1-1-2023

Improving the transition of older adults into residential aged care: A scoping review

Stacey Scott
Edith Cowan University

Annette Raynor
Edith Cowan University

Julie Dare
Edith Cowan University

Jennifer Grieve
Edith Cowan University

Leesa Costello
Edith Cowan University

10.1080/07317115.2023.2274042
Scott, S., Raynor, A., Dare, J., Grieve, J., & Costello, L. (2023). Improving the transition of older adults into residential aged care: A scoping review. Clinical Gerontologist. Advance online publication. https://doi.org/10.1080/07317115.2023.2274042

Routledge
Taylor & Francis Group

Clinical Gerontologist

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/wcli20

Improving the Transition of Older Adults into Residential Aged Care: A Scoping Review

Stacey Scott, Annette Raynor, Julie Dare, Jennifer Grieve & Leesa Costello

To cite this article: Stacey Scott, Annette Raynor, Julie Dare, Jennifer Grieve & Leesa Costello (06 Nov 2023): Improving the Transition of Older Adults into Residential Aged Care: A Scoping Review, Clinical Gerontologist, DOI: 10.1080/07317115.2023.2274042

To link to this article: https://doi.org/10.1080/07317115.2023.2274042

Published online: 06 Nov 2023.

CLINICAL GERONTOLOGIST
https://doi.org/10.1080/07317115.2023.2274042

Routledge
Taylor & Francis Group

Improving the Transition of Older Adults into Residential Aged Care: A Scoping Review

Stacey Scott MSc[a], Annette Raynor PhD[a], Julie Dare PhD[a], Jennifer Grieve MBA[b], and Leesa Costello PhD[a,c]

[a]School of Medical and Health Sciences, Edith Cowan University, Perth, Western Australia; [b]School of Nursing and Midwifery, Edith Cowan University, Perth, Western Australia; [c]Nutrition & Health Innovation Research Institute

ABSTRACT

Objectives: The transition into residential aged care (RAC) is often associated with loss, grief, isolation and loneliness. This scoping review aimed to identify quantitative research which focused on reducing the negative effects associated with transition, thereby improving the transition experience.

Methods: A scoping review, which concentrated on quantitative research, was conducted. MEDLINE, CINAHL andPSYCHINFO databases were searched using the initial search terms "old-eradults", "residential aged care" and "transition".

Results: From the 457 original citations identified, four met the inclusion criteria. The interventions used a range of professionals and clinicians, diverse content, and a mixture of outcomes. The content of the more successful studies were underpinned by mental wellness themes and helped to reduce depressive symptoms among new residents.

Conclusions: Our review provides a summary of interventions aimed at improving the transition experience for older adults moving into RAC and highlights gaps in the literature. This review is limited by the paucity of quantitative research in this area. Further research is required to address the negative psychosocial effects associated with transition into RAC.

Clinical Implications: Assessing which of the transition phases an individual is in can help individualize interventions to reduce negative symptoms relating to transition.

KEYWORDS
Interventions; psychosocial; residential aged care; transition

Introduction

Some older adults will reach a point where living in their own home is no longer viable because their holistic and complex care needs can no longer be met by formal or informal community-based care programs. The purpose of a residential aged care (RAC) facility is to "provide accommodation and care to older people so that they can maintain their health and wellbeing" (Australian Government Department of Health, 2022, para. 4). Despite the higher level of care available in RAC, evidence indicates rising levels of psychosocial and cognitive health issues among aged care residents (Amare et al., 2020). An example of the psychosocial issues that are of significant concern within RAC are loneliness (Gardiner et al., 2020) and depression, which is reported by Amare et al. (2020) as the most common mental health disorder among residents in RAC. Unfortunately, the transition from living independently to RAC appears to be a critical time for many older adults, with recent research indicating that the prevalence of mental health issues increases at the time that older adults move into RAC (Amare et al., 2020).

Transition

McKechnie et al. (2018) describe transition as occurring between time or places, and as characterized by "intense" change, whereby social connections and ties to communities are broken and "uncertainty and disorder reside" (p. 18). In the context of RAC, transition can be defined as a journey from living independently to living in a residential care facility.

Researchers have described transition into RAC as an emotionally stressful life event for older adults (Brownie et al., 2014; Newson, 2011), with evidence suggesting that some individuals can take up to six months or longer to adjust to their new home (Hertz et al., 2007). The transition period can be experienced

CONTACT Stacey Scott s.scott@ecu.edu.au Centre for Research in Aged Care, School of Medical and Health Sciences, Edith Cowan University, 270 Joondalup Drive, Perth 6027, Australia

as a "painful loss" (Sullivan & Williams, 2016, p. 43), resulting in intense grief for new residents (Newson, 2011) and a period of mourning (Fitzpatrick & Tzouvara, 2019). The move to an aged care facility not only results in older adults losing a physical home, but also their established friendships and lifestyles, along with their independence and sense of self-identity (Fitzpatrick & Tzouvara, 2019; Newson, 2011). These circumstances can result in feelings of helplessness, abandonment, vulnerability and fear (Melrose, 2004; Wilson, 1997), particularly where connections with family and friends become disrupted (Zamanzadeh et al., 2017). These feelings can lead to sadness, isolation and loneliness (Gardiner et al., 2020; Zamanzadeh et al., 2017).

A review on the consequences of loneliness (Hawkley & Cacioppo, 2010) indicated that loneliness is a risk factor for depression, poor physical health and mortality. Another review by Meeks et al. (2011), reported that subthreshold depression can have a negative effect on cognitive health in older adults, and is associated with a decline in physical health and disability. Hence, it appears that while the move into a RAC facility may be positioned as a "new chapter" in life – both for the person making the move and for their families – the feelings of loss and grief experienced by new residents can cause serious and prolonged mental and physical health consequences.

One of the most commonly cited determinants influencing the transition experience of older adults, is the level of control an individual has over the decision to move into RAC and their ability to preserve some form of autonomy (Brownie et al., 2014). Moilanen et al. (2021) describes this autonomy as the ability of older adults to exercise "their own free will" and "make independent choices" (p. 424). Facilitating the level of autonomy described by Moilanen et al. during the transition period, can help residents to feel stable in their new living environment (Sullivan & Williams, 2016). The importance of autonomy in the Australian aged care sector was recognized recently by the Royal Commission into Aging Quality and Safety, which advocated for the right to autonomy for those receiving aged care (Recommendation 2), and recommends that aged care providers promote a sense of dignity by including residents in decision-making (Royal Commission into Aged Care Quality and Safety, 2021). Additionally, facilitating a socially supportive environment and encouraging residents to develop new relationships, both with other residents and staff, can also help improve the transition experience (Brownie et al., 2014; Johnson & Bibbo, 2014).

