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Review

Admiral Nurse Case Management within Enhanced Health in Care Homes

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Abstract

The United Kingdom's (UK) older population is higher than the global average. Over the next 20 years, England will see an increase in the number of older people who have higher levels of dependency, dementia, and comorbidity many of whom may require 24-hour care. Currently it is estimated that 70% of residents in nursing and residential care homes either have dementia on admission or develop it whilst residing in the care home. The provision of high-quality care for this population is a challenge with a lack of consistency in the provision of primary care and specialist services and a known gap in knowledge and skills. The NHS Long Term Plan aims to move care closer to home and improve out of hospital care which includes people who live in care homes by introducing Enhanced Health in Care Homes (EHCH). However, such services need to be equipped with the correct skill mix to meet the needs of the care home population. Admiral Nurses are specialists in dementia care and are well placed to support the delivery of EHCH and improve access to specialist support to care home residents, their families, care home staff and the wider health and social care system. This paper discusses current gaps in service provision and how both the EHCH framework, and the inclusion of Admiral Nurses, might redress these and improve outcomes.

Keywords
Dementia; Admiral Nurses; care homes; integrated systems; enhanced health in care homes; palliative care

1. Background

1.1 Ageing Population

People aged over 80 years old equate to 15% of the world's total population [1]. This increase in the proportion of older people has major health, social care and economic implications [1]. The United Kingdom's (UK) older population is higher than the global average, in 2017 approximately 18% of the UK population were aged 65 years or over and this figure is projected to grow to almost 21% by 2027 [2]. Projections suggest that in 50 years' time there will be an expected additional 8.6 million people over 65 years old in the UK [2]. It is also predicted that the number of people aged over 85 will increase to 3.5 million by 2043 equating to 5% of the total UK population. It is important that health and care systems adapt and respond to meet this changing demographic to better manage resources and consider interventions which both prevent and manage chronic conditions that are inevitable in an ageing population [3].

Older people often have complex health and social care needs and have an increased risk of developing dementia [4]. On average people living with dementia are likely to have 4.6 chronic conditions besides dementia [5], other studies indicate that 61% of people with dementia have at least three comorbid conditions [6, 7]. Comorbidities can include conditions such as chronic obstructive pulmonary disease, chronic cardiac failure, hypertension, diabetes, sensory impairment, vascular or heart disease and musculoskeletal disorders and depression [8-11]. Over the next 20 years, England will see an increase in the number of older people who have higher levels of dependency, dementia, and comorbidity [12]. Whilst dementia is not a normal nor inevitable part of ageing [13], age is the greatest risk factor of developing dementia therefore as the population ages the number of people living with dementia is set to rise [4].

1.2 Dementia

It is estimated that there are 885,000 people in the UK living with dementia and numbers are projected to increase by 80% to 1.6 million people by 2040 [14]. Dementia is an umbrella term used to describe a syndrome with a group of symptoms that are characterised by memory loss, behavioural changes, and loss of cognitive and social functioning caused by progressive neurological disorders [15]. There are over 200 subtypes of dementia, but the most common are Alzheimer's disease, vascular dementia, Lewy Body disease, mixed dementia (often a combination of Alzheimer's and Vascular) and Frontotemporal dementia [16]. Although the majority of people with dementia live in the community approximately one third of people with dementia live in care homes [17]. It is estimated that 70% of residents in nursing and residential care homes either have dementia on admission or develop it whilst residing in the care home [17, 18], which equates to an estimated 311,730 people with dementia residing in UK care homes [17].

1.3 Care Homes

Care homes in the UK are categorised as either nursing or residential care homes. Nursing homes offer on-site 24-hour nursing care and support for activities of daily living (ADLs), whereas residential care homes offer 24-hour care to support ADLs, with any nursing needs met by external National Health Service (NHS) community nurses [19-21]. All care homes in the UK are monitored by regulatory bodies within each of the devolved nations to ensure they meet the prescribed standards of care [22].

