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Vieillir chez soi

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BIBLIOTHÉCAIRE

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Voie, K. S., J. Wiles et al. (2024). "The timescapes of older adults living alone and receiving home care: An interview study." <u>Journal of aging studies</u> 68: 101212. https://dx.doi.org/10.1016/j.jaging.2024.101212

In this study, we drew on Barbara Adam's (1998) timescape perspective and applied a timescape lens to our analysis of how nine older adults who live alone, receive home care and are considered by home care professionals to be frail, experience living (in) time. Over a period of eight months, we conducted three interviews with each of the nine participants. We analysed the data using reflexive thematic analysis and drew on timescapes to further interpret our preliminary analysis. Our results show that situated everyday time, place across time, and large-scale time interact in the framing and shaping of older adults' everyday lives. Older adults' embodied experiences of being of advanced age, living alone and receiving home care influenced their timescapes. We propose that paying attention to older adults' timescapes can enable home care professionals and other supporters to consider older adults' health, well-being, vulnerabilities and strengths from a broader perspective than the 'here and now' and thereby enhance the provision of person-centred care.

Dreyer, J., J. M. Bergmann et al. (2022). "Differences and commonalities of home-based care arrangements for persons living with dementia in Germany – a theory-driven development of types using multiple correspondence analysis and hierarchical cluster analysis." <u>BMC geriatrics</u> 22(1): 723. <u>https://dx.doi.org/10.1186/s12877-022-03310-1</u>

Most persons with dementia live at home and want to stay there as long as possible. In most cases, informal carers such as spouses or children care for them. Together with other family members and professional carers, they form care arrangements to address the complex needs of persons with dementia. One major aim of informal carers is to keep the care arrangement stable. The middlerange theory of 'stability of home-based care arrangements for people living with dementia' (SoCA-Dem theory) offers a theory to understand what constitutes and influences the stability of homebased care arrangements. Based on this theory, the aim of this study was to (1) uncover the underlying structures of differences and commonalities of home-based care arrangements for persons living with dementia, (2) construct types of these care arrangements, and (3) compare these types with regard to their stability., METHOD: This is a secondary analysis of data from a convenience sample of n = 320 care arrangements for persons with dementia obtained in the observational DemNet-D study. Data were analysed using multiple correspondence analysis and hierarchical cluster analysis. Sociodemographic data and variables related to the structure of the care arrangement (D-IVA), burden of the informal carer (BICS-D), dementia severity (FAST), and quality of life of the person with dementia (QOL-AD) were included., RESULTS: The multiple correspondence analysis identified 27 axes that explained the entire variance between all care arrangements. The two axes 'dementia and care trajectory' and 'structure of the dyadic relationship' best distinguished care arrangements from each other and together explained 27.10% of the variance. The subsequent cluster analysis identified four types of care arrangements. Two types included spouse-centred care arrangements, and two types included child-centred care arrangements at different phases of the dementia and care trajectory. The types differ with regard to their stability., CONCLUSION: The results highlight the heterogeneity and commonality of care arrangements for persons living with dementia. They contribute to a better understanding of informal dementia home care. Furthermore, the results can guide the development of tailored support for persons living with dementia and their caring families.

Kerschen, N. (2021). "Le modèle luxembourgeois du maintien à domicile des personnes dépendantes." Gérontologie et société vol. 43 / nº 165(2): 245-261.

https://doi.org/10.3917/gs1.165.0245

Il y a plus de 20 ans, le Luxembourg s'est doté d'une assurance-dépendance « à tout âge » dont la priorité est le maintien à domicile. Cet article a pour objectif de reprendre le projet politique initial basé sur les besoins des personnes dépendantes, la professionnalisation des aides et soins et la reconnaissance des aidants. La mise en place d'une instance centralisée d'évaluation, de contrôle et de conseil a permis de garantir une prise en charge de qualité. L'article présente les différentes prestations en nature et en espèces offertes par l'assurance-dépendance, ainsi que le statut reconnu aux aidants. Les chiffres récents montrent que deux tiers des personnes dépendantes vivent à domicile. L'organisation actuelle du système de prise en charge et les caractéristiques des bénéficiaires sont abordées en dernier lieu. L'article conclut sur le système luxembourgeois comme un modèle articulant libre choix des personnes dépendantes et qualité de la prise en charge.

