assist families/carers caring for a person with dementia	2.79	3.39	+0.60	22%

The blended learning module has been a very significant part of the PREPARED project. The module may continue to run in UCC in Autumn 2019, with bursary awards for student fees from the PREPARED project.

3.2.6 Dementia in Primary Care - An Interprofessional Approach

At the outset, it was intended that a training and education programme would be developed for delivery to individual practicing PCTs, with the recruitment of these PCTs facilitated by the HSE. However, in piloting the programme, it proved difficult to recruit PCTs, and only a single PCT participated in the programme. Several difficulties were encountered including the problems of making a whole PCT available for training at any one time and the low number and configuration of existing PCTs. Moreover, health professionals in primary care were often not linked directly to a PCT (Cullen et al., 2018). It became clear that a different approach was needed, and the programme was developed as an interprofessional programme for health professionals working in primary care in specific regions around the country, rather than a programme for individual, distinct, practicing PCTs.

Description of the programme

The programme Dementia in Primary Care: An Interprofessional Approach is similar to the GP workshop programme in that it is a peer-facilitated programme, practice focused, and designed around a case study. The principle of personhood underpins the case study. The programme content was developed by a Clinical Nurse Specialist supported by a GP/academic with a specialist interest in dementia, three allied health professionals and the wider PREPARED team. A core principle underpinning this programme is interprofessional education and collaborative practice, and not surprisingly therefore the content of this programme differs from that of Workshops 1 and 2 for GPs, and a much broader range of primary care professionals were targeted for participation. The contents of the programme were designed to support professions in five key areas, namely, knowledge of dementia, supporting the person with dementia and their family, understanding roles and responsibilities within the PCT, team functioning and collaboration, and interprofessional communication skills, particularly in advanced care planning. The programme was designed as a three-hour interactive interprofessional workshop. A guide and workshop materials were developed for workshop facilitators (Quinn et al, 2017). These included PowerPoint (PPT) presentation slide images, notes to support facilitators, and detailed references and

explanatory notes. Like other programmes, health professionals were incentivised to attend this programme using CPD credits. The workshop is accredited by the NMBI for 3 CEUs.

The key dimensions of Dementia in Primary Care: An Interprofessional approach – Facilitated workshops for primary care professionals – are summarised in Table 13.

Piloting and evaluation of the programme

The dementia in primary care workshops were piloted in three PCTs in the southern region of Ireland between December 2016 and January 2017. The PCTs were purposively selected to include different practice locations and areas with different dementia services and supports. Trained facilitators delivered the three workshops, two of which were delivered by an advanced nurse practitioner (ANP) in dementia and one by a GP and physiotherapist. The pilot workshops were evaluated. The evaluation included a focus group with workshop facilitators and workshop observers, at which the facilitators gave feedback on the train-the-trainers workshop, workshop content, resources and delivery. Workshop participants were asked to complete a self-administered questionnaire.

In total, 54 health professionals attended the three pilot workshops, including physiotherapists (19), PHNs (11), OTs (9) and GPs (4). The majority were female (85%) and three-quarters (76%) had more than five years of experience working in primary care. Their responses to the questionnaire were extremely positive. They found the outcomes to be clear (93%) and the content relevant (90%). They liked the approach adopted for the workshop (93%). They particularly valued the case study approach and the opportunity to engage in group discussion, and wanted more opportunity to do this. An overwhelming majority agreed that the workshop 'has improved my knowledge of dementia assessment and management' (94%) and 'has improved my understanding of what people with dementia and their carers need and how I can support them' (93%). With regard to interprofessional working, the majority agreed that they had a better understanding of the roles and responsibilities of different members of the PCT as a result of the workshop (88%) and that it had contributed to improving and enhancing team working and collaboration (85%) (Jennings et al., 2018d).

Three main issues were identified from the focus group discussions. The first related to the length of the workshop and concerns about covering the material in three hours, whilst at the same time incorporating enough time for participants to actively engage with the contents. The second related to the depth of knowledge required of and demands on facilitators, and it was agreed that co-facilitation by at least two facilitators would be preferred as this would provide support for facilitators and encourage better interprofessional discussion. The third related to practical implementation problems, mainly related to the logistical challenges of bringing PCTs together to participate in the workshops. Strategies identified for overcoming these logistical challenges were accreditation, incentives to attend the workshop and how to support staff release for the national roll-out of the programme (Jennings et al., 2018d)

After piloting the programme, a further eight workshops were delivered across the country in 2017 for groups of primary care staff in seven CHO areas. All were delivered by the same facilitator, a Clinical Nurse Specialist in dementia. A process and implementation evaluation of these workshops was carried out by a research team in DCU (Cullen et al., 2018)

Roll-out of the interprofessional workshops

From 2018, following the development, piloting and finalisation of the workshop materials by PREPARED, the NDO facilitated the ongoing delivery of the interprofessional workshops across the country. A train-the-trainers approach was adopted to facilitate the delivery of the workshops. The NDO coordinated three regional train-the-trainer sessions in conjunction with Centres of Nurse Education (CNEs),[12] to upskill staff in the centres to provide the interdisciplinary workshops in their areas. In some areas, the CNEs could not facilitate the delivery of workshops due to the capacity of the CNEs to deliver the workshops, in addition to their commitment to nurse education. In these areas, allied health professionals, with education within their remit, were trained to deliver the programme. The train-the-trainer sessions were for experienced clinicians working in primary care with an interest in dementia and in the provision of education to primary care staff. These sessions were delivered by the ANP in dementia who had been involved in developing, piloting and delivering the workshops in 2017.

Facilitators attached to CNEs and AHPs trained to deliver the workshops went on to deliver workshops in four CHO areas. For example, in Donegal the training was delivered a Dementia ANP attached to Donegal Mental Health Services. Dementia education is attached to this ANP role. The other members of the CMHT were also involved in co-facilitating and delivering the training. The workshops were rolled out across Donegal to primary care professionals across a largely rural county. HSE buildings were mainly used for the workshops. Planning, administering and co-ordinating the workshops was reported to be time-consuming as it involves advertising the workshops, recruiting and communicating with participants, identifying and booking suitable local venues, and organising catering for participants

The trained facilitators went on to deliver workshops around the country, and a total of 505 primary care professionals have to date received the programme.[13] Data was provided by the NDO on 18 workshops (Table 11). The workshops were initially planned as three-hour workshops, but in some areas extended to four hours at the request of participants. Each workshop was facilitated by two facilitators. The workshops were delivered in four CHOs areas, and four counties, with the highest concentration of workshops and participants in Donegal. The size of the workshops varied considerably; the smallest workshop had six participants and the largest 78 participants.

Table 11: Number of interprofessional workshops held and individuals attending by workshop type, and geographical location

CHO area	Workshops (n)	Workshop size	Attendees (n)
CHO 1 (Donegal, Sligo/Leitrim/West Cavan, Cavan/Monaghan)	10	6-22	148
CHO 2 (Galway, Mayo, Roscommon)	-	-	-
CHO 3 (Clare, Limerick, Tipperary North)	-	-	-
CHO 4 (Cork, Kerry)	1	78	78
CHO 5 (Tipperary South, Waterford,	-	-	-

[12] There are 22 CNE located throughout the country, mostly situated in hospital settings.
[13] Communication from NDO, 20.06.2019.