Due to the challenges experienced by older adults, and in particular the emotional stress many experience when they move into RAC, it is imperative that researchers provide evidence of successful interventions that can reduce the negative psychosocial issues (e.g., loneliness, depression, anxiety and stress) associated with the transition into RAC. To date, the majority of review articles have focused on the experiences of the participants (Brownie et al., 2014; Ferrah et al., 2018; Fitzpatrick & Tzouvara, 2019; Müller et al., 2017; Sullivan & Williams, 2016; Sun et al., 2021; Yong et al., 2021), and not on objectively measured outcomes of interventions. Consequently, the aim of this scoping review was to address this gap in the literature, by identifying quantitative research evidence that describes interventions to improve the transition experience of older adults, with a particular focus on the design and mode of previous interventions that have targeted primarily the psychosocial aspects of the transition experience. Specifically, the results of this scoping review will be used to inform the design and implementation of a targeted intervention in RAC during the transition period. The first author of this review is an experienced exercise physiologist and will be designing a physical activity program which will harness the key components of successful interventions identified in this review to improve the physical and psychosocial well-being of residents during this challenging period.

Methods

Design

This scoping review replicates the approach of Arksey and O'Malley (2005), the first authors to publish a scoping review framework, and Levac et al. (2010), who further developed and expanded on this framework. The application of the five stages described by the afore-mentioned authors is reported below.

Step 1: Identifying the research question

This review focused on interventions that aimed to improve the psychosocial response of older adults who were transitioning into RAC. To ensure an extensive scope of the literature related to transition programs in RAC, the question that guided this review was: *What is the design and mode of previous interventions that have been implemented during the transition phase into RAC?* The intervention design includes duration, frequency and intensity of treatment; who organizes the treatment sessions; how each session is structured and what content is included in each session; and the mode refers to the main form of treatment, such as crafting, counseling and reminiscing.

Step 2: Identifying relevant studies

Using Medline, a basic search was conducted using the initial search terms of "older adults", "residential aged care" and "transition", which reflects the population, context and concept (PCC) of the review. The three individual searches were combined to form the preliminary search strategy, which was then further developed using Boolean indicators to expand the search strategy for each individual idea (e.g., "older adults*" OR "older people" OR "older person" OR "aged" OR "aged, 80 and over"). The search strategy (Table 1) was then used to conduct a comprehensive search of three major databases in May 2021, namely Medline, CINAHL and PsychInfo. The search was limited to peer reviewed, which was selected under the Advanced Search Function for the three databases used, and English language articles that were published between January 1991 to December 2021, with the identified articles being imported into Covidence (www.covidence.org). An additional hand search was then carried out, based on six systematic and meta-synthesis articles (Brownie et al., 2014; Ferrah et al., 2018; Fitzpatrick & Tzouvara, 2019; Müller et al., 2017; Sullivan & Williams, 2016; Sun et al., 2021; Yong et al., 2021), with six more articles being identified as meeting the search parameters.

A further search was undertaken in August 2023 for peer-reviewed articles published from January 2021 to August 2023. This additional search yielded no new quantitative studies where a treatment or intervention was provided to new residents to improve their transition experience. A hand search of two scoping reviews (Groenvynck et al., 2022; Skudlik et al., 2023) was also conducted in August 2023, which did not yield any new studies that met the criteria of this scoping review.

Step 3: Study selection

Study selection was conducted by four reviewers (SS, AR, JD and LC) using Covidence. The selection was based upon the inclusion and exclusion criteria (Table 2), which were discussed and agreed upon by SS and AR before the articles were examined. The four reviewers randomly reviewed the abstracts to determine if the articles met the inclusion criteria – this was indicated with either "Yes" or "No". If two reviewers indicated a Yes, then the article was automatically saved to the full-article review list,

Table 1. Search terms.

Concepts	Terms
Population: 'older adults'	'older people'
	'older person'
Context: 'residential aged care'	'aged care'
	'aged care facilities'
	'residential aged care facilities'
	'nursing home*'
	'residential care'
	'residential settings'
	'residential aged care settings'
	'care home*'
	'residential care facilities'
	'aged-care facilities'
	'residential aged care service*'
	'aged care service*'
	'residential aged-care facilities'
Concept: 'transition'	'transition care'
	'transitional care program*'
	'care transition*'

Table 2. Inclusion and exclusion criteria for study selection.

Inclusion	Exclusion
• Transfer from hospital or acute-care or home INTO Permanent RAC • Must have an intervention/treatment arm • Participant receiving the intervention must be a resident of RAC • Quantitative studies that have objective data	• Transfer from Permanent RAC to home or hospital or any other setting • Transfer from hospital into a transitional care program • Qualitative studies that have not included any type of intervention • Studies where participants receiving the intervention are family/carers

with 27 studies selected for full-text review following the first phase of the review. In the analysis of the full-text, SS reviewed all 27 articles, and AR and JD reviewed eight and 14 respectively. A spreadsheet was created to address conflicts that arose during the full text review. Each reviewer commented on the articles under dispute, which was followed by a discussion among the three reviewers to resolve any conflicts and decide if the articles would be included in the data extraction process. After the full-text articles were analyzed, four studies were deemed to have met the inclusion criterion and were included in the final analysis - Table 3 provides details of these four studies. The study selection process was reported as per the PRISMA guidelines as shown in Figure 1.

Step 4: Charting the data

A template for data extraction was created by SS and subsequently discussed with JD, prior to finalizing it. This template was used by SS to conduct the data extraction and the results were reviewed for accuracy by AR. The characteristics that were charted are shown in Table 3.

No quality assessment was conducted of the four included studies. In a scoping review of scoping reviews (Pham et al., 2014) 267 out of 344 (77.7%) scoping reviews assessed did not carry out a quality assessment. The framework of Arksey and O'Malley was adhered to, which states that "quality assessment does not form part of the scoping remit" (Pham et al., 2014, p. 380).

Results

Overview of findings

The electronic search of the literature conducted in May 2021 yielded 456 original citations, which was reduced to 451 potentially relevant articles following the removal of five duplicates. Six additional articles, identified as a result of a hand search, brought the total number of articles for review to 457. Overall, this scoping review yielded only four articles, and, in this section, we present evidence to address the initial research question by describing and evaluating the interventions presented in the five studies.

Three of the studies were randomized control trials (RCT) (Chen et al., 2020; Davison et al., 2021; Sullivan et al., 2019) and one was a non-randomized experimental study (Hersch et al., 2012). Only one RCT study followed an *Intention to Treat* design (Davison et al., 2021), with the other two RCT studies following a *Per Protocol* approach. The aims of the studies were varied – three studies implicitly aimed to determine if the intervention would reduce depression (Chen et al., 2020; Davison et al., 2021; Sullivan et al., 2019), with Chen et al. (2020) also aiming to investigate a holistic effect of the intervention, incorporating physical, behavioral and psychosocial effects; and Hersch et al. (2012) targeted facilitating adaptation by enhancing quality of life (QoL), engagement in activities and social involvement.