Tremblay, É., J.-M. Daigle et al. (2021). Portrait de l'utilisation des soins et des services de soutien à domicile par les personnes en fin de vie au Québec, 2013 à 2018, Institut national d'excellence en santé et en services sociaux : 52 p.

https://catalogue.santecom.qc.ca/cgi-bin/koha/opac-detail.pl?biblionumber=145242

Le vieillissement de la population et la prévalence accrue des incapacités et des comorbidités qui l'accompagnent ont mené, depuis quelques années, plusieurs pays à considérer l'offre de soins dans le milieu de vie des personnes comme une alternative prometteuse, notamment lorsque celles-ci sont en fin de vie et que cette modalité de services correspond à leurs valeurs et préférences. Au cours des deux dernières décennies, une réflexion soutenue et plusieurs travaux ont porté sur l'offre de soins palliatifs et de fin de vie (SPFV) au Québec. Une volonté grandissante d'offrir des SPFV à domicile est présente mais des enjeux -entre autres d'équité d'accès selon les types de clientèles ou selon les régions – persistent. Une meilleure connaissance du soutien à domicile (SAD) offert aux personnes en fin de vie, au sein duquel s'inscrit l'offre des SPFV, est requise afin de bien comprendre la situation actuelle et possiblement identifier les éléments d'amélioration nécessaires. C'est dans ce contexte, et à la demande de la Commission sur les soins de fin de vie (CSFV), que l'INESSS a entrepris d'élaborer, au moyen des banques de données clinicoadministratives (BDCA) provinciales, un portrait de l'utilisation des soins et services offerts à domicile par les personnes susceptibles d'avoir bénéficié de SPFV dans les trois années précédant leur décès.

Jean-Bart, C., A. Ayata et al. (2020). Services d'aide et de soins à domicile : accompagnement des personnes atteintes de maladie neurodégénérative. Le projet de service, Haute Autorité de Santé : 18 p.

https://www.has-sante.fr/upload/docs/application/pdf/2020-07/diqasm_guidemnd_projetdeservice_publi.pdf

L'adaptation du projet de service aux personnes atteintes de maladie neurodégénérative. Le projet de service est un document formalisant les orientations stratégiques de la structure. Il s'agit d'un projet établi collégialement qui prend en compte le contexte environnemental du service (lieu d'implantation, caractéristiques du territoire, etc.), ainsi que les ressources internes et externes mobilisables (ressources humaines, organisation, management, coordination, etc.). Il permet à toutes les parties prenantes de la structure (professionnels, partenaires, personnes accompagnées et leurs proches) d'identifier les missions du service, d'en visualiser les organisations techniques, de percevoir le rôle de chacun et de comprendre les orientations pour les cinq années à venir.

Strandell, R. (2020). "Care workers under pressure – A comparison of the work situation in Swedish home care 2005 and 2015." <u>Health & social care in the community</u> 28(1): 137-147. https://dx.doi.org/10.1111/hsc.12848

As in many Western countries, eldercare services in Sweden have changed dramatically over recent decades. Population ageing, ageing-in-place policies, pressures to contain costs and organisational reforms linked to New Public Management are challenging public home care. There is, however, limited knowledge about how the job content and working conditions have changed in the Swedish home care across this period. This article aims to analyse and compare the work situation in the Swedish home care in 2005 and 2015. The analysis is based on the international Nordcare survey and draws on the subsample of respondents working in Swedish home care 2005 and 2015 (n = 371). The data were analysed with bivariate and multivariate methods. The results suggest that, overall, the work situation of home-care workers was worse in 2015 compared to 2005. For example, those surveyed in 2015 reported meeting a larger number of clients per day, receiving less support from their supervisors, and having less time to discuss difficult situations with colleagues and considerably less scope to affect the planning of their daily work. Care workers in 2015 were also more mentally exhausted than those surveyed in 2005. In addition, the workers in 2015 experienced an accumulation of work-related problems. Deteriorating working conditions could be related to cutbacks and organisational reforms, and evidence suggests that home-care workers are paying a high price for ageing-in-place policies. Improvements of the work situation in home care are necessary not only to ensure the quality of care for older people, but also to ensure workers' well-being and to recruit and retain care workers, and thus, to meet the future needs for home care in an ageing society.