The provision of high-quality care for the care home population is an international challenge for the sector [23]. Older people admitted to all types of care homes are often frail and have complex needs [24, 25], such as, higher levels of dependency, cognitive impairment, distressed behaviours, multimorbidity, subject to polypharmacy and are frequent users of NHS resources [26]. As a result, they are more likely to be approaching the end of their lives. A study by Kinley et al. [27] found that 56% of older people admitted to UK care homes died within the first year with the average life expectancy being 24 months for residential care homes without nursing and 12 months for nursing homes [28]. UK care homes, even those providing nursing care, are reliant on NHS primary care services to review the medical and nursing needs of residents, and to access specialist services.

2. Enhanced Health in Care Homes

People living in care homes should expect the same level of support as if they were living in their own home. In 2019 the NHS published its Long-Term Plan, which aims to deliver care closer to home and improve out of hospital care [29] which included a framework to provide better support to care home populations through one of the strands of work within the Ageing Well programme of the Long-Term Plan. NHS England & NHS Improvement [30] propose that to achieve this requires collaborative working between health and social care, third sector and care home partners and have developed a model of Enhanced Health in Care Homes (EHCH). The EHCH model strives to move away from traditional reactive models of care delivery towards proactive care which centres on the needs of individual residents, their families and care home staff [30]. The EHCH model will be delivered through Primary Care Networks (PCN), the key building blocks of the NHS Long-Term Plan that bring together general practices to support integration of health and care systems [29]. The EHCH framework aims to deliver healthcare across seven key areas (See table 1) which include; enhanced primary care support; multi-disciplinary team (MDT) support; high quality palliative and end-of-life care; dementia care and workforce development [30].

Table 1 Core elements and sub elements of refreshed EHCH model (adapted from [30]).

Care element	Sub-element
1. Enhanced primary care support	• Each care home aligned to a named PCN, which leads a weekly multidisciplinary 'home round' • Medicine reviews • Hydration and nutrition support • Oral health care

	• Access to out-of-hours/urgent care when needed
2. Multi-disciplinary team (MDT) support including coordinated health and social care	• Expert advice and care for those with the most complex needs • Continence promotion and management • Flu prevention and management • Wound care – leg and foot ulcers • Helping professionals, carers, and individuals with needs navigate the health and care system
3.Falls prevention, Reablement, and rehabilitation including strength and balance	• Rehabilitation/reablement services • Falls, strength, and balance • Developing community assets to support resilience and independence
4. High quality palliative and end-of-life care, Mental health, and dementia care	• Palliative and end-of-life care • Mental health care • Dementia care
5. Joined-up commissioning and collaboration between health and social care	• Co-production with providers and networked care homes • Shared contractual mechanisms to promote integration (including Continuing Healthcare) • Access to appropriate housing options
6. Workforce development	• Training and development for social care provider staff • Joint workforce planning across all sectors
7. Data, IT and technology	• Linked health and social care data sets • Access to the care record and secure email Better use of technology in care homes

This paper will now discuss how the model of Admiral Nurse case management can support PCNs in achieving the ambition for EHCH.

3. Admiral Nurse Case Management

Admiral Nurses are specialist dementia nurses who, through a biopsychosocial case management approach recognise the interactions between biological, psychological, and social factors that influence wellness and disease [31]. Case management enables the Admiral Nurse to work across health and social care systems to deliver clinical support to families affected by dementia who have complex needs. The Admiral Nurse model aims to deliver case management across the life course of dementia [32] from peri diagnosis to end-of-life and then through to post bereavement support

of family members (Figure 1) and can be adapted to support people with dementia (and their families and care staff) in which ever setting they may find themselves. Admiral Nurses adopt a range of strategies, approaches and interventions to meet the holistic needs of families affected by dementia. The person-centred approach to dementia care [33] is one of the cornerstones of their practice whilst recognising and supporting the relationships that surround the person with dementia. Family focused (relationship centred) interventions embrace shared decision-making, while also maintaining and supporting autonomy in the person with dementia for as long as is possible [34]. In more recent years the relationship-centred model of care has become more prominent with the emergence of triadic perspectives of care that include the person with dementia, their families and carers, and the professionals that care for them [35, 36]. Relationship-centred care is a model advocated for the care home setting in which people receive care in an enriched environment encompassing not only the relationships between residents, their families and carers and care home staff, but extends to the relationships between the care home and wider health and social care system [37].