Intervention description

The research question for this scoping review focused on the design and mode of previous interventions; therefore, this section provides a description of the procedures followed for each of the four studies. Details of the design and mode of each intervention are provided in Table 3.

Participants

The population was similar for each study; namely older adults ranging in age from 71 to 85 years who had lived in RAC for between four weeks and two years. The inclusion criteria for the studies ranged from 55 to 65 years and over, with a mean age range of 78.9 years (Chen et al., 2020) and 85.5 years (Davison et al., 2021) and

Table 3. Characteristics of included studies.

Citation	Location	Aim of Study	Study Design	Participants analysed	Population Description	Key Findings	Design and Mode of intervention
Chen et al. (2020)	Southern Taiwan	To determine physical, behavioural and psychosocial effects of a mindfulness program for older adults with type 2 diabetes (T2DM) relocating to a long-term care facility (LTCF)	Cluster randomised controlled trial	*n* = 60 intervention *n* = 60 control Per protocol	Older adults who had T2DM and lived in a long-term care facility (within the past 12 months) Mean age: 78.9	Mindfulness is an approach that can be used to reduce relocation stress and depression among older adults who are transitioning into Long-term care/RAC	Group (8–10 participants) 1x90 min session per week x 9 weeks Mindfulness activities plus breathing and relaxation activities
Davison et al. (2021)	Melbourne, Australia	To determine the effectiveness of PEARL* in reducing depressive symptoms in newly admitted nursing home residents, compared to standard care * Program to Enhance Adjustment to Residential Living (PEARL)	Cluster randomised controlled trial Facilities were randomised, not individuals	*n* = 111 intervention *n* = 105 control Intention to treat	Residents that had recently been admitted into a nursing home (admitted during past 4 weeks as permanent resident) Mean age: 85.5	PEARL demonstrated a significant treatment effect on depressive symptoms between baseline and two months following the end of the treatment among newly admitted residents into RAC	1:1 1x60 min session per week x 7 weeks Self-Determination Theory – autonomy, relatedness and competence
Hersch et al. (2012)	Texas, USA	To determine whether the occupation-based cultural heritage intervention (OBCHI) facilitated older adults' adaptation to their new home	Non-randomised experimental study Non-equivalent control-group design with pre-test and post-test	*n* = 16 intervention *n* = 13 control	Older adults, over 55 years, admitted to long term care facility within the past 12 months 71–75 years	A client-centred, occupation-based intervention can improve Quality of Life (QoL) for older adults in RAC	Group (2–4 participants) 2x60 min session per week x 4 weeks People and cultural characteristics of those who had transitioned
Sullivan et al. (2019)	Southeast Florida, USA	To determine if story-sharing when transitioning, leads to a reduction in depression and an improvement in well-being for older adults transitioning into LTC	Two group randomised controlled trial	*n* = 41 intervention *n* = 52 control Per protocol	Older adults who were transitioning into long-term care over the past 2 years 81–82 years	Story-sharing is an ineffectual approach to reduce levels of depression and improve well-being	Group (2–3 participants) 2x30 min session per week x 3 weeks Story-sharing relating to childhood, vocation, romance, etc

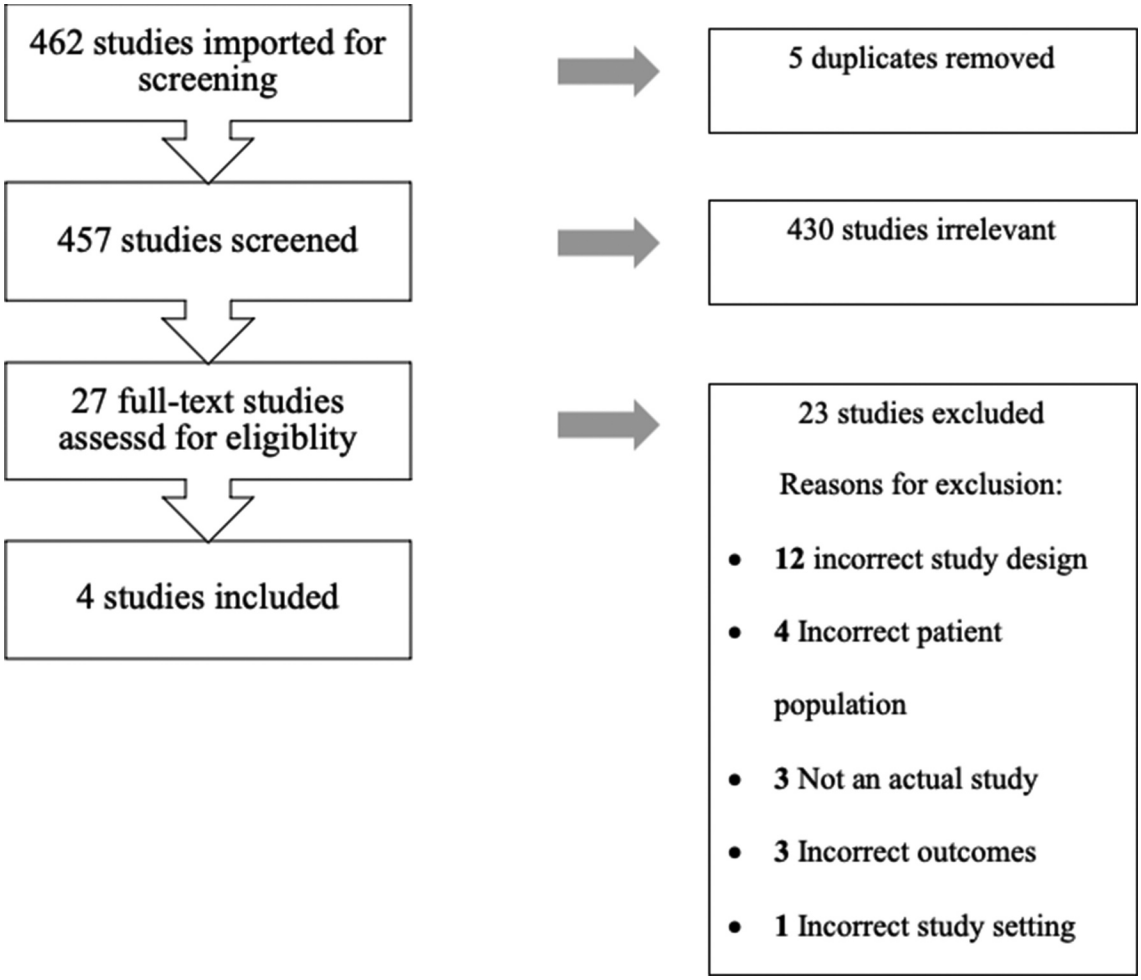

Figure 1. PRISMA chart.

a median age of 71–75 years (Hersch et al., 2012) and 81–82 years (Sullivan et al., 2019). A breakdown of the demographics for each study can be found in Table 4.