Vos, W. H., L. C. van Boekel et al. (2020). "Exploring the impact of social network change: Experiences of older adults ageing in place." <u>Health & social care in the community</u> 28(1): 116-126. <u>https://dx.doi.org/10.1111/hsc.12846</u>

Social networks are sources of support and contribute to the well-being of older adults who are ageing in place. As social networks change, especially when accompanied by health decline, older adults' sources of support change and their well-being is challenged. Previous studies predominantly used quantitative measures to examine how older adults' social networks change. Alternatively, this study explores the impact of changing social networks on older adults' lives by examining their personal experiences. We held four focus groups, two with a total of 14 older adults who are ageing in place and receiving home care and two with a total of 20 home-care nurses from different regions and organisations in the Netherlands. Subsequently, an expert team of home-care professionals and managers discussed and verified the results. Procedures for grounded theory building were used for analysis. We revealed four themes of high-impact experiences: (a) struggling with illness/death of the spouse; (b) working out a changing relationship with (grand)children; (c) regretting the loss of people they have known for so long and (d) feeling dependent and stressed when helpers enter the network. Also, network dynamics were found to follow three consecutive stages: (a) awareness of social network change; (b) surprise when social network change actually occurs and (c) acceptance and adjusting to new circumstances. Together, the four themes of experiences and three stages of network change form an integrative model of the role of social network dynamics for older adults' lives when ageing in place.

Burton, E., K. Farrier et al. (2019). "Physical activity programs for older people in the community receiving home care services: systematic review and meta-analysis." <u>Clinical interventions in aging 14: 1045-1064. https://dx.doi.org/10.2147/CIA.S205019</u>

The proportion of older adults is increasing around the world and most wish to live in their home until they die. To achieve this, many will require services in the home to remain living independently. To maintain function (ie, strength, balance, and endurance), physical activity needs to be undertaken on a regular basis, and is essential as a person ages. Unfortunately, as people age there is a tendency to reduce activity levels, which often leads to loss of function and frailty, and the need for home care services. This updated systematic review includes a mix of study methodologies and meta-analysis, and investigated the effectiveness of physical activity/exercise interventions for older adults receiving home care services. Eighteen studies including ten randomized controlled trials meeting the selection criteria were identified. Many of the studies were multi-factorial interventions with the majority reporting aims beyond solely trying to improve the physical function of home care clients. The meta-analysis showed limited evidence for effectiveness of physical activity for older adults receiving home care services. Future exercise/physical activity studies working with home care populations should consider focusing solely on physical improvements, and need to include a process evaluation of the intervention to gain a better understanding of the association between adherence to the exercise program and other factors influencing effectiveness.

Rodrigues, R. A. P., A. d. A. Bueno et al. (2019). "Assumptions of good practices in home care for the elderly: a systematic review." <u>Revista brasileira de enfermagem</u> 72(suppl 2): 302-310. <u>https://dx.doi.org/10.1590/0034-7167-2018-0445</u>

OBJECTIVE: To synthesize the knowledge produced on best nursing practices in long-term care for elderly at home, in order to promote healthy aging., METHOD: A systematic review, based on the Joanna Briggs Institute's proposal: without restriction of dates; in the English, Portuguese and Spanish languages; conducted in PubMed, CINAHL, LILACS, Embase and Scopus databases., RESULTS: Among 453 articles identified, 16 were included in the review: seven qualitative and nine quantitative, published between 1996 and 2015. The synthesis of the data identified as best practices identifies a premise of care centered on the elderly and the inclusion of the elderly, family and nurses as agents of this care., CONCLUSION: According to evidence, good practices in gerontological and nursing home care fundamentally depend on constant planning and reorganization, so that they are indeed comprehensive and contextualized. Thus, providing care will be reasoned by and driven to the elderly, based on their specific and global needs, favoring a process of healthy and active aging.