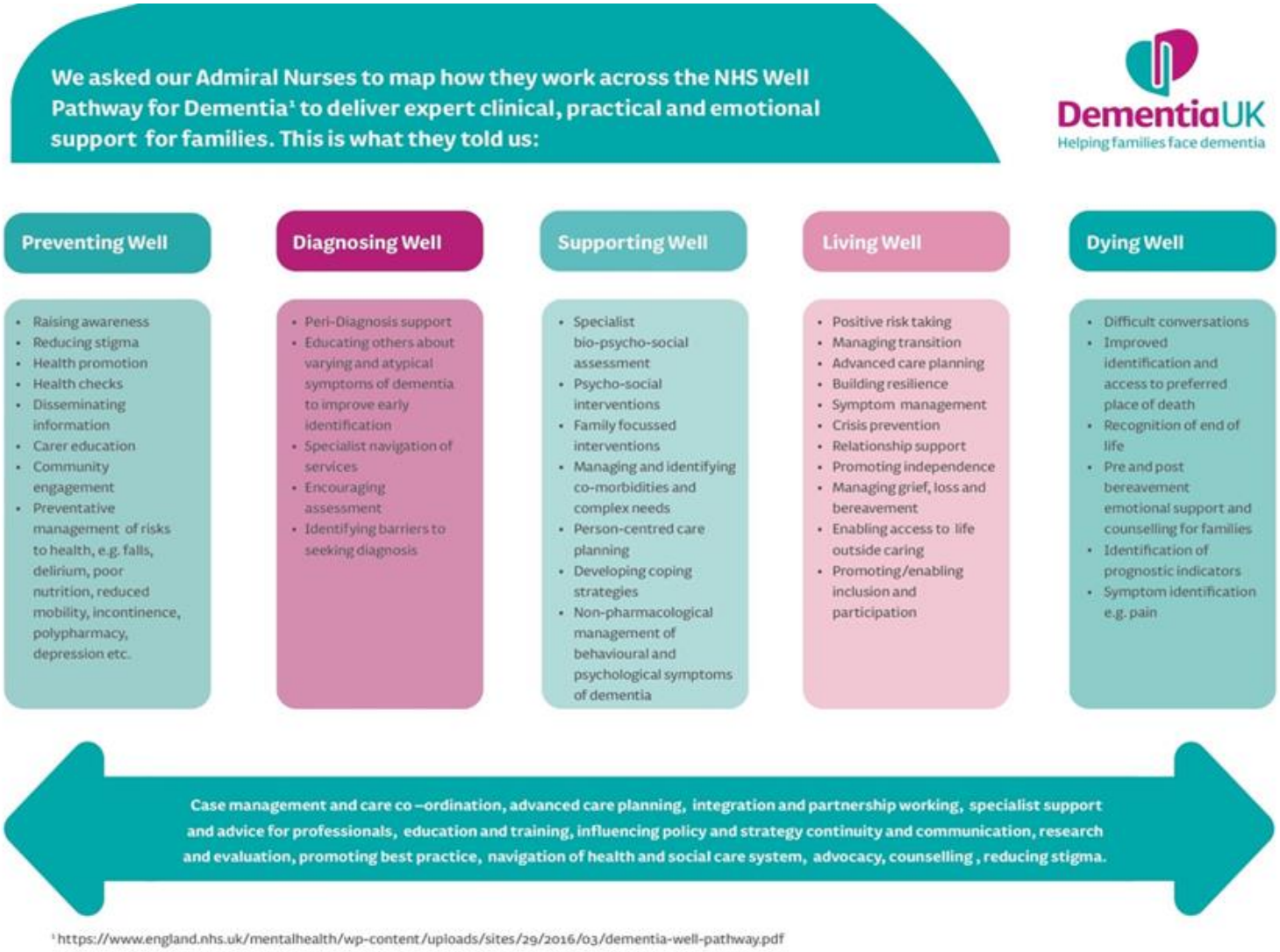

Figure 1 Admiral Nurse interventions across NHS England Dementia well pathway.

Therefore, as well as working directly with families affected by dementia with complex needs, Admiral Nurses provide consultancy and support to generalist colleagues through education, supervision and mentorship to enable the best possible dementia care. Consultancy requires close working and collaboration with all stakeholders and care providers to deliver comprehensive care for the whole family. A case management