Carlow/Kilkenny, Wexford)			
CHO 6 (Wicklow, Dun Laoghaire, Dublin South East)	4	11-13	48
CHO 7 (Kildare/West Wicklow, Dublin West, Dublin South West, Dublin South City)	3	11-18	46
CHO 8 (Laois/Offaly, Longford/Westmeath, Louth/Meath)	-	-	-
CHO 9 (Dublin North, Dublin North Central, Dublin North West)	-	-	-
Total	**18**	**6-78**	**320**

In total, 320 health professionals participated in these 18 workshops. The majority of participants were primary care professionals. Information on the disciplinary background is available for 294 of these participants. Of these, almost three-quarters (61.9%) were nurses (including PHNs, registered general nurses (RGNs), community mental health nurses and student nurses). Much smaller proportions of OTs (10%), physiotherapists (7.8%), speech and language therapists (5.8%), social workers (4.4%) and dietitians (3.1%) also participated. Participation of GPs (3.4%) and practices nurses (2.4%) was also relatively low. A small number of clinical psychologists (2.0%) also attended the workshops.

An evaluation of the 10 workshops in Donegal was conducted by one of the facilitators (Kelly, 2019). Feedback from these 10 workshops was overwhelmingly positive, with almost all participants (99%) rating the workshop as excellent or good. Feedback to the NDO from another facilitator also showed that responses were overwhelmingly positive.

The feedback from participants showed that some of the participants had never received dementia-specific education or had not received it since completing undergraduate education. A common complaint was that the workshops were too short and participants suggested a full-day workshop would be more appropriate given the amount of information delivered. The participants valued the interaction and learning aspect of the workshops highly, and one of the reasons for asking for a longer workshop was that it could be used to encourage more sharing and collaboration between primary health professionals. Some also wanted more frequent training (Kelly, 2019). Similar issues were reported by the other facilitator who gave feedback to the NDO.

A commitment has been made by the HSE in its National Service Plan to continue the roll-out of primary care team dementia education (HSE, 2018). The workshops will continue to be delivered around the country by trained personnel in CNEs and AHPs, with the NDO overseeing and monitoring the delivery of these workshops. The target set by Department of Health (2018) is to have a minimum of 500 PCT members attend the workshop by end 2018.

3.3 PREPARED guidance and resource materials

As well as developing and delivering the dementia education and training programmes described in Section 3.2, the PREPARED project produced guidance and resource materials. With regard to the use of IT to support GP decision-making, a website, http://dementiapathways.ie/, was developed. A guide to clinical audit for care of dementia in primary care was also produced.

3.3.1 Dementia Pathways website – An online resource

The education needs analysis indicated that GPs wanted to have clinical information about dementia readily available and to which they could have immediate access in a consultation setting or during the course of a busy working day. In addition, the role of GPs in signposting people with dementia and their family carers to primary care professionals had been identified by family carers and GPs as important (Foley et al., 2017a). Having found that no such resource existed, the PREPARED project developed an online resource, www.dementiapathways.ie, intended for GPs as well as a range of health professionals based in primary care more generally. The online resource was informed by the educational needs analysis (Foley et al., 2017a) and was developed with two distinct components, i.e. the first component comprises educational content and clinical resources and the second is a directory of locally based services and supports.

The education and clinical content for the first component used findings from the educational needs analysis (Foley et al., 2017a) to prioritise content. It was also informed by a literature review (Foley, 2018), clinical guidelines (Foley and Swanwick, 2014) and other work already completed on educational content for other PREPARED programmes (Foley and Jennings, 2016; Quinn et al., 2017). The clinical content was reviewed by a multidisciplinary ERG, which included two GPs, a physiotherapist, a nurse, an OT, a PHN, two geriatricians, two old age psychiatrists and an academic legal expert in dementia, purposively selected on the basis of their known interest in dementia care (Jennings, Boyle and Foley, 2018).

The education and clinical content of the online resource covers a wide range of issues. It includes an interactive pathway for GPs to follow when a patient presents with concerns about their memory or when cognitive impairment or dementia is suspected. The online pathway used interactive flowcharts and resources that have been developed to help GPs follow good practice when making and disclosing a diagnosis of dementia. The website also provides information and resources to support the GP in the management of dementia post-diagnosis, from post-diagnostic support, to key areas for ongoing review, to palliative care. It addresses key issues that GPs encounter such as behavioural and psychological symptoms of dementia, driving issues and legal issues.

The second component involved the creation of a services and supports directory, developed using an iterative approach and input from a stakeholder group, which included eight national dementia advisors, representatives from the Alzheimer Society of Ireland (ASI) and representatives from existing dementia projects nationwide (Jennings, Boyle and Foley, 2018). It drew on data in the first instance from an existing database of dementia-specific supports and services.[14] This was supplemented by information from dementia advisors with on the ground knowledge of supports and services, and then with information provided by a range of community-based projects across the country, and finally with internet searches. The information was collated and a database of services organised by county was created. The information is updated monthly with the support of the ASI, dementia advisors and on the ground co-ordinators.

[14] https://www.understandtogether.ie/news-and-events/news/Final-Report-Dementia-Specific-Services-Mapping-Project.pdf

All of the resources developed by the project can be accessed through this website. Since a wide range of health professionals are involved in delivering primary care to people with dementia, the website has developed resources to highlight the roles and skills of a range of health professionals and is currently developing discipline-specific resources.

Evaluation of the dementiapathways.ie website

The PREPARED team undertook an evaluation of the implementation of the www.dementiapathways.ie website. The evaluation included an analysis of the site's web analytics showing the number and breakdown of visitors to the site. This showed that during the first 12 months after the site's launch, there were 4,331 unique visitors to the site, including GPs, nurses and other members of primary care teams, the intended target audience. The online resource was also accessed by hospital doctors and people with dementia and their family carers (Jennings, Boyle and Foley, 2018).

Potential end-users including six GPs, two nurses, three allied health professionals, three geriatricians, 12 family caregivers and five people with dementia were given access to the resource and asked to review its usability, relevance and usefulness, thus providing input into the design and content before the online resource went live. Feedback from end users was universally positive, and minor adjustments to the content were made in response to their feedback.

The evaluation also included feedback from GPs who indicated the extent to which they agreed with a statement about how valuable they felt the online resource to be, following its demonstration to them at GP facilitated workshops and at CME small group meetings (Jennings, Boyle and Foley, 2018). The response of GPs to whom the web-based intervention was demonstrated was positive, with the overwhelming majority of GPs (>90%) who had completed Workshop 1 agreeing or strongly agreeing that the dementiapathways.ie website will be a valuable resource in post-diagnosis dementia care (Tables 7 and 10).

While the web analytics show the number of individuals users visiting the site, data is not available on how frequently users visited the site, or which components of the site were visited. The positive feedback from potential end-users and positive responses from GPs are an indication of acceptability of the web-based intervention. However, we do not know anything about the actual use of the web-based intervention in practice. We don't know why visitors engaged with the site, how they used it, or whether the web-based intervention was useful in practice, and if so how. Nor is it possible for the online resources to comment on the quality of services included.

The NDO will take over responsibility for maintaining and updating the online resource once the PREPARED project has finished.

3.3.2 Audit and coding

The PREPARED project developed a guide to clinical audit of dementia in general practice (McLoughlin et al., 2017), informed by a rapid review (McLoughlin et al., 2016), to support GPs to audit their care to people with dementia against evidence-based criteria including those published by the ICGP (Foley and Swanwick, 2014). In addition to the audit guide, a suite of electronic dementia audit tools was developed by PREPARED in association with

the ICGP and the Irish Primary Care Research Network (ICPRN). GP software providers were commissioned to build these tools into their systems for GPs to use and easily extract lists/registers of dementia patients. These tools are currently available on GP practice management software systems. The tools support GPs to audit the care of people with dementia by:

- Enabling easy identification of people with a current diagnosis of dementia (the Register)
- Allowing for the identification of people who may not be coded for dementia on practice software systems but where other indicators (e.g. anti-dementia medication) recorded for the patient suggest that they should be included (the Finder)
- Allowing GPs to upload their data anonymously to a central database and in return receive their practice report.
- Supporting GPs to compare their own practice with other practices.