Sandberg, L., I. Nilsson et al. (2019). "Home care services for older clients with and without cognitive impairment in Sweden." Health & social care in the community 27(1): 139-150. <u>https://dx.doi.org/10.1111/hsc.12631</u>

Little is known about the types of home care services granted to older clients in Sweden. The objectives of this study were to: (a) identify and describe the range of granted home care services and service hours; (b) compare services granted for clients with and without documented cognitive impairment; and (c) examine associations between the range of granted home care services and factors related to cognitive impairment and demographical characteristics. The study design was descriptive and cross-sectional. The data, included records of granted home care services for clients age 65+ with (n = 43) and without (n = 88) cognitive impairment documented by the local municipality assessors, collected from one agency in Sweden during a 2-month period in 2015. Data analyses resulted in an overview of the range of home care services divided into two categories:

personal care and service. In the personal care category, the median was 3 for types of services (range 0-12), and shower (n = 69; 52.7%) was the most common service. In the service category, the median was 5 for types of services (range 0-10), and cleaning the household (n = 103; 78.6%) was the most common service. The median for service hours was 27 hr per month (range 2.5-127.5). Logistic regression models revealed that cognitive impairment was associated with a higher number of services in the personal care category and a higher number of hours per month. Living alone was associated with a higher number of services in the service category. In conclusion, a wide range of home care services were provided for clients who have complex needs in daily life. Home care services were granted to clients with cognitive impairment and to a greater extent with clients who were living alone.

Sempe, L., J. Billings et al. (2019). "Multidisciplinary interventions for reducing the avoidable displacement from home of frail older people: a systematic review." <u>BMJ open</u> 9(11): e030687. <u>https://dx.doi.org/10.1136/bmjopen-2019-030687</u>

OBJECTIVES: To synthesise existing literature on interventions addressing a new concept of avoidable displacement from home for older people with multimorbidity or frailty. The review focused on home-based interventions by any type of multidisciplinary team aimed at reducing avoidable displacement from home to hospital settings. A second objective was to characterise these interventions to inform policy. DESIGN: A systematic search of the main bibliographic databases was conducted to identify studies relating to interventions addressing avoidable displacement from home for older people. Studies focusing on one specific condition or interventions without multidisciplinary teams were excluded. A narrative synthesis of data was conducted, and themes were identified by using an adapted thematic framework analysis approach., RESULTS: The search strategy was performed using the following electronic databases: the American National Library of Medicine and the National Institutes of Health (PubMed), Scopus, Cochrane Library (Central and CDRS), CINAHL, Social Care Online, Web of Science as well as the database of the Latin American and Caribbean Health Sciences Literature. The database search was done in September 2018 and completed in October 2018. Overall 3927 articles were identified and 364 were retained for full text screening. Fifteen studies were included in the narrative review. Four themes were identified and discussed: (1) types of interventions, (2) composition of teams, (3) intervention effectiveness and (4) types of outcomes. Within intervention types, three categories of care types were identified; transitional care, case-management services and hospital at home. Each individual article was assessed in terms of risk of bias following Cochrane Collaboration guidelines. CONCLUSIONS: The review identified some potential interventions and relevant topics to be addressed in order to develop effective and sustainable interventions to reduce the avoidable displacement from home of older people. However the review was not able to identify robust impact evidence, either in terms of quantity or quality from the studies presented. As such, the available evidence is not sufficiently robust to inform policy or interventions for reducing avoidable displacement from home. This finding reflects the complexity of these interventions and a lack of systematic data collection. PROSPERO REGISTRATION NUMBER: CRD42018108116.

Aboujaoudé, A., R.-P. Filiou et al. (2023). <u>La technologie au service du vieillissement dans le</u> <u>milieu de son choix : un répertoire de technologies disponibles au Québec</u>, Centre de recherche de l'Institut universitaire de gériatrie de Montréal : 57 p.

https://criugm.qc.ca/la-recherche/repertoire-des-technologies-au-service-du-vieillissement-dans-le-milieu-de-son-choix/

Ce répertoire contient de l'information sur différentes technologies pouvant soutenir le vieillissement dans le milieu de son choix. Il a été créé afin d'aider les professionnels offrant des services sociaux et de santé dans leur recherche de produits technologiques pouvant contribuer au maintien à domicile des personnes âgées. Il n'a pas pour but d'être exhaustif, mais plutôt de fournir un aperçu de produits actuellement disponibles à l'achat (en magasin ou en ligne) sur le marché canadien, plus précisément dans la province de Québec.