approach ensures expertise from all areas is harnessed and care delivered in a consistent, efficient and cost-effective way [38, 39]. The Admiral Nurse ABC model of case management applied to MDT or PCN locality working seeks to integrate health and social care services as well as those provided by the private and charity sectors to support families affected by dementia, wherever the person with dementia may reside (see figure 2) [40].

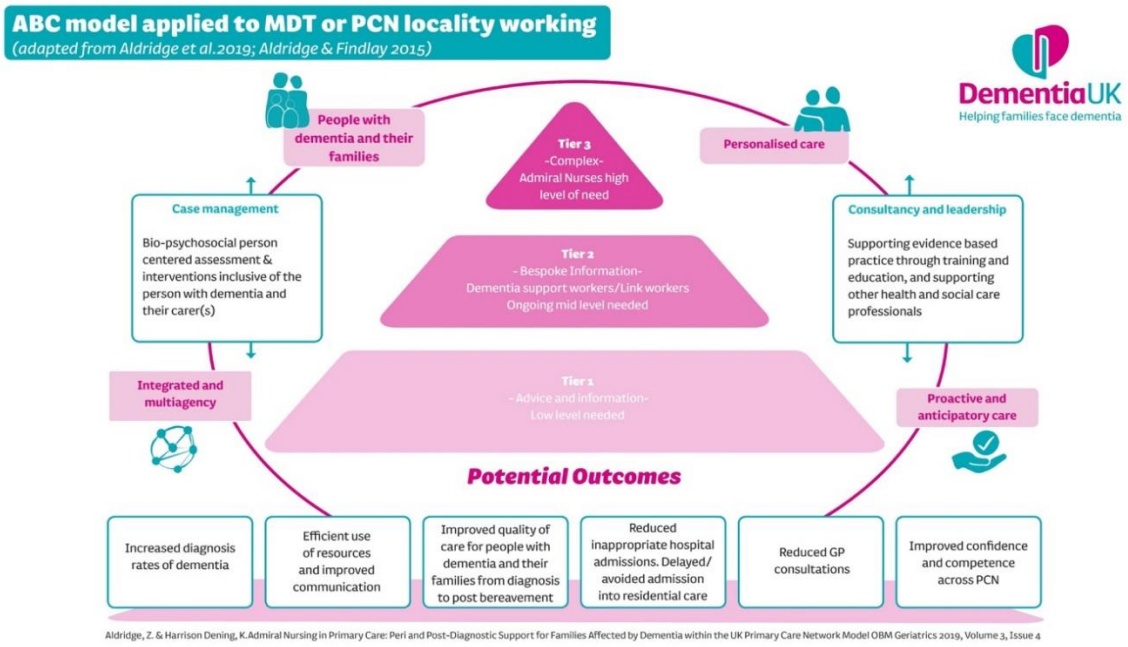

Figure 2 ABC Model applied to MDT or PCN locality working [19].