All studies applied some form of cognitive status assessment, with Davison et al. (2021) and Sullivan et al. (2019) administering a test to determine cognitive status and Chen et al. (2020) specifically excluding individuals who had obvious delirium, were confused or had a current diagnosis of psychiatric illness.

Table 4. Demographic summary.

	Total number of participants	Total number of male participants	Total number of female participants
Chen et al. (2020)	120	42	78
Davison et al. (2021)	216	76	140
Hersch et al. (2012)	29	5	24
Sullivan et al. (2019)	93	60	33

Professionals and clinicians

An assortment of professionals and clinicians were involved in delivering the various interventions, including registered nurses (RN), clinical psychologists, and occupational therapy assistants. In one of the studies (Davison et al., 2021) staff members delivered the intervention, whereas the other three papers did not comment on staff involvement.

Intervention content

The content was vastly different across all studies. The two studies that focused more on mental wellness themes (i.e., mindfulness and Self-Determination Theory) appeared to have the greatest effect on reducing depressive symptoms (Chen et al., 2020; Davison et al., 2021). The Sullivan et al. (2019) study that incorporated story-sharing did not report a significant decrease in levels of depression, and although the Hersch et al. (2012) study that

included occupation-based cultural content lead to a significant increase in QoL scores for the intervention group, the control group also demonstrated a significant improvement in this score as well.

The mindfulness program (Chen et al., 2020) included mindful deep breathing and mindfulness activities, which comprised meditation and exercise strategies, and education (e.g., What is mindfulness, how to respond to stress, communication and relationships and how to live mindfully in a new "home"). The PEARL (Program to Enhance Adjustment to Residential Living) intervention (Davison et al., 2021) was underpinned by the three basic psychological needs of all individuals – autonomy, relatedness and competence, as set out by Deci and Ryan (2000). A clinician met individually with each participant to assist them in developing strategies to form relationships with others, increase meaningful activity and enhance competence and autonomy.

The story-sharing intervention (Sullivan et al., 2019) was guided by Meleis' middle-range theory of transitions (Meleis et al., 2000; Schumacher et al., 1999). According to Meleis et al. (2000), well-being is one of the three indicators of a healthy transition – well-being was used within this study to determine if participants had transitioned into RAC well. The investigator encouraged group participants to share stories based on preplanned topics, such as childhood, vocation, love and ambitions.

The OBCHI (occupation-based cultural heritage intervention) intervention (Hersch et al., 2012) centered around occupational therapy principles of a client-centered approach through the delivery of planned and meaningful activities, the opportunity for both social and activity engagement, and small group interactions. The intervention was underpinned by the assumption that meaningful activities are integral to the health promotion of the individual. The group sessions were composed of five elements – namely, introduction, warm-up, activity (e.g., exercise, poetry, writing and crafts), discussion and conclusion.

Research setting

All interventions took place within residential aged care facilities (also referred to as long-term care facility or nursing home). Two of the studies did not report the exact location within the RACF, one took place indoors in a "social activity space" (Chen et al., 2020) and one took place in a private room (Davison et al., 2021).

Outcome measures and data collection

There was an assortment of outcome measures among the studies – outcomes used in each study is listed in Table 5. Depression was measured in three of the four studies, with each utilizing a different depression test: Depression and Anxiety Scale (DASS-21) (Moussa et al., 2003), Cornell Scale for Depression in Dementia (Alexopoulos et al., 1988), and Depression Inventory 8b (DI) (National Institutes of Health, 2013). One study also applied the structured clinical interview for DSM-5 disorders – clinician version (SCID-5-CV) to determine if participants met criteria for Major Depressive Disorder (MDD). Three studies performed a cognitive test at baseline for screening purposes – "Mini-cog" (Borson et al., 2000), short probable mental status questionnaire (Pfeiffer, 1975), and Mini Mental State Examination (Folstein et al., 1975; Tombaugh & McIntyre, 1992). Other outcome measures utilized were the Relocation Stress Scale (Moussa et al., 2003; Yang et al., 2014), Yesterday Interview

Table 5. Outcome measures utilized by each study.

Citation	Outcome Assessments
Chen et al. (2020)	Glycaemic control (HbA1c) Chinese version of Depression and Anxiety Stress Scale (DASS-21) Relocation Stress Scale
Davison et al. (2021)	Cornell Scale for Depression in Dementia The Structured Clinical Interview for DSM-5 Disorders – Clinician Version (SCID-5-CV) Mini mental State Examination (MMSE)
Hersch et al. (2012)	The Yesterday Interview Quality of Life Index: Nursing Home Version
Sullivan et al. (2019)	Mini-Cog Depression Inventory 8b (DI) Psychological Well-being (PWB) Satisfaction with life scale (SWLS) Scale of positive and negative Experience (SPANE)

(Moss & Lawton, 1982), Quality of Life Index (Ferrans & Powers, 1985, 1992), Psychological Well-being (Diener & Biswas-Diener, 2008), Satisfaction With Life Scale (Diener & Emmons, 1984; Pavot & Diener, 2008) and Scale of Positive and Negative Experiences (Diener & Biswas-Diener, 2008).

Two of the studies (Chen et al., 2020; Davison et al., 2021) collected data at four time points, whereas the other two studies (Hersch et al., 2012; Sullivan et al., 2019) collected data at two time points (pre- and post-intervention). The PEARL research (Davison et al., 2021) was the only study to conduct follow-up data collection, which took place six months post-intervention.

Format and frequency

Three of the interventions were provided in a group format, with one study using a one-to-one format. The frequency of the interventions was once or twice a week, for a period of three to nine weeks. The total time participants spent in the interventions ranged from 180 to 810 minutes, with each session ranging from 30 to 90 minutes (see Table 3 for further details).

Intervention evaluation

The aim of the scoping review was to identify interventions that have improved the transition experience for older adults, with the findings to be used to inform a physical activity intervention to ameliorate the psychosocial issues associated with transition. Therefore, the effectiveness of the interventions were evaluated to identify the studies that reported significant results which had a positive impact on the transition experience of older adults. A summary of each intervention evaluated below can be found in Table 6.

Story-sharing

The study on story-sharing by Sullivan et al. (2019) focused on reducing depression and enhancing well-being; however, there was no evidence to suggest that this intervention was successful. Although findings showed a small decrease in depression for both groups, it was not significant, and the intervention group showed no significant change in both the level of depression and well-being. No effect size was reported.

Table 6. Summary of evaluated interventions.