Kostovic, C., M.-H. Raymond et al. (2023). <u>Bulletin de veille stratégique – Innovations en soutien</u> à domicile : à la croisée des technologies et de l'humain, Institut national d'excellence en santé et en services sociaux (Québec) : 22 p.

https://www.inesss.qc.ca/publications/repertoire-des-publications/publication/innovations-ensoutien-a-domicile-a-la-croisee-des-technologies-et-de-lhumain.html

Les innovations en santé et services sociaux permettent d'envisager de nouvelles possibilités pour transformer les soins et les services offerts à la population. Alors que les technologies en santé évoluent rapidement, tant au Québec qu'à l'international, des innovations de nature sociale et centrées sur la communauté se déploient en même temps que les systèmes de santé empruntent le virage de la santé numérique. Parmi ces innovations, lesquelles présentent de nouvelles possibilités pour permettre aux personnes en perte d'autonomie de demeurer le plus longtemps possible à leur domicile? Dans le cadre d'un mandat confié par le ministère de la Santé et des Services sociaux, l'INESSS a documenté les innovations en cours de développement et de déploiement à travers le monde, qui pourraient permettre d'optimiser les services offerts aux usagers à domicile et de soutenir le travail du personnel du réseau de la santé et des services sociaux. Ces innovations ont été répertoriées dans de nombreuses sources documentaires provenant des secteurs privé, scientifique et réglementaire, et classifiées en tenant compte de leurs objectifs vis-à-vis de l'usager et des personnes proches aidantes, du personnel et de l'organisation des services. Dans l'optique de brosser un portrait global des innovations pouvant potentiellement être intégrées au domicile des usagers, ce bulletin de veille inclut autant les innovations employées dans le cadre des différents soins et services qui peuvent être offerts à domicile que celles déployées spécifiquement pour soutenir le maintien à domicile des personnes qui ont des incapacités. De plus, les innovations ont été incluses quel que soit leur degré actuel de maturité ou d'implantation dans les systèmes de santé et services sociaux.

Sorwar, G., C. Aggar et al. (2023). "Factors that predict the acceptance and adoption of smart home technology by seniors in Australia: a structural equation model with longitudinal data." Informatics for health & social care 48(1): 80-94.

https://dx.doi.org/10.1080/17538157.2022.2069028

Smart Home Technology presents an exciting opportunity to support seniors living independently in their homes. Despite widespread interest in Smart Homes, seniors' readiness to adopt Smart Home Technology is low. To determine the factors underpinning Australian seniors' acceptance and adoption of Smart Home Technology using an extended UTAUT model that includes Trust, Resistance to Change and Technology Anxiety. A longitudinal study was conducted to validate the

proposed model prior to and after the implementation of a pilot Smart Home Modification program for seniors. Structural Equation Modeling has been applied to test the proposed hypotheses using a sample of 60 seniors in regional Australia. Perceived Usefulness is an important predictor of Smart Home Technology adoption by seniors. Trust was found to indirectly predict adoption of Smart Home Technology via Perceived Usefulness. This study showed that Perceived Usefulness and Trust are critical factors for the acceptance and use of SHT by seniors, validating the extension of UTAUT with a Trust factor. This makes a unique theoretical contribution to the literature with implications for aged care providers and policymakers to consider seniors' perceived usefulness and trust in the design, development, and implementation of Smart Home solutions.

Dequanter, S., M. Fobelets et al. (2022). "Determinants of technology adoption and continued use among cognitively impaired older adults: a qualitative study." <u>BMC geriatrics</u> 22(1): 376. <u>https://dx.doi.org/10.1186/s12877-022-03048-w</u>