Currently there is little consistency in the way care is delivered in to care homes due to fragmented commissioning and so may often be driven by crisis management [41-43]. Care homes are reliant on NHS primary care services to review the often-complex medical needs of residents, and to access specialist services [29]. However, access to general practitioners (GP) and specialist healthcare service varies considerably [44], with some GP practices offering regular ward rounds alongside as required visits, whilst others only visit when requested [45]. Evidence suggests that for many primary and secondary health services the provision of support to care homes has not been seen as a priority [44]. The EHCH approach offers an opportunity to redress this inequity by offering a model of best practice for commissioners, healthcare providers and stakeholders to follow and reflects the proactive and integrated approach that is central to Admiral Nurse case management. An adaptation of the Admiral Nurse ABC model integrated into EHCH could affect positive outcomes against the EHCH framework [30] (see figure 3). This paper now highlights some of the expected outcomes that Admiral Nursing within an EHCH framework could impact positively upon.

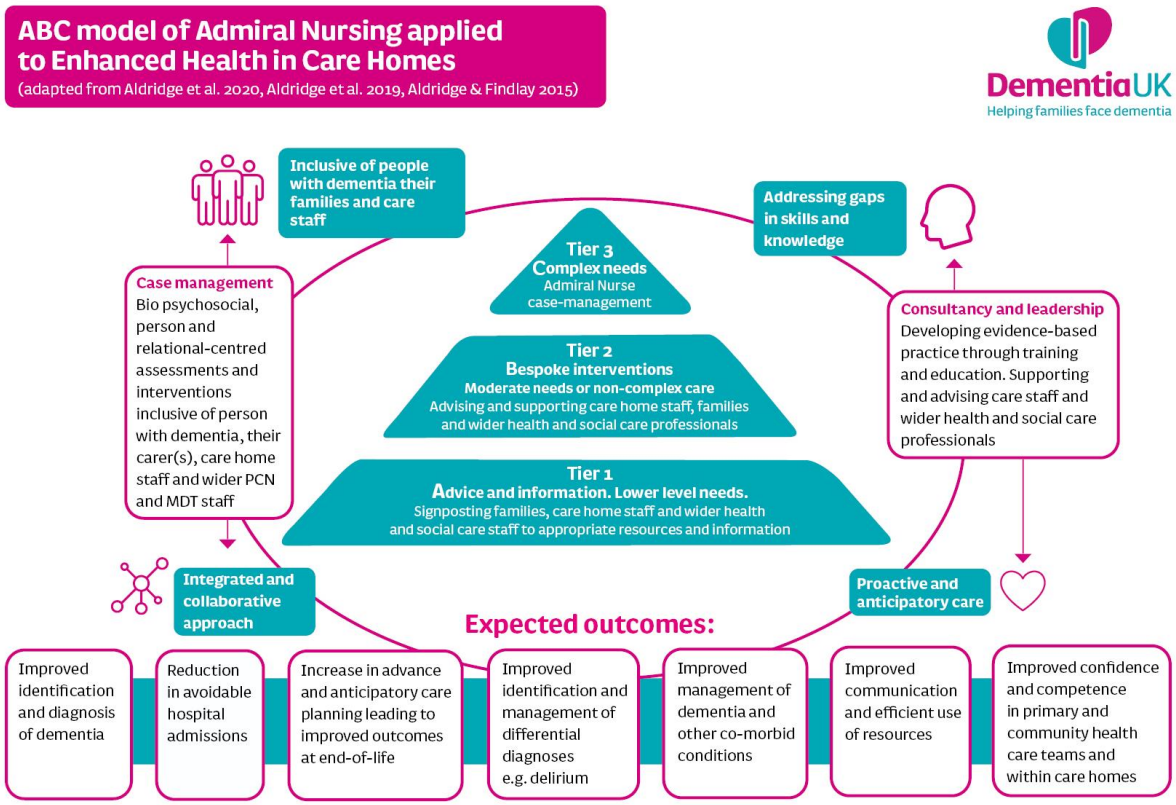

Figure 3 The ABC Model of Admiral Nursing model applied to Enhanced Health in Care Homes.