The clinical audit guide was introduced to GPs and other practice staff who attended Workshop 1 of the Dementia Care in General Practice programme. It was also made available to GPs accessing the web-based eLearning modules and through the dementiapathways.ie website. GPs were also informed at Workshop 1 about the importance of coding for dementia in medical records and provided with information about the dementia software tool. GPs completing the UCC blended module were encouraged to undertaken a clinical audit on dementia in practice.

Participants' reactions to the dementia software tool

Those attending Workshop 1 who completed an evaluation form were asked to answer two questions relating to dementia software tool, one relating to changes in their knowledge of advantages of coding for dementia within patients' medical records and a second on their willingness to use the dementia software tools. The majority agreed that the workshop had improved their knowledge of the advantage of such coding, but it seems from the responses that at least one-fifth were not convinced about this and would not be inclined to use dementia software tool in practice (Table 12), which may be explained by the different emphasis placed by individual facilitators on audit and coding, and the fact that information given about the tools at the earlier workshops was more conceptual as the tools were still in production.

Table 12: Responses of workshop participants to coding and dementia software tool

This workshop has …	Agree / Strongly Agree	Neither Agree nor Disagree	Disagree / Strongly Disagree
… improved my knowledge of the advantages of coding for dementia within patients' medical records (n=171)	129 (75.4%)	35 (20.5%)	7 (4.1%)
I will use the dementia software tool (n=169)	136 (80.5%)	25 (14.8%)	8 (4.7%)

Some GPs have completed an audit of their care to people with dementia following completion of the Dementia Care in General Practice workshops, and others completed it as

part of the UCC dementia module. For example, one GP conducted an audit of anti-psychotic medication prescribed for people with dementia in a nursing home attended by the GP. Working in consultation with a pharmacist, the medication was reviewed, and in collaboration with staff in the nursing home, more psychosocial approaches (e.g. life story work) and an education programme 'I'm Still Here' were introduced, with the result that anti-psychotic medication use was reduced. The exact number of GPs who have completed a clinical audit is not known. Registered GPs must at a minimum complete one audit annually, but there is no obligation for any of their audits to relate to care to people with dementia. Completed audits can be submitted annually to the ICGP under the Professional Competence Scheme Framework, but ICGP do not collate information on the number of audits that relate specifically to dementia, and it is highly likely that this would not be a straightforward exercise in any case.

3.4 Stakeholder interviews

Interviews were conducted by the author with a small number of stakeholders (n=9).

Stakeholders spoke very positively about the PREPARED team, describing them as extremely knowledgeable, professional, and reported having confidence in their expert knowledge and skills. They highlighted that the team were accessible, reliable, responsive and that working relationships with the team were very good.

Stakeholders provided additional information about various aspects of project and how it had unfolded as well as about individual programmes and resources and explained how these programmes worked. They commented on the merits and demerits of different dementia education programmes for GPs and the interprofessional programme, and the sustainability of the programmes after the end of the PREPARED project.

The reworking and further development of the dementia eLearning programme for GPs, originally developed by K-CORD and funded by Dementia Elevator, was viewed by stakeholders as very worthwhile, as much had been learned from the development of the original programme and the PREPARED project provided an opportunity for expanding and enhancing the eLearning programme. The new programme was regarded as a high-quality product and was described as being 'fit for purpose'. Its availability was viewed as important by stakeholders as the programme was filling a big gap in dementia education and in the ICGP's wider eLearning programme.

The provision of the eLearning programme through the ICGP website was seen as valuable as it fits in well with the ICGP's role in professional competence, and had been accredited for the purpose of CPD credits by the ICGP.

According to stakeholders, feedback from GPs on the eLearning programme, albeit anecdotal, was reported to be positive. It was reported that GPs were satisfied with the online course, its content and format, and had indicated that it is helping GPs in their work at the coalface. Other than this anecdotal feedback, it is not known what the reaction of GPs and practice nurses is to this programme or what outcomes are being achieved. Stakeholders would like to know more about what works, what doesn't work, what are the strengths and weaknesses of the eLearning programme, and whether it is working to change

knowledge, attitudes and practice. However, the limits associated with eLearning as a sole method of educating and training GPs and practice nurses about dementia were appreciated by most of the stakeholders.

Some stakeholders wanted the eLearning programme to be made available to all primary care professionals, and not restricted to GPs and practice nurses. It was suggested that the programme could be made more widely available through a portal such as HSELandD, the HSE's eLearning and development portal. Other stakeholders had reservations about this, and stressed that this could only happen if key issues were first considered and addressed including programme ownership, funding, the role of bodies responsible for professional competence and accreditation, and adoption of common standards and procedures to ensure that the coherence and quality of the programme was maintained in future iterations and versions of the eLearning programme, as it would need to be regularly revised and updated.

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The uniqueness of the Dementia Care in General Practice workshop programme was highlighted by stakeholders. Stakeholders stressed that having a specific programme that could be delivered face-to-face to GPs and that would facilitate small group learning was hugely important for dementia education for GPs and for changing practice. The programme design, its provision locally to practices and by peer facilitators were highlighted as important features for the acceptability of the programme by GPs.

Much has been learned about the feasibility of delivering the workshops and potential vehicles for their delivery, but stakeholders highlighted that the Dementia Care in General Practice workshops are resource intensive and more costly to deliver than eLearning programmes. Given the resources required and associated costs, stakeholders highlighted that sustainability of the workshop programme after the PREPARED project had finished was more challenging than for eLearning programmes. Funding was made available for the delivery of the workshops for the duration of the PREPARED project, but no additional funding had been allocated for its delivery after the project end. Responsibility for the Dementia Care in General Practice programme now rests with the NDO, but without funding the programme will not continue into the future. This possibility was a source of disappointment to some stakeholders, who emphasised the importance of a dementia education programme for GPs based on face-to-face, small group learning delivered by peer facilitators, especially since it had been identified at the outset as an effective mode of delivery and the approach preferred by practitioners who responded very positively to the programme.

The UCC blended learning module for GPs was welcomed by stakeholders. In particular, stakeholders valued the level of dementia expertise that was made available to the GPs participating by the module facilitators and the way in which the module facilitated the sharing of expertise. The diffusion of dementia expertise and upskilling of GPs to a specialist level were seen as important aspects of this module. The module was considered by stakeholders to have great potential for contributing to the building of a critical mass of GPs with expertise and a specialist interest in dementia around the country. However, some stakeholders believed that educating GPs to a specialist level had largely been confined to the Southern region of the country and would like to see upskilling of GPs more evenly spread across the country. It was also suggested that the qualification on its own was not an

endpoint and that there was a need to find ways to make optimal use in primary care of the knowledge and skills gained by module graduates. It was suggested that strategic plans at national and local level could help to achieve these goals, but that organisational and systems changes were also needed. Some stakeholders wanted to know how the IGCP eLearning programme fitted in with the blended learning module.

The interprofessional programme was highly regarded by stakeholders. It was reported to fill an education gap that existed for primary care professionals, many of whom had received little or no undergraduate training in dementia or post qualification. It was reported that there was ‘a hunger for basic information on dementia’ among primary care professionals and that the programme was in high demand. The interprofessional aspect of the workshops was stressed as particularly important and was believed to be of much benefit to participants who were learning about the roles that different health professionals have and what contributions they can make to dementia care. Indeed, some stakeholders advocated strongly for all dementia education programmes for primary care professionals to be interprofessional and saw no need or room for dementia education programmes that were discipline-specific. Others, while supportive of interprofessional education programmes, argued that primary care professionals do not all have the same knowledge and skill requirements. The distinct knowledge and skills required by GPs were highlighted in particular. They also identified practical challenges associated with the delivery of interprofessional group-based dementia education, such as the structure of primary care in Ireland and the challenges GPs have in getting to training. They emphasised that education on its own is not a sufficient to improve dementia care.