BACKGROUND: Technology offers opportunities to support older adults with mild cognitive impairments to remain independent and socially connected, but is often not used. Although determinants of technology use among older adults in general are well studied, much less is known about how these factors impact technology use behaviour in cognitively impaired older adults. This study aimed to bridge this gap in research by examining the factors underlying technology use in community-dwelling older adults with mild cognitive impairments. METHODS: We applied a generic qualitative design and used 16 semi-structured interviews to collect data from Belgian (Flemish) community-dwelling older adults diagnosed with Mild Cognitive Impairment or dementia and informal caregivers. To get data from different perspectives, a focus group with professional caregivers was added. We used thematic analysis with an inductive approach to identify and select themes from the data. RESULTS: We identified two themes: introduction of technology and determinants of technology adoption and continued use. Successful technology adoption in cognitively impaired older adults is need-driven and subject to individual, technological and contextual characteristics. Specific for older adults with cognitive impairments are the importance of disease awareness and cognitive ability for adoption and continued use, respectively. Although social support can be a valuable alternative to technology, it is an important facilitator of continued technology use in these older adults. Similarly, integration of technologies in daily routines can buffer discontinuation of technologies. CONCLUSIONS: Future research is encouraged to validate our findings in a postpandemic era and to further develop a novel theoretical framework for technology acceptance among older adults with cognitive impairments. Moreover, identification of crucial determinants as well as strategies to remove use barriers are also important future research tasks. Clinical practice should focus on improving disease awareness to facilitate technology adoption and policies should invest in training and support of professional caregivers and in reimbursement strategies to facilitate implementation of technology in practice.

Choi, Y. K., H. J. Thompson et al. (2021). "Internet-of-Things Smart Home Technology to Support Aging-in-Place: Older Adults' Perceptions and Attitudes." Journal of gerontological nursing 47(4): 15-21. <u>https://dx.doi.org/10.3928/00989134-20210310-03</u>

The purpose of the current study was to examine older adults' perceptions of Internet-of-Things (IoT) smart home devices as part of a real-world feasibility study and describe what factors affect adoption of these technologies. A total of 37 community-dwelling older adults enrolled in the 2-month study. Participants chose among different IoT devices to be installed in their home for the study period. Semi-structured interviews to explore perceptions of the technology were conducted. Older adults have unique preferences for specific types of IoT devices and their functionalities. Similarly, there were different degrees of acceptability across devices. In general, older adults had a positive attitude toward IoT smart home technologies to support their health

management. Emergency preparedness was a key benefit of IoT devices identified by many older adults. In addition, convenience of a voice interface provided by a smart speaker was appreciated among participants. Older adults seemed to weigh the benefits and actual need for having the devices against potential infringements on privacy. Nurses and system designers should consider ethical and practical challenges related to the interconnected services of the IoT domain for older adults.

Ehn, M., M. X. Richardson et al. (2021). "Mobile Safety Alarms Based on GPS Technology in the Care of Older Adults: Systematic Review of Evidence Based on a General Evidence Framework for Digital Health Technologies." Journal of medical Internet research 23(10): e27267. https://dx.doi.org/10.2196/27267

BACKGROUND: GPS alarms aim to support users in independent activities. Previous systematic reviews have reported a lack of clear evidence of the effectiveness of GPS alarms for the health and welfare of users and their families and for social care provision. As GPS devices are currently being implemented in social care, it is important to investigate whether the evidence of their clinical effectiveness remains insufficient. Standardized evidence frameworks have been developed to ensure that new technologies are clinically effective and offer economic value. The frameworks for analyzing existing evidence of the clinical effectiveness of GPS devices can be used to identify the risks associated with their implementation and demonstrate key aspects of successful piloting or implementation., OBJECTIVE: The principal aim of this study is to provide an up-to-date systematic review of evidence based on existing studies of the effects of GPS alarms on health, welfare, and social provision in the care of older adults compared with non-GPS-based standard care. In addition, the study findings were assessed by using the evidence standards framework for digital health technologies (DHTs) established by the National Institute for Health and Care Excellence (NICE) in the United Kingdom., METHODS: This review was conducted according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. Primary studies published in peer-reviewed journals and gray literature from January 2005 to August 2020 were identified through searches in 13 databases and several sources of gray literature. Included studies had individuals (aged >=50 years) who were receiving social care for older adults or for persons with dementia; used GPS devices as an intervention; were performed in Canada, the United States, European Union, Singapore, Australia, New Zealand, Hong Kong, South Korea, or Japan; and addressed quantitative outcomes related to health, welfare, and social care. The study findings were analyzed by using the NICE framework requirements for active monitoring DHTs., RESULTS: Of the screened records, 1.6% (16/986) were included. Following the standards of the NICE framework, practice evidence was identified for the tier 1 categories Relevance to current pathways in health/social care system and Acceptability with users, and minimum evidence was identified for the tier 1 category Credibility with health, social care professionals. However, several evidence categories for tiers 1 and 2 could not be assessed, and no clear evidence demonstrating effectiveness could be identified. Thus, the evidence required for using DHTs to track patient location according to the NICE framework was insufficient., CONCLUSIONS: Evidence of the beneficial effects of GPS alarms on the health and welfare of older adults and social care provision remains insufficient. This review illustrated the application of the NICE framework in analyses of evidence, demonstrated successful piloting and acceptability with users of GPS devices, and identified implications for future research.