4. Identification and Diagnosis of Dementia

The National Institute of Health and Clinical Excellence (NICE) dementia guideline [46] recommends people thought to have dementia should receive timely access to an assessment with several benefits identified, such as, access to early interventions and management for co-morbidities [47]. However, dementia diagnosis rates in care homes are known to be particularly poor [18]. It is recognised that this may be in part due to skills and resource gap in primary care and within care homes which can negatively impact the recognition of dementia symptoms, and subsequent access to assessment and diagnosis [18]. Although, conversely, some professionals still question whether there is actually any value in a diagnosis of dementia at all [18, 48]. Consequently, Admiral Nurses can educate, advise and support care home staff and primary care colleagues to identify symptoms, support screening and coordinate dementia assessments both within primary care and through onward referral to specialist memory assessment services. As a consequence of improving identification and diagnosis of dementia in care home residents, the person with dementia, their families and care home staff can be enabled to consider pre-emptive decision-making and setting goals of care [49]. Similarly, the dementia diagnosis can inform the treatment and management of other comorbid conditions which can reduce the risk of avoidable hospital admissions and improve quality of life [50].

5. Preventable Hospital Admissions

Dementia is a life-limiting, progressive condition for which there is no cure [51] and is now the leading cause of death in England and Wales [52]. Historically, most people with dementia have died in acute hospitals, however, this is changing with approximately 58 % of such deaths now being in care homes [53]. Whilst this may be seen as a positive step forward and evidence to suggest people are dying in their preferred place of death, there are still a high number of emergency hospital admissions of people with dementia in their last year of life, rising significantly in the months before death [54, 55]. This is due to a lack of direct preventative interventions in the care homes in managing both multimorbidity and intercurrent conditions [51]. Multimorbidity, frailty and dementia represents the most common 'disease pattern' found among the care home population, characterised by a complex interaction of each [51]. People with dementia do not always have their comorbid conditions managed as well as those without dementia, which often leads to a high number of hospital admissions with longer lengths of stay and greater treatment costs [56]. They are also less likely to have access to the usual primary care services and resources available to other community dwelling older people [57]. Admiral Nurse case managers can support care home staff and the primary care team to manage and monitor comorbid conditions or any intercurrent acute condition superimposed on dementia to reduce any avoidable hospital admissions. This may involve several interventions by the Admiral Nurse, for example, educating care home staff and the wider MDT to understand the interplay of dementia with other physical conditions and support differentiating between conditions, such as, dementia, delirium and depression, so enabling speedier and more appropriate access to community based care and treatment and avoid escalation [58].

Similarly, they can offer support and guidance on prognosis and the trajectory of dementia which may reduce inappropriate and burdensome transitions to hospital which often result in poorer quality end-of-life care [59]. There is evidence to suggest that people in the advanced "terminal" stages of dementia are often exposed to overly aggressive, burdensome or futile treatments and consequently there is a need for expertise in dementia care at end-of-life [60]. Such hospital admissions may be reduced or prevented if swift action is taken when a resident deteriorates and therefore enable access to timely treatment or symptom control in the care home setting [41, 51]. Therefore the inclusion of Admiral Nurse within EHCH may support pre-emptive discussions and decision-making.

6. Advance and Anticipatory Care Planning for End-of-Life

NICE dementia guidelines [46] recommend a palliative care approach to dementia, commencing at the point of diagnosis through to end-of-life [46]. A palliative care approach regards dying as a normal process and aims to provide the best possible quality of life until death for the person with the terminal condition [61, 62]. Essential to a palliative approach is pre-emptive care and a timely recognition of the dying phase and avoiding unnecessarily burdensome treatments [63, 64].