Stakeholders highlighted the important role played by the facilitator in tailoring the interprofessional programme to different groups. Although the case study was informed by the principle of personhood, it was explained that it was down to the facilitator to integrate and promote the idea and practice of person-centred care throughout the workshop.

The importance of communication and having feedback loops between different actors involved in developing and delivering the different programme was highlighted by stakeholders.

4. Discussion

For the past 30 years, there have been calls for dementia education and training for primary care professionals and for training for interprofessional education. Despite this and evidence from Irish research demonstrating the need for such education, little progress was made until recently and it was largely left to individual dementia experts to forge the way. The PREPARED project was formulated by a practising GP and academic expert clearly passionate about dementia in general practice, and primary care more broadly. Despite being the smallest allocation, the investment of funding in the PREPARED project under the NDS implementation plan is significant development in that it has provided an opportunity for this project to highlight dementia education for primary care professionals and bring it a big step forward. For the first time in Ireland, an array of programmes had been developed for GPs and other primary care professionals, and their feasibility and acceptability tested. The offerings range from essential to specialist level training, offer different modes of learning, and include both dementia-specific and interprofessional education.

A considerable amount of research has been undertaken, published and disseminated at conferences and other events. This included research to inform the mode of delivery, topics covered and content of educational programmes and resources being developed by the PREPARED project. An educational needs assessment of GPs has been conducted, followed by a Delphi consensus study. The research includes surveys of GPs on topics including dementia diagnosis and referral and GPs' use of informant history in making a diagnosis. It includes studies based on qualitative interviews with GPs to better understand their knowledge and attitudes and their experiences of dementia, for example, in relation to managing challenging behaviours. The research includes rapid reviews, systematic reviews and meta-ethnography, undertaken to synthesise existing published literature on topics such as GPs' knowledge, attitudes and experience of managing BPSD.

Three different programmes were developed for GPs. The three programmes exemplify three different approaches that can be adopted in the development of dementia education programmes for GPs. The programme Dementia in Primary Care: An Interprofessional Approach is markedly different from the other programmes in that it is primarily focused on interprofessional education and collaborative practice. The dimensions of each of these programmes are summarised and compared in Table 13. Practical resources are needed to underpin care practice and those developed by and made available by PREPARED include an online resource, dementiapathways.ie, a clinical audit guide and a dementia coding tool.

The PREPARED programmes have been evaluated but evaluations have focused for the most part on the responses of participants to the programmes. Given the limited evidence from these evaluations, this chapter discusses the programmes according to the extent to which each has incorporated key features of effective dementia education programmes, as outlined by Surr et al. (2017). A summary table is provided (Table 14).

Table 13: Key dimensions of PREPARED dementia education programmes for GPs and primary care professionals

Dimensions	ICGP eLearning Programme on Diagnosis and Management of Dementia in Primary Care	Dementia Care in General Practice Programme - GP facilitated workshops for GP practices	Care in General Practice Programme – GP facilitated workshops for CME small group meetings	UCC CPD Postgraduate Module in Dementia in Primary Care	Dementia in Primary Care: An Interprofessional approach – Facilitated workshops for primary care professionals
Professionals targeted	GPs registered with ICGP; Practice nurses registered with IPNA	GPs, general practice staff, GP registrars	GPs	GPs	A wide range of primary care professionals
Mode of delivery	Wholly web-based	Face-to face, practice based individual or small group workshops	Face-to-face small group meetings	Blended (module pack, online discussion board and study days)	Face-to-face, small and larger group meetings
Facilitators	Not applicable	Facilitated by experienced, trained GPs	Facilitated by experienced, trained GP	Delivered and facilitated by dementia experts from general practice, primary care and specialist practice	Generally facilitated by one or two experienced, trained clinical facilitators
Programme length	10 x 10-minute lessons plus supplementary reading	1 or 2 x 60- to 90-minute sessions	1 x 2-hour evening sessions	12 weeks online plus two study days, plus self-directed learning	1 x 3-4 hour session
Setting / Venue	Web-based	GP practices, GP training programmes	GP CME small group meetings held in various venues	Web-based / Group based in UCC	Local venues (mainly HSE facilities)
Group size	Individual	Individual, small (2-10) and larger (10+)	10-15	15-20	Wide-ranging from 6 to 78 participants

		groups			
Accreditation / Incentive	Accredited by ICGP; 10 CPD credits on successful completion	Accredited by ICGP with CPD credits for attendance	2 external and 2 CPD credits plus ½ day GMS study leave credited by ICGP	Accredited by UCC	Accredited by NMBI with CPD credits for attendance
Assessment	Summative multiple-choice questionnaire	None	None	Written submissions and continuous assessment of participation on online discussion board	None

Table 14: PREPARED Dementia Education Programmes by features for effective dementia education and training

Features	ICGP eLearning programme on Diagnosis and Management of Dementia in Primary Care	Dementia in Primary Care Workshops for GP practices / GP Registrars	Dementia in Primary Care small group CME meetings for GPs	UCC Postgraduate CPD blended learning module: Dementia in Primary Care	Interprofessional Workshops for Primary Care	Web-based eLearning programme for OTs (in development)	Web-based eLearning programme for SLTs (in development)
Relevant to role (as reported by participants)	Not known	Yes	Yes	Yes	Yes	Not yet known	Not yet known
Relevant to experience and practice of learners / Not one-size fits all	Developed specifically for GPs and practice nurses	Developed specifically for GPs, other practice staff and GP registrars	Relevant for GPs participating in CME small group meetings	Developed specifically for GPs	Developed for a wide range of primary care professionals	Being developed specifically for OTs	Being developed specifically for SLTs
Includes active participation	No	Yes	Yes	Yes	Yes	No	No
Underpins practice-based learning with theoretical or knowledge-based content	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Experiential learning includes adequate time for debriefing and discussion	No	Yes	Yes	Yes	Yes	No	No
Experienced trainer /	N/A	Yes	Yes	Yes	Yes	N/A	N/A

facilitator who is able to adapt to the needs of the groups							
Does not involve reading written materials (paper or web-based) or in-service learning as the sole method of learning	Videos and audio are used, but use of other forms of technology to enable interactive dialogue is low	Yes	Yes	Yes	Yes	???	???
At least 3 hours with individual sessions of at least 90 minutes	No	Mostly yes	No	Yes	Yes	No	No
Active, small or large group face-to-face learning either alone or in addition to another learning approach	No	Yes	Yes	Yes	Yes	No	No
Includes learning activities that support the application of learning into practice	No	Yes	Yes	Yes	Yes	No	No
Provides staff with a structured tool, method, or practice guidelines to underpin practice	Yes	Yes	Yes	Yes	Yes	???	???

4.1 Web-based dementia education programmes

The new ICGP eLearning Programme on Diagnosis and Management of Dementia in Primary Care is a wholly web-based programme. The key motivation for the development of this programme was the existing eLearning modules that had previously been developed by K-CORD funded by the Dementia Elevator Project. The original modules were taken, upcycled, enhanced and the number of lessons increased to create a new eLearning module. The ICGP Dementia eLearning programme fills a major gap in the ICGP eLearning programme and will continue to be included on the IGCP's wider eLearning programme. The programme provides accessible and readily available dementia education on the ICGP and IPNA websites to GPs and practice nurses who are registered, at no extra cost to them. The technology appears easy to use. The content is informed by evidence and experts and the programme content is consistent and of high quality. The programme is linked to programme assessment, and there is an incentive for completion. Since it went online on the ICGP website in November 2018, 599 users, mostly GPs, have accessed the programme, although just over one-quarter have completed the MCQ assessment and received a certificate of completion. While the programme seems to be reaching GPs, the completion rate at 28% is low and it is not known what factors may be influencing the non-completion of the eLearning programme. This may be linked to the acceptability of web-based education among GPs. We know from the research conducted by PREPARED that, although some GPs favour web-based education programmes, there was a strong desire among GPs for small group, face-to-face learning. There may be other factors at play influencing whether or not learners complete an online programme (Wong, Greenhalgh and Pawson, 2010). For example, do GPs and practice nurses find the format a convenient way to receive dementia education? Do they find the technology easy to use? The eLearning programme is a short programme of 10 x 10-minute lessons, but given the amount of supplementary materials and readings, does it take too much time to complete it?