Intervention	Summary
Mindfulness Program (Chen et al., 2020)	Six 'hospital-affiliated LTCFs' Adapted from a program that focused on mental illness by the Taiwan Mindfulness Association (Huang et al., 2015) Over a period of 9 weeks, individuals participated in 1.5-hour group sessions, consisting of 8–10 participants 'indoor social activity space' Sessions comprised 2 parts – 30 minutes mindful and relaxing deep breathing and 60 minutes mindfulness activities Concentrated on how to manage stress caused by diabetes Registered nurse delivered program
Program to Enhance Adjustment to Residential Living (PEARL) (Davison et al., 2021)	Intervention group received both standard care and PEARL Participants received 5 sessions in a 7-week period (1 hour/session) Delivered in participant's private room First three sessions concentrated on identifying and applying a plan that was tailored to the participant to satisfy the participant's need for autonomy, competence and relatedness 2 extra sessions provided in week 6 and 7 - included key staff member and participant and focused on barriers to applying strategies discussed in weeks 1–3 and how to overcome them Clinical psychologist/social worker who delivered intervention met with key staff member at facility before and after each session to discuss how strategies may be implemented
Occupation-Based Cultural Heritage Intervention (OBCHI) (Hersch et al., 2012)	Each group = 2–4 participants 8 sessions over 4 weeks (2 sessions/week, 1 hour/session) Structure and layout of each group identical for intervention and control group – only difference was content Content delivered extrapolated from interviews in 6 RACs – resident interviews focused on people and cultural characteristics of those who had transitioned Intervention conducted by occupational therapy assistants
Story-Sharing Intervention (Sullivan et al., 2019)	Participants met twice a week over 3 weeks (30 min/session) in a group Each participant participated in 5 sessions in total Participants recounted stories within a small group (2–3 participants plus investigator) Topics provided by investigator (e.g., a pleasant childhood or children/s story, a professional or vocation story and a funny or strange story)

Occupation-based cultural heritage

Hersch et al. (2012) aimed at facilitating adaptation of older adults to their new living environment by introducing an occupation-based cultural heritage intervention (OBCHI). This study reported that the intervention group demonstrated a significant increase in QoL scores. However, the control group's QoL score also increased significantly. Moreover, the control group demonstrated a greater improvement in their QoL scores on all subscales (Health and Function; Social and Economic; Psychological/Spiritual; and Family) compared to the intervention group. The control group also increased the amount of time spent in activities they had personally selected to do between the pre- and post-intervention, whereas the intervention group spent less time in these activities in the same period. A small to medium effect size was reported.

Mindfulness and self-determination theory

The studies that appeared to be the most successful were inherently heterogeneous. The intervention that focused on physical, behavioral, and psychosocial effects (Chen et al., 2020) was conducted by a registered nurse, while the study that aimed at reducing depressive symptoms (Davison et al., 2021) was conducted by psychologists and social workers. Both interventions took place over a longer period (seven and nine weeks) compared to three weeks for the story-sharing study by Sullivan et al., and four weeks for the OBCHI study by Hersch et al. (2003).

Chen et al. (2020) mindfulness study was group-based, located in a social activity space, and focused on managing the stress caused by having diabetes. In this study, Chen et al. reported a significant interaction effect between the four time points and the two groups in terms of the relocation stress and depression scores. No effect size was reported.

Davison's PEARL intervention was a one-to-one format that took place in a private room. The focus of this intervention was on reducing depressive symptoms among older adults who were new to RAC by creating a plan to assist the individual to meet their three basic needs – i.e., autonomy, mastery, and relatedness. Davison et al. reported a significant difference in the change in level of depressive symptoms between the intervention and control group between baseline and two months after the intervention. A small to medium effect size was reported.

Discussion

The findings from this scoping review provide an overview of what is currently known about interventions that have been used to address the negative psychosocial issues typically associated with transition into RAC and draws attention to gaps in the literature relating to the transition experience and mental health and well-being. It is not possible to say that one particular type of content is superior to another, as the content was vastly different between all studies. QoL improved for both the intervention and control groups in the OBCHI study, suggesting that the content may not be as important for some residents as how it is delivered (i.e., in a group). Social relationships are an important factor in helping residents adjust to their new living environment (Brownie et al., 2014), and it may have been the social aspect of the group that contributed to the improvements in QoL for the participants in this particular study, rather than the specific content per se. This issue has been previously highlighted by Hertz et al. (2007), who recommended that providing new residents with the chance to socialize with others by taking part in social groups, and introducing them to other individuals, may help them to adjust to RAC. Similarly, Knippenberg et al. (2021) noted that social engagement is an important part of any intervention aimed at reducing depression, and therefore will likely play a significant role in interventions designed to support transitions into RAC.

Those studies which were conducted for longer durations (between seven and nine weeks) appeared to be more effective than those which ran for three to four weeks (even though these shorter studies had a higher weekly frequency). The link between duration and efficacy may be related to where individual residents are in the process of transition. Wilson (1997) identified that individuals who are new to RAC move through three phases: overwhelmed, adjustment and initial acceptance. The shorter interventions described in this current review may only be

taking place during the "overwhelmed" stage, whereas the longer interventions may also include the "adjustment" and "initial acceptance" phases. Given individuals typically move through three phases, the longer studies are more likely to continue past the first phase and could help participants move through to the second and even the third phase of transition into RAC. Progress through these phases is an individual process and can also be affected by the type of admission to RAC (i.e., planned or unplanned) (Wilson, 1997). It is therefore important for clinicians (such as an exercise physiologist) to consider what phase an individual is in to be able to provide a more individualized and targeted approach during the transition period.

As well as understanding and addressing an individual's transition phase, Hertz et al. (2007) suggested that clinicians should "support the older adult's highest level of physical and psychological functioning and his or her autonomy by ensuring that assistance is adequate to meet his or her needs and making referrals to appropriate health care providers as needed" (p. 17). While the Australian Government's definition of RAC is to: "provide accommodation and care to older people so that they can maintain their health and well-being" (Australian Government Department of Health, 2022, para. 4), allied health and age care providers should set the bar higher and not simply help older adults to maintain their health and well-being, but also work toward improving the physical function, mental health, and QoL of residents, where possible.

Physical activity (PA) has been proven to have a positive effect on physical and mental health, as well as quality of life (QoL) (Bauman et al., 2016; Chodzko-Zajko et al., 2009; Diegelmann et al., 2018; Fien et al., 2016; Hewitt et al., 2018; Singh, 2002). When an individual moves into RAC, they often feel as if they have lost control. They can have low self-esteem, feel insecure and their connection to others can be disrupted or cut off completely (Lee et al., 2002; Matos Queirós et al., 2021; Zamanzadeh et al., 2017). PA can help to reduce social isolation and loneliness, positively influence social connections, stabilize symptoms of depression and help improve mental health and QoL (Bauman et al., 2016; Diegelmann et al., 2018; Hwang et al., 2019; Post et al., 2020). Hence, PA is ideally situated to address some of the issues associated with transition into RAC. To date, a physical activity-based intervention implemented with older adults as they transition into RAC has not been reported in the literature.