The European Association of Palliative Care (EAPC) white paper proposed a series of domains and recommendations for palliative care in relation to people with dementia [64] and one domain centred on advance care planning (ACP). ACP is a process that supports adults at any age or stage of health in understanding and sharing their personal values, life goals, and preferences regarding future medical care. The goal of ACP is to help ensure that people receive care that is consistent

with their values, goals and preferences during serious and chronic illness [65]. However, supporting the development of an ACP directly with the person with dementia will depend upon their capacity to do so.

The point in the life course of the disease ACP is offered is important and the sooner after diagnosis, the better [51, 66]. There are several barriers to ACP for people with dementia [43] and few have an ACP in place when they move into a care home when many are in the advanced stages of in the disease and may have already lost capacity [67, 68]. Thus, ACP moves more to a shared decision-making approach involving families and in supporting best interests' decisions [66]. There is often a reliance on substitute or proxy decision-makers, usually family members who participate in decision-making on behalf of those who are no longer able to make decisions for themselves in relation to their financial and/or health and care needs [69] whom play an important role in end-of-life decision-making [70].

Whilst there has been focus on the potential benefits of ACP for people with dementia [39, 71-73], there has been limited focus on meeting the support needs of substitute or proxy decision-makers [70, 72, 74]. Decision-making on behalf of a person with impaired capacity can be an emotional and burdensome process [75], therefore to ameliorate some of these challenges for families and care staff alike Admiral Nurses can offer skilled facilitation of ACP, anticipatory care planning and support shared decision-making by adapting their communication and approach according to each family's needs [76] alongside supporting care home staff and other healthcare professionals to determine the most appropriate options to consider.

7. Differential Diagnoses

As discussed earlier, when a person experiences memory loss or other features that might indicate the development of dementia, this requires assessment. There are several other conditions that can mimic symptoms of dementia, such as, vitamin deficiencies, infections, delirium, depression and metabolic disorders-which may be reversible and should be ruled out at an early stage [58, 77]. As well as ensuring any reversible causes of a person's symptoms are identified, it is also important to distinguish between the "3D's": dementia, delirium and depression which a person may be experienced singularly or concurrently at any one time [58]. These are all serious conditions that are common in older people and have similar presentations, which may lead to each condition going undetected and untreated [78, 79]. Equally, these conditions occur more frequently in the care home population [80-82]. Stewart et al. [82] report high levels of unmet need in respect of these conditions with high levels of behavioural symptoms and psychotropic medication use. The Admiral Nurse could not only support care home staff and primary care teams to enable a differential diagnosis between dementia, depression and delirium and expedite treatment pathways [56] for each but also support better assessment, treatment and management of behavioural symptoms and thus avoid inappropriate use of antipsychotic medications [58].

8. Dementia and Comorbidities

Left untreated and unmanaged comorbid conditions can cause pain, distress and worsening health [51]. Equally, dementia and comorbidities can interact with one another causing either complication with treatment or an acceleration or exacerbation of one or more of the individual diseases [10, 11, 77, 83]. For example, a person may have both dementia and diabetes; poorly

managed blood sugar levels can impact on cognition and cognition can impact upon a person ability to manage their diet and treatment regimens. However, it is suggested that the recognition of symptoms and subsequent diagnosis of comorbidities experienced by people with dementia is underestimated due to the difficulties people living with dementia may have in communicating any new symptoms [83]. Similarly there is a propensity to attribute any symptoms to a known, existing condition, an effect called "diagnostic overshadowing", whereby symptoms are attributed to one condition as opposed to being seen as an interaction with other comorbid conditions or indeed the manifestation of a new condition [77, 84]. An example of such diagnostic overshadowing is often seen when a person with dementia becomes distressed, and changes in behaviour being solely attributed to a worsening or progression of dementia as opposed to considering other possible causes such as for example pain, delirium or depression. Admiral Nurses are able to guide care home staff and other health professionals to consider differential diagnoses and suggest assessments, interventions and treatments that can reduce the negative effects that residents may be experiencing and moreover improve their quality of life [85].