Learners greatly value educational programmes that allow them to interact (Wong et al., 2010) and this was corroborated by research by PREPARED with GPs. Interactive dialogue is harder to achieve in online programmes. Recent research has shown that dementia education programmes that involve reading written materials (including web-based) as the sole teaching method have not been found to be effective (Surr et al., 2017). In fairness, the eLearning programme does not rely entirely on written materials. Voices overs and supplementary video footage has been included to add a more human-human dimension to the programme, although many of the videos are supplementary to the main 10-minute presentation, and learners do not have to view these in order to complete the programme. The feedback participants get on their performance through the MCQ assessment adds another interactive element to this eLearning programme, albeit limited. Enhancing the opportunity for participants using web-based education programmes to enter into a dialogue with others (virtual or human) is thought to be important in order to help learners clarify their understanding (Wong et al., 2010), which is particularly pertinent given the complexities of dementia. Examples provided by Wong et al. (2010) of how interactive dialogue might be enabled technically include structured virtual seminars; email, bulletin boards; real-time chats; and supplementary media e.g. videos, audios, phone calls, videoconferencing. Besides the use of videos and audios, the use of other technologies in this ICGP eLearning programme is low. Used on its own, the eLearning programme has few of the features of more effective dementia educational programmes (see Table 14). However, this programme

provides fundamental information to increase knowledge and upskill GPs and practice nurses and feedback from participants about their reactions and responses to the programme has been positive if anecdotal. As Wong et al. (2010) have pointed out, different modes of delivery suit different learners in difference contexts. It is hoped that this programme has succeeded in improving knowledge, attitudes and confidence levels of GPs and practice nurses in diagnosing and managing dementia, but without evaluation it is impossible to say.

An issue relating to dementia eLearning programmes raised by stakeholders is whether it is necessary or not to develop web-based programmes for specific professions in the first place or always make them available to all. In particular, the restriction of the ICGP eLearning programme to GPs and practice nurses was raised by some stakeholders, who want web-based dementia education programmes developed for and available to all primary care professionals. This arguably follows a one size fits all approach, which is not recommended as an effective approach. In addition, the commissioning of two wholly web-based dementia eLearning modules for specific disciplines, one for OTs and one for S&LTs, seems to be concerned with developing web-based education programmes that are relevant to particular professions. In that sense, there are contradictions. Furthermore, it is not clear yet which organisational body will host these two eLearning programmes or if they will be readily available free of charge and relevant to all primary care professionals.

If web-based programmes are to be developed for and made available to all primary care professionals, several issues and practicalities need to be addressed. Where does ownership of the programmes lie? Where will the programmes be hosted? How will decisions about funding be made and by whom? How will decisions about future iterations of the eLearning programmes, their standard, quality and coherence be made and by whom? A contextual issue is the role of professional bodies who are required to maintain professional competence, and who may also have a role in accreditation and/or be education providers themselves. Differences in regulatory policies for professional competence, professional goals and rewards also present challenges. Research has shown that some professional bodies may have fears that education programmes targeted at a wide range of professions may lead to lower the autonomy of distinct professions who have worked very hard to attain it. McPherson et al. (2001) argue that a fear that professional identity may be diminished or lost should not be dismissed as an irrational concern, as there may be legitimate reasons for such fears. The authors conclude that there is a real need to be clear about what interprofessional education is aiming to achieve.

4.2 Peer-facilitated small group dementia workshops for GPs

In contrast to the eLearning programme, the Dementia Care in General Practice workshop programme for GPs adopted a very different approach. This programme was designed as face-to-face, small group, peer-facilitated workshops, that were practice-based and used a case study to allow for active engagement of participants. This GP-specific peer-facilitated workshop programmes is unique among dementia educational programmes for GPs and responds to the expressed preferences of GPs. There was a strong desire among GPs for this type of programme, who place great value on dementia education programmes that facilitate interactive dialogue and research shows that dementia educational programmes are more effective when they require active learning from participants. The content of the

programme was informed by educational needs analysis, evidence from research and input from GPs, people with dementia and family carers. Moreover, facilitated small group learning has shown to be effective in dementia educational programmes (Koch and Iliffe, 2011).

To support the delivery of the Dementia Care in General Practice workshops, GPs were recruited and trained as facilitators to run the workshops across the country. Resources have been developed to guide the GP facilitators. GP practices and GP training programmes were targeted for the delivery of the programme, and later the GP CME scheme was also used as a vehicle for the delivery of the workshops. Using these avenues, the programme has been delivered to more than 500 GPs / GP practice staff and, although concentrated in the Southern region, has reached most CHOs areas.

This was the first time that a dementia education programme of this type was made available to GPs in Ireland. Responses to both workshops in the Dementia Care in General Practice programme were overwhelmingly positive. While evaluation of the programme by the project was limited to the responses of participants, this programme has many of the key features of effective dementia education programmes identified by Surr et al. (2017), as shown in Table 14. It is relevant to the role of GPs and other practice staff, for whom it was specifically developed. It involves active learning. It took place in locations (e.g. GP practices, GP training programmes or CME small group meetings) and at times that were convenient for GPs. The case study facilitated experiential learning and time was built into the programme for discussion. Participants were given access to a range of structured tools, methods and guides to underpin practice. The programme is based on short workshops and, depending on the workshop length which varied from 60 to 90 minutes and whether GPs attended one or two workshops, the programme length may or may not achieve the length of at least 3 hours which seems to be a required feature to achieve effect. This highlights the difficulties of designing educational programmes that are at the same time effective, acceptable, and take account of context in which primary care professionals are working.

A major challenge faced by the project related to the delivery or implementation of the Dementia in General Practice workshop programme for GPs, including the identification and recruitment of facilitators, the identification of an appropriate education provider organisations to deliver the programmes, and recruitment of GPs as participants in the programme. The PREPARED project initially acted as the education provider organisation and engaged facilitators to deliver this programme. While this approach was useful for piloting the programme, testing its feasibility and assessing the response to the programmes, it was not sustainable in the longer term beyond project end. Education provider organisations that could potentially serve as channels through which the Dementia Care in General Practice programme could be delivered were identified and tested by the PREPARED project. These were GP training programmes and the GP CME scheme. Of these, the delivery of the workshops for GP Registrars through the GP training programmes offers an interesting and perhaps the more promising approach. The programme is available to and likely to be delivered to some GPs through the GP CME scheme. However, its reach is likely to be limited, as delivery of the programme is at the discretion of the CME tutors, unless action is taken to increase the uptake of the programme, for example, making the programme mandatory. It remains to be seen whether the training materials produced for the workshops will form part of any future content for CME small group sessions or used in any informal/personal training capacity by GPs.

4.3 Blended learning dementia module for GPs

The UCC postgraduate blended learning module is the first dementia education programme in Ireland offering specialist education to GPs. It differs from the other two programmes for GPs in that it is a university-based module and is accredited by the university. It is also different in that it combines self-directed learning with facilitated online discussion boards and two face-to-face study days. This approach was taken in response to the evidence on the effectiveness of multi-pronged approaches to dementia education for GPs. The self-directed learning and online discussion board is intended to make the module accessible, flexible and acceptable to GPs who can participate on the programme from a place and at a time that is convenient to them. However, some GPs found the large amount of reading and engagement with the discussion board hugely time-consuming. The module was designed to facilitate interactive dialogue between GPs and between GPs and facilitators and used online discussion boards and study days to do this. Whereas the former two programmes for GPs are short programmes aimed at providing a foundation level of dementia education and training, this module is much more intensive and intended as a specialist module. It demands a greater time commitment, over a number of weeks, from participants.