PA-based activities can also be designed to incorporate elements of the other studies described in this review that have demonstrated positive outcomes. For example, Chen et al. (2020) study demonstrated that mindfulness activities can have a positive effect on relocation stress and depression. Drawing on this evidence, mindfulness could therefore be a valuable practice to incorporate into a PA intervention as part of the cool down section of the class. Similarly, the three elements of the Social Determination Theory (autonomy, mastery and relatedness) can easily be integrated into a PA intervention, while PA groups can also provide residents with an opportunity for conversation and sharing stories with others. That is, a successful PA program moves beyond a simple focus on physical improvements, to instead incorporate aspects that help individuals feel valued and confident, as well as provide a sense of belonging and enable them to achieve realistic goals in the context of a meaningful activity. In doing so, such programs have the potential to empower residents and benefit them in various aspects of their life in residential care.

Future research

Although 75% of the studies reviewed used depression as an outcome measure, the aims and findings of the studies were distinct. In the three studies that aimed at improving depression (Chen et al., 2020; Davison et al., 2021; Sullivan et al., 2019), three different outcome assessments were used. Future research could focus on investigating an appropriate grouping of assessments to standardize the way in which a successful transition intervention is evaluated.

This scoping review demonstrates that different professionals and clinicians are conducting research to improve the experience of transition into RAC. Unfortunately, as illustrated by this scoping review,

there are limited studies exploring this topic and further research is needed to assist new residents to positively adjust to their new living situation.

Limitations

This scoping review is limited by the scarcity of quantitative studies that have focused on the psychosocial well-being of older adults within the context of transitioning into RAC. Only peer-reviewed studies were included in this review and therefore it is possible that unpublished or gray literature relating to the topic were missed. While qualitative studies provide important insights into interventions to improve the experience of transition to RAC, it is important that objective evidence is also examined to provide clinicians and aged care providers with practical knowledge and mechanisms to help new residents have a smoother and happier transition into RAC. The shortage of studies in this area is further impacted by the fact that the reviewed studies only took place in three different countries. At present, there appears to be no studies concentrating on the psychosocial issues of transition in countries other than Australia, Taiwan and the USA. Although the location of studies was limited, the search strategy itself was not. The finite locations in which these studies took place will most likely limit the generalizability of this review.

The fact that no quality assessment was conducted for the four articles reviewed may appear to be a limitation; however, the aim of a scoping review is to present an overview of the literature in a given field (Munn et al., 2018). If literature is excluded based on a quality assessment, this could potentially provide a skewed representation of the literature that exists in this area, particularly given the small number of papers that are available.

Conclusion

Our review identified a small number of interventions that were aimed at assisting older adults to transition into RAC; however, there were very few common elements that could be reported. As our review indicated, there are multiple designs and modes that have been trialed to assist older adults to transition successfully into RAC. However, our review indicated that to date, a PA intervention has not been investigated to improve the transition process. Importantly, well-designed PA programs can incorporate various elements from the studies examined in this review, to provide a mode of treatment that can benefit the whole person. Therefore, the authors will incorporate aspects of the studies presented in this review into a PA intervention aimed at improving the transition experience.

Clinical implications

- Residents progress through the three phases of transition (Wilson, 1997) at different speeds – it is therefore important to assess what phase an individual is currently in to be able to provide an individualized intervention aimed at reducing negative symptoms relating to transition.
- Group-based activities that facilitate social engagement may be useful in reducing depression.
- Physical Activity provides older adults with numerous benefits, such as reducing loneliness, stabilizing depressive symptoms and improving mental health and QoL, therefore, it is well situated to help manage some of the problems experienced by new residents when they transition into RAC.

Acknowledgments

The authors thank Pam Thornton, Librarian at Edith Cowan University, for assistance provided in designing the draft search strategy for this scoping review.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work is supported by an Industry based PhD scholarship, which is funded by Edith Cowan University and Hall & Prior Health & Aged Care Group [ECU-Fresh Fields Aged Care Pty Ltd Scholarship].

References

Alexopoulos, G. S., Abrams, R. C., Young, R. C., & Shamoian, C. A. (1988). Cornell scale for depression in dementia. *Biological Psychiatry*, *23*(3), 271–284. https://doi.org/10.1016/0006-3223(88)90038-8

Amare, A. T., Caughey, G. E., Whitehead, C., Lang, C. E., Bray, S. C. E., Corlis, M., Visvanathan, R., Wesselingh, S., & Inacio, M. C. (2020). The prevalence, trends and determinants of mental health disorders in older Australians living in permanent residential aged care: Implications for policy and quality of aged care services. *Australian and New Zealand Journal of Psychiatry*, *54*(12), 1200–1211. https://doi.org/10.1177/0004867420945367

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Australian Government Department of Health. (2022). *About residential aged care*. Australian Government Department of Health; Australian Government Department of Health. https://www.health.gov.au/initiatives-and-programs/residential-aged-care/about-residential-aged-care

Bauman, A., Merom, D., Bull, F. C., Buchner, D. M., & Fiatarone Singh, M. A. (2016). Updating the evidence for physical activity: Summative reviews of the epidemiological evidence, prevalence, and interventions to promote "active aging". *The Gerontologist*, *56*(Suppl 2), S268–S280. https://doi.org/10.1093/geront/gnw031

Borson, S., Scanlan, J., Brush, M., Vitaliano, P., & Dokmak, A. (2000). The mini-cog: A cognitive 'vital signs' measure for dementia screening in multi-lingual elderly. *International Journal of Geriatric Psychiatry*, *15*(11), 1021–1027. https://doi.org/10.1002/1099-1166(200011)15:11<1021:AID-GPS234>3.0.CO;2-6

Brownie, S., Horstmanshof, L., & Garbutt, R. (2014). Factors that impact residents' transition and psychological adjustment to long-term aged care: A systematic literature review. *International Journal of Nursing Studies*, *51*(12), 1654–1666. Elsevier Ltd. https://doi.org/10.1016/j.ijnurstu.2014.04.011

Chen, S. M., Lin, H. S., Atherton, J. J., MacIsaac, R. J., & Wu, C. J. J. (2020). Effect of a mindfulness programme for long-term care residents with type 2 diabetes: A cluster randomised controlled trial measuring outcomes of glycaemic control, relocation stress and depression. *International Journal of Older People Nursing*, *15*(3), e12312. MEDLINE. https://doi.org/10.1111/opn.12312