Frennert, S. (2021). "Hitting a moving target: digital transformation and welfare technology in Swedish municipal eldercare." <u>Disability and rehabilitation. Assistive technology</u> 16(1): 103-111. https://dx.doi.org/10.1080/17483107.2019.1642393

INTRODUCTION: This article contributes to the discussion on digital transformation and welfare technology in municipal eldercare. The aim of welfare technology solutions is to exceed the current welfare system and to meet the challenges of an ageing population through technological innovations and applications that help people to better cope with health issues and strengthen their participation, activity and independence regarding their own healthcare. METHODS: First, this article outlines a number of different perspectives on technological and social change. Against this backdrop, this article portrays the challenges faced by Swedish municipal eldercare organizations due to the moving targets of digital transformation and the development of welfare technologies. CONCLUSION: In this context, eldercare organizations are at risk of becoming victims of the fast pace at which technology develops and the rhetoric of technological determinism; they may try to pursue the latest technological innovation at the expense of their stakeholders' needs. The implementation and deployment of welfare technology become a real-world social experiment. Without proper tools for evaluation, welfare technology might be implemented and deployed as an end in itself, instead of as means for better ageing or improved eldercare. This article concludes by framing a set of questions to help increase the understanding of welfare technology implementation and deployment in order to mitigate risks and improve outcomes. IMPLICATIONS FOR REHABILITATION Analysis of different perspectives regarding technological and social change. Identification of the challenges faced by municipal eldercare organizations due to digital transformation. Presentation of evaluation questions to increase the understanding of welfare technology implementation and deployment in order to mitigate risks and improve outcomes.

Sumner, J., L. S. Chong et al. (2021). "Co-Designing Technology for Aging in Place: A Systematic Review." <u>The Gerontologist</u> 61(7): e395-e409.

https://dx.doi.org/10.1093/geront/gnaa064

BACKGROUND AND OBJECTIVES: There is a growing interest to involve older adults in the co-design of technology to maintain their well-being and independence. What remains unknown is whether the beneficial effects of co-designed solutions are greater than those reported for non co-designed solutions. The aim of this study was to evaluate the effects and experiences of co-designed technology that support older adults to age in place. RESEARCH DESIGN AND METHODS: We conducted a systematic review to (a) investigate the health and well-being outcomes of codesigned technology for older adults (>=60 years), (b) identify co-design approaches and contexts where they are applied, and (c) identify barriers and facilitators of the co-design process with older adults. Searches were conducted in MEDLINE, EMBASE, CINAHL, Science Citation Index (Web of Science), Scopus, OpenGrey, and Business Source Premiere. RESULTS: We identified 14,649 articles and included 34 projects. Four projects reported health and well-being outcomes; the effects were inconsistent. Co-design processes varied greatly and in their intensity of older adult involvement. Common facilitators of and barriers to co-design included the building of relationships between stakeholders, stakeholder knowledge of problems and solutions, and expertise in the co-design methodology. DISCUSSION AND IMPLICATIONS: The effect of co-designed technology on health and well-being was rarely studied and it was difficult to ascertain its impact. Future co-design efforts need to address barriers unique to older adults. Evaluation of the impact of co-designed technologies is needed and standardization of the definition of co-design would be helpful to researchers and designers.

Gordon, S., N. Bidargaddi et al. (2020). "Opportunities for Technology-Assisted Healthy Ageing in a Local Government Context." <u>Studies in health technology and informatics</u> 268: 77-86. <u>https://dx.doi.org/10.3233/SHTI200007</u>