Evaluation of this module was based on responses from GPs, who rated all aspects of the module very positively, although there were different perceptions of the online discussion board, with some valuing it and liking it more than others. Some found the technology challenging, but appeared to persist with it nevertheless. Interestingly, Wong et al. (2010: 6) in their review of internet-based medical education noted when referring to a technology aimed at allowing teaching expertise to be shared between a few dispersed experts that 'it appears that the advantage of being able to learn with otherwise hard-to reach experts ('improved access to learning') more than made up for the technical limitations of the learning technology'.

This module was the only PREPARED education programme that assessed changes in attitudes and knowledge of GPs. While there was no change in the attitudes of GPs, this can be accounted for by the largely positive attitudes of the GPs recorded at baseline, although after module completion GPs still held some fears, for example, around communicating a diagnosis of dementia. Although the results are limited due to the small sample size, the results suggest the module helped to improve the GPs' confidence levels in their abilities with respect to dementia. It is hoped that improvements in confidence may indicate an intention by GPs to change their practice and will lead to potential improvements in clinical care for people with dementia. The audits/quality improvement initiatives performed by GPs in practice may also lead to further improvements. While the evaluation results are limited, it is encouraging that this module had all of the features of effective dementia education programmes (Table 14). With up to 20 participants per annum, the module's reach is small, but it is hoped that this programme will help to create a critical mass of GPs with a specialist interest in dementia.

4.4 Interprofessional dementia education

The programme Dementia in Primary Care: An Interprofessional Approach is markedly different from the other programmes in that it is primarily focused on interprofessional education and collaborative practice. The interprofessional programme is intended not only

to increase knowledge of dementia among primary care professionals but also to bring about change in practice. Delivering the interprofessional workshop to individual practicing PCTs was key to supportive collaborative working, but this proved to be unfeasible. Instead, the programme changed to a focus on delivery to a range of primary care professionals working in a geographical area but not necessarily linked to a PCT. The content, however, continued its focus on professional roles and responsibilities, team collaboration; and interprofessional communication skills, which is one of the real advantages of the programme. This programme is novel as before the PREPARED project Ireland did not have any significant interprofessional educational programmes in primary care.

Although the interprofessional programme has a different focus, it has many similarities with the Dementia in General Practice workshop programme. Both were informed by an educational needs analysis, both were designed as small group, peer-facilitated workshops with a focus on case-based discussions. Providing an opportunity for interactive dialogue was central to the interprofessional programme. However, it is not clear how well this worked in the larger group meetings. Like the other PREPARED programmes, evaluation of the interprofessional programme focused for the most part on the responses of participants to the programmes. Reactions were extremely positive, and the main issue surrounded the workshop length, as participants valued the discussions and wanted more time to be given for interactive discussion.

Like the GP workshops, a train-the-trainer approach was adopted for the Dementia in Primary Care Interprofessional workshops for primary care professionals. Although the geographical reach of these interprofessional workshops was smaller than for GP workshops, the programme is estimated to have been delivered to approximately 500 primary care professionals, a similar number to the GP workshops. Experienced and trained facilitators are needed to deliver the programme nationwide. CNEs tutors and AHPs with a role in education have been trained to deliver the interprofessional workshops, but recruitment, training and monitoring of facilitators can be a challenge.

The interprofessional programme has incorporated features of effective dementia education programmes (Table 14). However, a long-held definition of IPE is health professionals learning about, from and with each other to enhance collaboration and improve health outcomes. It remains to be seen if the interprofessional programme succeeds in enhancing collaboration and improves health outcomes for people with dementia. In the next phase of this programme, a greater focus on measuring programme quality, outcomes and impact is needed.

Some stakeholders wanted all dementia education programmes for primary care professionals to be interprofessional, but there was no consensus among the key stakeholders interviewed. Rather the question of whether to have discipline-specific or interprofessional education or a mixture or both was a thorny issue. Interprofessional learning is important to enable health service professionals work closely together and with GPs at the time of diagnosis and post-diagnosis and to learn from one another about respective roles, responsibilities and expertise. However, discipline-specific training is equally important. For example, a GP does not necessarily need to have detailed knowledge of the occupational therapy interventions to promote optimal functioning for people with dementia at different stages of dementia as this is the responsibility of an OT. Likewise, a

Practice Nurse who is aware of the signs of dementia may have a role to play in helping to increase detection of dementia, but does not need to be trained in the interpretation of diagnostic tools such as MRI or PET scans as this is the responsibility of a physician. However, a broad and more generic knowledge of dementia diagnosis and management is important for everyone if a holistic approach to patient care is to be adopted.

What is clear from the literature is that designing effective interprofessional education is complex and requires considerable commitment and time to create and sustain it (McPherson et al., 2001). There are several issues to be considered to ensure that interprofessional education is effective including the duration of the programme and location. There are a number of significant barriers to effective interprofessional education. Differences in the routines of work can be a major obstacle, as can scheduling challenges, which are particularly challenging for GPs given their independent status as self-employed GPs. Other barriers are variations in learners age, educational experience, and clinical experience (McPherson et al., 2001).

It has long been recognised that education of GPs and other primary care professionals on its own may not be sufficient to improve dementia care. The need to augment educational programmes with service innovation in primary care has been backed up by research evidence (Perry et al., 2011; Koch and Iliffe, 2011), and was emphasised by stakeholders interviewed for this report. The HSE is establishing 'nine learning sites in CHOs to give effect to the network operating model with a focus on demonstrating how it can more effectively respond to the needs of people with chronic disease and with frailty in community settings' (HSE, 2018: 16), and this could provide an opportunity to test the augmentation of dementia interprofessional educational programme with service innovation. DementiaNet, a Dutch initiative, offers an interesting example of a primary care-based, collaborative care approach aimed at improving outcomes for people with dementia and their family members, which includes education and training as a central theme. Taking account of health care complexity, shifting roles and variation in clinical practice, it is centred around the theme of network-based care, where networks are developed using a stepwise approach. The four other central themes are clinical leadership, quality improvement cycles, interprofessional practice-based training and learning, and communication and has evaluation as a core component (Nieuwboer, 2017). This approach has some similarities to the change process piloted in four sites across Ireland by Genio (forthcoming), which was primary and community care based and related to home care packages for people with dementia and their family carers.

This report did not set out to evaluate the contents of the PREPARED educational programmes described in this report. However, personhood is a key principle underpinning the NDS, and it would be remiss to ignore any further reference to personhood. Personhood is certainly in evidence throughout the project. People with dementia were interviewed as part of the educational needs analysis so that their views and experiences could inform the development of educational materials for GPs and other primary care professionals. The case studies that form a key part of the peer facilitated GP workshops, interprofessional workshops and study days on the UCC blended learning module, and encourage learning through interactive dialogue, are underpinned by personhood. Some of the videos on the ICGP eLearning module demonstrate through role play how to interact with a person with dementia and their family carer in a sensitive and person-centred way. A person with

dementia is involved in the study days giving GPs participating on the UCC blended learning module an opportunity to hear from and interact directly with a person with dementia as an expert by experience. These are just some examples. In my view, however, there are places where the principle of personhood could have been embedded further into the programme. For example, the first lesson on dementia in the ICGP eLearning module provides a symptom-based definition of dementia, which follows the disease model of dementia, but no other definition, perspective or framing of dementia is provided, and there are no videos or supplementary readings to get across to GPs and practice nurses what is meant by personhood and citizenship, and how this can be applied in practice. Similarly, a symptom-based definition of BPSD is presented, and while the focus on and use of the term BPSD is arguably acceptable in a clinical setting (Dementia Australia, 2014), the term is grounded in a biomedical explanation (Cahill, 2018) and its use can render the person with dementia invisible. While an understanding of BPSDs as an expression of unmet need is promoted by the PREPARED programmes and psychosocial approaches embraced, alternative definitions or framings are not presented, although these are in widespread use. For example, Professor Steven Sabat refers to BPSD as 'Basic Personal Signs of Distress'. Responsive Behaviours, informed by a biopsychosocial model, originated from and is the preferred term by people with dementia, representing how their actions, words and gestures are a response, often intentional, that express something important about their personal, social or physical environment (Depuis et al., 2012, Alzheimer Society of Canada, 2017). Moreover, language matters and, placing the emphasis on the 'management' of BPSDs may inadvertently contribute to a 'malignant positioning' of people with dementia, where the focus is on managing and treating people rather than engaging and interacting with them, and seeing them as individuals who can exercise independence and agency (Sabat, 2008). A biopsychosocial approach to dementia needs to inform every aspect of dementia educational programmes for primary care professionals, including the language and concepts adopted.