Chodzko-Zajko, W. J., Proctor, D. N., Fiatarone Singh, M. A., Minson, C. T., Nigg, C. R., Salem, G. J., & Skinner, J. S. (2009). Exercise and physical activity for older adults. *Medicine & Science in Sports & Exercise*, *41*(7), 1510–1530. https://doi.org/10.1249/MSS.0b013e3181a0c95c

Davison, T. E., McCabe, M. P., Busija, L., Graham, A., Camões-Costa, V., Kelly, J., & Byers, J. (2021). The effectiveness of the program to enhance adjustment to residential living (PEARL) in reducing depression in newly admitted nursing home residents. *Journal of Affective Disorders*, *282*, 1067–1075. https://doi.org/10.1016/j.jad.2020.12.087

Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Diegelmann, M., Jansen, C. P., Wahl, H. W., Schilling, O. K., Schnabel, E. L., & Hauer, K. (2018). Does a physical activity program in the nursing home impact on depressive symptoms? A generalized linear mixed-model approach. *Aging & Mental Health*, *22*(6), 784–793. https://doi.org/10.1080/13607863.2017.1310804

Diener, E., & Biswas-Diener, R. (2008). *Happiness: Unlocking the mysteries of psychological wealth*. Blackwell Pub.

Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, *47*(5), 1105–1117. https://doi.org/10.1037/0022-3514.47.5.1105

Ferrah, N., Ibrahim, J. E., Kipsaina, C., & Bugeja, L. (2018). Death following recent admission into nursing home from community living: A systematic review into the transition process. *Journal of Aging and Health*, *30*(4), 584–604. https://doi.org/10.1177/0898264316686575

Ferrans, C. E., & Powers, M. J. (1985). Quality of life index: Development and psychometric properties. *Advances in Nursing Science*, *8*(1), 15–24. https://doi.org/10.1097/00012272-198510000-00005

Ferrans, C. E., & Powers, M. J. (1992). Psychometric assessment of the quality of life index. *Research in Nursing & Health*, *15*(1), 29–38. https://doi.org/10.1002/nur.4770150106

Fien, S., Henwood, T., Climstein, M., & Keogh, J. W. L. (2016). Feasibility and benefits of group-based exercise in residential aged care adults: A pilot study for the GrACE programme. *Peer of Journal*, *4*, e2018. https://doi.org/10.7717/peerj.2018

Fitzpatrick, J. M., & Tzouvara, V. (2019). Facilitators and inhibitors of transition for older people who have relocated to a long-term care facility: A systematic review. *Health & Social Care in the Community*, *27*(3), e57–e81. APA PsycInfo. https://doi.org/10.1111/hsc.12647

Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). Mini-mental state. *Journal of Psychiatric Research*, *12*(3), 189–198. https://doi.org/10.1016/0022-3956(75)90026-6

Gardiner, C., Laud, P., Heaton, T., & Gott, M. (2020). What is the prevalence of loneliness amongst older people living in residential and nursing care homes? A systematic review and meta-analysis. *Age and Ageing*, *49*(5), 748–757. https://doi.org/10.1093/ageing/afaa049

Groenvynck, L., Fakha, A., de Boer, B., Hamers, J. P., van Achterberg, T., van Rossum, E., Verbeek, H., & Heyn, P. C. (2022). Interventions to improve the transition from home to a nursing home: A scoping review. *The Gerontologist*, *62*(7), e369–e383. https://doi.org/10.1093/geront/gnab036

Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and

mechanisms. *Annals of Behavioral Medicine*, *40*(2), 218–227. https://doi.org/10.1007/s12160-010-9210-8

Hersch, G., Hutchinson, S., Davidson, H., Wilson, C., Maharaj, T., & Watson, K. B. (2012). Effect of an occupation-based cultural heritage intervention in long-term geriatric care: A two-group control study. *The American Journal of Occupational Therapy*, *66*(2), 224–232. APA PsycInfo. https://doi.org/10.5014/ajot.2012.002394

Hersch, G., Spencer, J., & Kapoor, T. (2003). Adaptation by elders to new living arrangements following hospitalization: A qualitative, retrospective analysis. *Journal of Applied Gerontology*, *22*(3), 315–339. https://doi.org/10.1177/0733464803253586

Hertz, J. E., Koren, M. E., Rossetti, J., Tibbits, K., & Butcher, H. K. (2007). Management of relocation in cognitively intact older adults. *Journal of Gerontological Nursing*, *42*(11), 14–23. https://doi.org/10.3928/00989134-20160901-05

Hewitt, J., Goodall, S., Clemson, L., Henwood, T., & Refshauge, K. (2018). Progressive resistance and balance training for falls prevention in long-term residential aged care: A cluster randomized trial of the sunbeam program. *Journal of the American Medical Directors Association*, *19*(4), 361–369. https://doi.org/10.1016/j.jamda.2017.12.014

Huang, S. L., Li, R. H., Huang, F. Y., Tang, F. C., & Coyne, J. (2015). The potential for mindfulness-based intervention in workplace mental health promotion: Results of a randomized controlled trial. *PloS One*, *10*(9), e0138089. https://doi.org/10.1371/journal.pone.0138089

Hwang, J., Wang, L., Siever, J., Medico, T. D., & Jones, C. A. (2019). Loneliness and social isolation among older adults in a community exercise program: A qualitative study. *Aging & Mental Health*, *23*(6), 736–742. https://doi.org/10.1080/13607863.2018.1450835

Johnson, R. A., & Bibbo, J. (2014). Relocation decisions and constructing the meaning of home: A phenomenological study of the transition into a nursing home. *Journal of Aging Studies*, *30*, 56–63. APA PsycInfo. https://doi.org/10.1016/j.jaging.2014.03.005

Knippenberg, I. A. H., Reijnders, J. S. A. M., Gerritsen, D. L., & Leontjevas, R. (2021). The association between specific activity components and depression in nursing home residents: The importance of the social component. *Aging & Mental Health*, *25*(1), 118–125. https://doi.org/10.1080/13607863.2019.1671312

Lee, D. T. F., Woo, J., & Mackenzie, A. E. (2002). A review of older people's experiences with residential care placement. *Journal of Advanced Nursing*, *37*(1), 19–27. MEDLINE. https://doi.org/10.1046/j.1365-2648.2002.02060.x

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, *5*(1), 69. https://doi.org/10.1186/1748-5908-5-69

Matos Queirós, A., von Gunten, A., Martins, M., Wellens, N. I. H., & Verloo, H. (2021). The forgotten psychopathology of depressed long-term care facility residents: A call for evidence-based practice. *Dementia and Geriatric Cognitive Disorders Extra*, *11*(1), 38–44. https://doi.org/10.1159/000514118