9. Communication and Resource Utility

As previously discussed, the overarching philosophical approaches to care in care homes are those of relational [37] and person-centred models [33] which seek to meet the holistic needs of both residents and embrace family members [86]. This differs from other areas of healthcare which may be more readily sited within a biomedical model of care with the primary focus being on the health needs of the 'patient' as opposed to the 'resident' [87]. There is evidence to suggest that doctors are more likely to make decisions based on the functional status of the patient rather than the expressed wishes of family or ACP [88]. Furthermore, despite the known complexities and comorbidities of people with dementia, there remains a propensity to deliver care that focusses on singular conditions and diseases, which increases the risk of burdensome treatments and polypharmacy [5, 10, 77].

Whilst GPs have clinical authority, they may have limited knowledge of care home residents and therefore rely on the input of family members and/or care staff to ascertain the normal presentation of the person with dementia and to alert them to deterioration [89]. In using a biopsychosocial model of case management Admiral Nurses consider the complex needs of the residents in totality by incorporating relational, person-centred and biomedical models of care a when communicating and coordinating care [40, 85]. Such an approach improves consistency across services to promote clearly defined goals of care so that the person with dementia receives the right care at the right time, whilst taking their wishes and preferences into account and ensuring they are not exposed to futile treatments.

10. Confidence and Competence to Care

Care home staff often provide care for residents with complex needs as a result of a variety of conditions, including dementia. The nature of dementia care can be demanding of their knowledge and skills and also emotionally challenging [90]. Rivett and colleagues [90] also identified that a lack of adequate support and limited training opportunities for care home staff may contribute to high levels of staff turnover in this area. However, Goodman et al. [89] identified that when a care home resident is approaching their end-of-life there is often uncertainty about the roles and

responsibilities of the care home staff, the families and primary care professionals. Despite the GP having clinical authority they may have limited knowledge of the resident and therefore rely upon the input of family carers and/or the care home staff to inform decision-making [89]. Consequently, given the high prevalence of people with dementia living in care homes there is an imperative for the care home workforce to demonstrate their competence by meeting residents needs in a variety of ways. Yet there is currently no consistent model of specialist support for care homes in the UK and it has been identified that as a consequence of the increasing multimorbidity of the care home population, the expertise that is required may be beyond that of some GPs [26]. Furthermore, such complexity can result in people with dementia requiring different levels of care which may require them to move to a different care setting if their needs cannot be met within their current care home, the Admiral Nurse may offer support that minimises the need to move the person with dementia or support a transition to a more appropriate setting should it be required [56].

Therefore, delivering the EHCH framework will require careful consideration of the skill mix required to ensure the needs of care home residents are adequately served within this new model of care [40]. Reconfiguration of the current workforce will not address the gaps in skills and knowledge and there is an urgent need to consider dementia specialist roles, such as Admiral Nursing, within PCN's and integrated multi-disciplinary teams to address this current gap [40].

11. Conclusion

For too long care homes have been isolated from the wider health and social care system despite their vital role in providing care for some of the most vulnerable members of society. With increased rhetoric and political drivers to push forward the agenda of health and social care integration across England there must be a recognition of the gaps that exist within the workforce and strategies to redress these. There is growing momentum to address the inequalities faced by care home residents through the implementation of the EHCH model to be delivered via PCN's. Whilst this is to be welcomed, there is an urgent requirement to consider the complex needs of the care home micro population and ensure facilitation of EHCH uses appropriately skilled and knowledgeable clinician(s). There is already a known gap in the knowledge and skills in dementia care within PCN's. The inclusion of Admiral Nursing within this new model of care offers an opportunity to embed the specialist clinical knowledge and skills required to redress this and improve outcomes for people with dementia, their families, care staff and the wider health and social care system.

Author Contributions

ZA conceived the article and structure. The paper was co-authored by ZA and KHD.

Competing Interests

The authors have declared that no competing interests exist.

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