4.5 Sustainability of dementia education programmes

The ICGP eLearning programme will continue to be included on the IGCP's wider eLearning programme. Sustainability is not a major issue for the ICGP eLearning programme, as the ICGP had assumed responsibility for continuing to make the module available to GPs through the education page of its website, and agreement has also been reached with the IPNA to make it available to practice nurses through its website. Funding for the eLearning module is by way of the GP registration with the ICGP and as such is guaranteed. The ICGP has a protocol in place for reviewing and updating eLearning modules. Two more eLearning programmes are in development, one for OTs and one for S&LTs.

PREPARED was used to develop and test the feasibility and responses of the Dementia in General Practice workshop programme to GP practices. To date, additional funding has not been allocated to facilitate the ongoing and future delivery of the Dementia in Primary Care workshop Programme to GP practices beyond the length of the PREPARED project. A costs evaluation was not undertaken as part of the PREPARED project. Apart from the initial costs incurred to develop the programme, the main costs associated with delivering the Dementia in General Practice Workshops included facilitator sessional rate pay and their expenses for travel and accommodation, where required. The costs of hiring a venue were small, as the workshops took place in GP practices, primary care centres, or other health or academic facilities at no cost to the project. Workshops for GP registrars were held in venues linked to

the GP training programmes at no cost to the project. If funding is made available to continue the programme, the implementation of this programme requires an education provider organisation to adopt and deliver the programme. The adoption of this programme at all 14 GP training programmes across the country is worth further consideration. While the programme will likely be delivered through the GP CME scheme, action will be needed to encourage uptake of the programme.

The UCC postgraduate blended learning module is university run and accredited. To date, bursary awards has been available from the PREPARED project to assist GPs with the costs associated with participating in the module, and it is intended that this will continue for the 2019 intake if a minimum of 15 GPs enrol.

The HSE has committed to continuing the roll-out of primary care team dementia education in its National Service Plan (HSE, 2018) and the Dementia in Primary Care: An Interprofessional Approach workshops will continue to be delivered by trained CNE tutors and by trained AHPs in primary care around the country throughout 2019 and 2020. The NDO is overseeing and monitoring the delivery of these workshops. The NDO has committed to commissioning a review and update of the current programme to reflect feedback from participants and to include more up to date evidenced based material.

Dementia is not listed as an illness in the Department of Health's policy framework for the management of chronic disease (Department of Health, 2017), despite the explicit reference in the NDS to the importance of including dementia in all future health policies (Cahill, 2017). This is a missed opportunity. PREPARED adopted many of the principles of the Chronic Disease Model and there is much learning from PREPARED for a chronic disease management programme for dementia. If dementia were to be included as an illness under this policy framework, and a chronic disease management programme for dementia developed, this would mean that the work of the PREPARED project could be sustained and built upon. Some of the resources developed by or with input from PREPARED could be directly incorporated into such a programme. e.g. clinical guidelines, clinical information system. Indeed, PREPARED could be used to inform the management programmes for other chronic diseases.

5. Conclusions and recommendations

This report has described the political and geographical landscape in which CPD training in dementia for GPs and other primary care professionals has developed over recent years in Ireland. It has provided a synthesis of the work of the PREPARED team, which has been extensive and hugely successful. As shown by this report, the PREPARED project has clearly delivered on its core aims and objectives. The project is now complete.

The report has revealed the robust scientific approach adopted in the PREPARED project, as reflected by the empirical research studies undertaken. The findings from these studies were used to inform the development of GP and primary care professional training curricula on dementia. Accordingly, the dementia training materials were evidence-based, informed by findings emerging from research undertaken with user groups (patients and family caregivers) and health service professionals, along with a synthesis of the relevant international literature. The team have undertaken valuable and much needed research in an area previously neglected in Ireland. In so doing it has gone over and above its objectives.

This report has provided an overview of the different dementia training programmes that were designed, developed, delivered and evaluated by PREPARED. Whilst the content of the GP training programme remained similar, three different modes of delivery were used. The PREPARED project tested the feasibility of and evaluated different models of learning: e-learning, facilitated workshops, blended learning and interprofessional education.

- The ICGP Dementia eLearning programme is a comprehensive programme providing practical information to inform and upskill GPs and practice nurses on dementia and fills a major gap in the ICGP eLearning programme. While there is little evidence on the effectiveness of eLearning programmes, key advantages are that they offer accessible and flexible education, and are a good option when the aim is to reach a large number of health professionals at a limited cost and when attendance at small group learning is not feasible (Vaona et al., 2018). A total of 575 GPs accessed the ICGP eLearning Programme on Diagnosis and Management of Dementia over a relatively short time, but only a small fraction (7%) of the total number of around 2,500 GPs in the country have completed this eLearning programme.

- PREPARED has shown that use of peer-facilitated small group workshops to improve knowledge, attitudes and skills of GPs is feasible and GPs were receptive to this type of training. Small group learning has a greater number of features identified as effective in dementia education programmes. However, in the absence of any evaluation of the short- or long-term effects on GP practice, the evaluation of the Workshops rests on the feedback of workshop participants as gathered by the workshop providers, which was extremely positive. The Dementia Care in General Practice Programme has been delivered to more than 500 GPs, approximately 20% of around 2,500 GPs in the country. Trained peer facilitators are needed for the workshops to be delivered to the remaining 2,000 GPs, and planning is required if these workshops are to reach GPs in all areas of the country. No additional funding had been allocated for the future delivery of this programme. As the programme has already been developed, the main costs associated with delivering the Workshops are facilitator sessional rate pay and their expenses for travel and accommodation, where required. It is not clear who is responsible for funding

future GP dementia training programmes in Ireland, nor which organisation is responsible for the delivery of the programme in the future.

- The GP postgraduate CPD dementia blended learning module has been completed by 36 GPs. The module is expected to run again in UCC in Autumn 2019, with bursary awards from the PREPARED project to assist GPs with costs associated with enrolling on the module. The continuation of this module will it is hoped lead to an increasing number of GPs with a specialist interest in dementia, who will likely play a significant role in the diagnosis and ongoing care and support to people with dementia living at home and in long-stay residential care setting. This specialist group could also potentially play an important role in the development of dementia care pathways and contribute to primary care practice change and innovation.

- The Dementia in Primary Care Interprofessional workshop programme is intended not only to increase knowledge of dementia among primary care professionals but also to bring about change in practice. One of the real advantages of the programme is its focus on professional roles and responsibilities, team collaboration; and interprofessional communication skills. Primary care professionals were highly receptive to this training. While to date workshop was delivered to more around 500 primary care professionals, this represents only a small fraction of all primary care professionals employed by the HSE throughout Ireland. Furthermore, it is not known whether the programme is leading to enhanced collaboration in primary care and improved health outcomes for people with dementia, although this is extremely difficult to measure.