McKechnie, R., Jaye, C., Hale, B., Tordoff, J., Robertson, L., Simpson, J., & Butler, M. (2018). Transition into care: Experiences of the elderly as they move to residential aged care. *Sites: A Journal of Social Anthropology and Cultural Studies*, *15*(2). https://doi.org/10.11157/sites-id379

Meeks, T. W., Vahia, I. V., Lavretsky, H., Kulkarni, G., & Jeste, D. V. (2011). A tune in "a minor" can "b major": A review of epidemiology, illness course, and public health implications of subthreshold depression in older adults. *Journal of Affective Disorders*, *129*(1), 126–142. https://doi.org/10.1016/j.jad.2010.09.015

Meleis, A. I., Sawyer, L. M., Im, E., Hilfinger Messias, D. K., & Schumacher, K. (2000). Experiencing transitions: An emerging middle-range theory. *Advances in Nursing Science*, *23*(1), 12–28. https://doi.org/10.1097/00012272-200009000-00006

Melrose, S. (2004). Reducing relocation stress syndrome in long-term care facilities. *Journal of Practical Nursing*, *54*(4), 15–17. https://www.proquest.com/docview/228071687/citation/80C4078080DE4205PQ/1

Moilanen, T., Kangasniemi, M., Papinaho, O., Mynttinen, M., Siipi, H., Suominen, S., & Suhonen, R. (2021). Older people's perceived autonomy in residential care: An integrative review. *Nursing Ethics*, *28*(3), 414–434. https://doi.org/10.1177/0969733020948115

Moss, M. S., & Lawton, M. P. (1982). Time budgets of older people: A window on four lifestyles. *Journal of Gerontology*, *37*(1), 115–123. https://doi.org/10.1093/geronj/37.1.115

Moussa, M. T., Lovibond, P., Laube, R., & Megahead, H. A. (2003). Psychometric properties of an arabic version of the depression anxiety stress scales (DASS). *Research on Social Work Practice*, *27*(3), 375–386. https://doi.org/10.1177/1049731516662916

Müller, C., Lautenschläger, S., Meyer, G., & Stephan, A. (2017). Interventions to support people with dementia and their caregivers during the transition from home care to nursing home care: A systematic review. *International Journal of Nursing Studies*, *71*, 139–152. APA PsycInfo. https://doi.org/10.1016/j.ijnurstu.2017.03.013

Munn, Z., Peters, M. D. J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, *18*(1), 143. https://doi.org/10.1186/s12874-018-0611-x

National Institutes of Health. (2013, June 26). *PROMIS: Patient-Reported Outcomes Measurement Information System - Home Page*. https://commonfund.nih.gov/promis/index

Newson, P. (2011). At home then away: Supporting new residents as they settle in. *Nursing and Residential Care*, *13*(1), 32–35. https://doi.org/10.12968/nrec.2011.13.1.32

Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal*

of Positive Psychology, *3*(2), 137–152. https://doi.org/10.1080/17439760701756946

Pfeiffer, E. (1975). A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. *Journal of the American Geriatrics Society*, *23*(10), 433–441. https://doi.org/10.1111/j.1532-5415.1975.tb00927.x

Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: Advancing the approach and enhancing the consistency. *Research Synthesis Methods*, *5*(4), 371–385. https://doi.org/10.1002/jrsm.1123

Post, D., Corlis, M., Penington, A., & Parfitt, G. (2020). Exercise physiology in aged care: Perceptions and acceptability from the perspectives of family members and care staff in the residential aged care environment. *Dementia (London, England)*, *19*(7), 2152–2165. https://doi.org/10.1177/1471301218816246

Royal Commission into Aged Care Quality and Safety. (2021). *Final Report: Care, Dignity and Respect*. https://agedcare.royalcommission.gov.au/publications/final-report-volume-1

Schumacher, K.L., Jones, P.S., Meleis, A.I. (1999). Helping Elderly Persons in Transition: A Framework for Research and Practice. In Swanson, E.A., Tripp-Reimer, T (Eds.), *Life Transitions in the Older Adult: Issues for Nurses and Other Health Professionals* (pp. 1–26). Springer

Singh, M. A. F. (2002). Exercise comes of age: Rationale and recommendations for a geriatric exercise prescription. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, *57*(5), M262–M282. https://doi.org/10.1093/gerona/57.5.M262

Skudlik, S., Hirt, J., Döringer, T., Thalhammer, R., Lüftl, K., Prodinger, B., & Müller, M. (2023). Challenges and care strategies associated with the admission to nursing homes in Germany: A scoping review. *BMC nursing*, *22*(1). https://doi.org/10.1186/s12912-022-01139-y

Sullivan, G. J., Hain, D. J., Williams, C., & Newman, D. (2019). Story-sharing intervention to improve depression and well-being in older adults transitioning to long-term care. *Research in Gerontological Nursing*, *12*(2), 81–90. CINAHL Plus with Full Text. https://doi.org/10.3928/19404921-20190124-01

Sullivan, G., & Williams, C. (2016). Older adult transitions into long-term care: A meta-synthesis. *Journal of Gerontological Nursing*, *43*(3), 41–49. https://doi.org/10.3928/00989134-20161109-07

Sun, C., Ding, Y., Cui, Y., Zhu, S., Li, X., Chen, S., Zhou, R., & Yu, Y. (2021). The adaptation of older adults' transition to residential care facilities and cultural factors: A meta-synthesis. *BMC Geriatrics*, *21*(1), 1–14. CINAHL Plus with Full Text. https://doi.org/10.1186/s12877-020-01987-w

Tombaugh, T. N., & McIntyre, N. J. (1992). The mini-mental state examination: A comprehensive review. *Journal of the American Geriatrics Society*, *40*(9), 922–935. https://doi.org/10.1111/j.1532-5415.1992.tb01992.x

Wilson, S. A. (1997). The transition to nursing home life: A comparison of planned and unplanned admissions. *Journal of Advanced Nursing*, *26*(5), 864–871. https://doi.org/10.1046/j.1365-2648.1997.00636.x

Yang, Y. Y., Chen, S. M., Kuo, C. L., & Lee, H. J. (2014). Exploring relocation stress and diabetes control in the elderly residents of long-term. *Care Facilities Journal of Nursing*, *61*(6), 57–65. https://doi.org/10.6224/JN.61.6.57

Yong, B., Lin, R., & Xiao, H. (2021). Factors associated with nursing home adjustment in older adults: A systematic review. *International Journal of Nursing Studies*, *113*, 103790. APA PsycInfo. https://doi.org/10.1016/j.ijnurstu.2020.103790

Zamanzadeh, V., Rahmani, A., Pakpour, V., Chenoweth, L. L., & Mohammadi, E. (2017). Psychosocial changes following transition to an aged care home: Qualitative findings from Iran. *International Journal of Older People Nursing*, *12*(2), MEDLINE. https://doi.org/10.1111/opn.12130