PREPARED offers an extremely useful example of different options that can be adopted to upskill primary care professionals in a chronic and complex condition such as dementia and provides lessons for educationalists designing curricula. It also provides decisionmakers with a range of different options from which to choose.

Evaluation of the training programmes undertaken by the PREPARED project rests for the most part on the reactions of the workshop participants, as gathered by the workshop providers. In the absence of any other evaluation, this report assessed the programmes delivered according to Surr et al's. (2017) framework of desirable components. However, this is an assessment of process, and an evaluation of the outcomes (related to learning, behaviour change, and outcomes for people with dementia, family carers and staff) and the shorter- and longer-term impact of the training on GP and primary care professional practice remains to be undertaken. Evaluating these outcomes is notoriously challenging and hard to measure with any great accuracy (Irving, 2017) and a range of issues need to be considered including choice of outcomes which are multi-faceted, and time scale for follow up. A challenge of evaluating specific outcomes of training is that training rarely occurs in isolation, but usually takes place against a background of other changes such as the introduction of new policies, other quality improvement initiatives (e.g. ICPOP and its Frailty Education programme), the reorganisation of primary care, management change and staff turnover. The need for funded research on the impact of dementia-specific education on people with dementia and their caregivers have previously been highlighted, as has the need for such research to be carried out by researchers who are independent of, and external to educational programmes (Irving, 2017). Because of the challenges associated with evaluating the outcomes and impact of dementia educational programmes, mixed methods

studies are deemed to be most advantageous (Surr et al, 2017). When planning an evaluation of educational programmes, there are many models from which to choose, but because dementia educational programmes are inherently complex, evaluation models that are grounded in systems theory or complexity theory, such as the CIPP (Context/Input/Out/Product) model (Stufflebeam and Shinkfield, 2007), may be best suited to informing programme evaluation (Fry and Hammer, 2012).

Ireland's population is ageing and, like other countries, Ireland is likely to witness a significant increase in the number of people with dementia in the coming decades over the coming decades (Pierce and Pierse, 2017). Furthermore, public awareness about dementia has been heightened since the launch in 2015 of the Understand Together campaign (Glynn et al., 2017). Although we have no valid or reliable data to draw on, it is reasonable to assume that an awareness programme of this magnitude will place further demands on GPs, as presumably more people will present to their GPs and other primary care professionals worried about memory and cognitive difficulties. Therefore, there is an urgent need to train and educate larger numbers of GPs and other primary care professionals in dementia care. There is also a need for ongoing training provided on a more regular basis as educational needs are likely to change over time. For this to happen, funding must be allocated for the delivery and further development of high quality and effective dementia education and training to primary care professionals across the country, and, where training is based on small group workshops, to build and sustain capacity to deliver the training throughout the country.

Dementia education for primary care professionals is at a critical juncture and decisions taken now will have an impact into the future. Some decisions have already been taken about the future delivery of programme in the shorter term. A longer-term plan is needed. It is recommended that the Department of Health in consultation with the National Dementia Strategy Monitoring Group convene a small working group to consider the different choices that are available and develop a coherent and strategic plan on the future direction of dementia education and training for primary care professionals, which takes account of the findings in this synthesis report. It is recommended that this plan is a coproduction, co-produced with relevant key stakeholders.

The completion of this important project signals the need for several issues to be considered including issues related to programme acceptability, accessibility, flexibility, usability, reach, effectiveness, capacity to deliver, and costs. Other issues related to programme ownership, maintenance and coherence of standards and quality also need to be considered. The project end also signals to needs for critical questions to be asked. These include:

- Who should have responsibility for the training and education of GPs and Primary Care Professionals in dementia care in Ireland?
- Who will coordinate the different dementia educational programmes on offer and do so without alienating any one of the key stakeholders?
- What are the respective roles, if any, in dementia training of primary care professionals of the HSE, the DSIDC, professional bodies such as the ICGP, and dementia specialists in secondary services and Memory Clinics?
- What is needed at a political level to ensure that dementia be included in HSE models for chronic disease management?

Recommendations

There is an urgent need to train and educate larger numbers of GPs and other primary care professionals in dementia care. There is a need for this training to be ongoing and provided on a more regular basis as educational needs are likely to change over time.

A coordinated effort involving all relevant stakeholders is required if key issues are to be addressed and barriers to the development and delivery of dementia education programmes for primary care professionals effectively managed.

The Department of Health in consultation with the National Dementia Monitoring Group should convene a small working group to consider the different options that are available and develop a coherent and strategic plan on the future direction of dementia education and training for primary care professionals, which takes account of the findings from this synthesis report. It is recommended that this plan is a coproduction, co-produced with relevant key stakeholders.

More evidence is needed on the use and impact of the ICGP eLearning Programme on Diagnosis and Management of Dementia. Given the importance of interaction for learning, future iterations of this programme could give more attention to ways of providing meaningful interaction for participants, if resources are available.

Funding needs to be allocated for the future delivery of the Dementia in General Practice Workshops programme to GPs.

The adoption of Dementia in General Practice Workshops programme at all 14 GP training programmes across the country is worth further consideration.
Dementia training needs to be embedded in the undergraduate and postgraduate training of all medical doctors, nurses, allied health professionals and social care staff.
Progress on reaching targets set for training of primary care professionals in dementia care needs to be monitored. Where targets are set, care must to taken to ensure that this does not lead to an overemphasis on ‘volume’ trained. The quality and efficacy of the dementia education and training is of utmost importance.

Ongoing monitoring by the HSE of the adoption and reach of the interprofessional programme is needed, but this needs to be supplemented with evaluation to assess the quality of delivery and outcomes and impact of the programme. Consideration could be given by the HSE to augmenting interprofessional training with service innovation, which could be tested in the nine CHN demonstrator sites that the HSE is establishing.

Funding is needed for research to evaluate dementia educational programmes. Mixed methods studies using evaluations informed by evaluation models grounded in systems or complexity theory are likely to be best suited for measuring change and impact.

The provision of dementia training that is both interprofessional and dementia-specific is needed.

The inclusion of dementia as an illness under the Department of Heath's policy framework on chronic disease management could help to sustain and build upon the important work undertaken to date by PREPARED.

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Appendix 1: Additional Activities of PREPARED project

In addition to the core activities of PREPARED, the PREPARED team have been active on many other fronts with a view to making a positive impact on policy and practice relating to dementia in primary care. They have been involved in promoting dementia education in primary care including making presentations at numerous highly relevant conferences and meetings. These include presentations at conferences and organisations such as the ICGP, the AUDGPI, the IGS, the Irish Network of Medical Educators, the RCGP, the SAPC (UK) and Alzheimer Europe, as well as those for PHNs, OTs, dieticians, and by Nursing Homes Ireland. In recognition of the important work that PREPARED has undertaken in the area of dementia education in primary care, it has won the Irish Medical Times Healthcare Award and conference awards for presentations.

At national level, the PREPARED project has been working with and supporting the NDO on policy development and implementation. It is represented on a range of national dementia working groups, including the NDS Implementation Group, the Post-diagnostic Supports Group, the Antipsychotic Prescribing Group, the Non-pharmacological Management of BPSD Group and has spoken at NDO events nationally.

At a more local level, PREPARED set up a dementia interest group of GPs in UCC that meet quarterly.

As a consequence of its work, PREPARED has forged multidisciplinary research and project collaborations in UCC with colleagues across the disciplines of nursing, gerontology, pharmacy, speech and hearing sciences, occupational therapy and physiotherapy. It has also formed wider collaborations with other universities including DCU, TCD, NUIG, QUB and UL and with other organisations in Ireland including the ASI, Irish Hospice Foundation, AIIHPC, DNNI, DSIDC and INTERDEM at European level. More than 12 undergraduate and postgraduate dementia research projects have been supervised.