Current legislation aims to enable older Australians to age in place, and puts public healthcare within the remit of local governments. As Australia's population ages, local governments will need to explore new methods of service delivery in order to meet the increasing need for services that promote healthy ageing. Information technology (IT) may provide one such solution, however older Australian adults are reported to have low levels of technology use. In this simple descriptive qualitative study, focus groups with local government staff and community-dwelling older adults explored their perspectives regarding: a) IT solutions that councils could use to promote community-based healthy ageing, and (b) the enablers and challenges for adopting such solutions. Twenty-four adults participated in focus groups, and eleven of these adults also provided written data in response to visual prompts. Field notes were recorded by attending researchers. These three data sources were combined through narrative synthesis. Local government staff and community-dwellers alike perceived the utility of IT solutions in connecting community members, and connecting people to services (such as transport and providers of health information). While local government staff identified that IT solutions could provide benefits to the council when implemented in conjunction with existing services (e.g., to track data and identify information about community engagement and needs), community-dwellers placed stronger emphasis on adopting technology which had a clear purpose for its use. Due to limited digital literacy and some ambivalence towards embracing technology, IT solutions should be implemented with support to increase digital literacy, be widely advertised, and be centered in community needs. Personas have been generated and provided as possible case studies for technology adoption.

Robinson, E. L., G. Park et al. (2020). "Technology for Healthy Independent Living: Creating a Tailored In-Home Sensor System for Older Adults and Family Caregivers." Journal of gerontological nursing 46(7): 35-40. https://dx.doi.org/10.3928/00989134-20200605-06

Sensing technologies hold enormous potential for early detection of health changes that can dramatically affect the aging experience. In previous work, we developed a health alert system that captures and analyzes in-home sensor data. The purpose of this research was to collect input from older adults and family members on how the health information generated can best be adapted, such that older adults and family members can better self-manage their health. Five 90-minute focus groups were conducted with 23 older adults (mean age = 80 years; 87% female) and five family members (mean age = 64; 100% female). Participants were asked open-ended questions about the sensor technology and methods for interacting with their health information. Participants provided feedback regarding tailoring the technology, such as delegating access to family and health care providers, receiving health messages and alerts, interpreting health messages, and graphic display options. Participants also noted concerns and future likelihood of technology adoption.

Yatim, F. (2020). "Usage des technologies de santé pour le maintien à domicile des personnes âgées. Entre individualisation et personnalisation." <u>Management & Avenir - Santé</u> 7(2): 37-55. <u>https://doi.org/10.3917/mavs.007.0037</u>.

Le maintien à domicile des personnes âgées représente de nombreux enjeu x : économiques et organisationnels, démocratiques et éthiques. L'ensemble de ces enjeux se trouve renforcé avec l'introduction des technologies de santé, présentées comme une solution prometteuse pour réduire les dépenses, optimiser l'organisation des parcours et augmenter l'autonomie et la qualité de vie pour les personnes âgées. L'évolution en perspective ravive donc de manière aigue un enjeu éthique spécifique, celui de l'équilibre entre l'individualisation et la personnalisation des prises en

charge. En effet, selon l'éthique du care, les dispositifs technologiques doivent trouver une place pertinente et adaptée dans une dynamique relationnelle qui favorise l'autonomie, non pas en impliquant uniquement l'individu, la personne âgée, mais en co-construisant avec elle cette autonomie en tant que personne. Le présent article traite spécifiquement de cette problématique en mobilisant les données d'une enquête qualitative réalisée auprès de personnes âgées vivant à domicile et de leurs proches/aidants.

Grewal, A., K. J. Hepburn et al. (2024). "The impact of housing prices on residents' health: a systematic review." <u>BMC public health</u> 24(1): 931.

https://dx.doi.org/10.1186/s12889-024-18360-w

BACKGROUND: Rising housing prices are becoming a top public health priority and are an emerging concern for policy makers and community leaders. This report reviews and synthesizes evidence examining the association between changes in housing price and health outcomes., METHODS: We conducted a systematic literature review by searching the SCOPUS and PubMed databases for keywords related to housing price and health. Articles were screened by two reviewers for eligibility, which restricted inclusion to original research articles measuring changes in housing prices and health outcomes, published prior to June 31st, 2022., RESULTS: Among 23 eligible studies, we found that changes in housing prices were heterogeneously associated with physical and mental health outcomes, with multiple mechanisms contributing to both positive and negative health outcomes. Income-level and home-ownership status were identified as key moderators, with lower-income individuals and renters experience negative health consequences from rising housing prices. This may have resulted from increased stress and financial strain among these groups. Meanwhile, the economic benefits of rising housing prices were seen to support health for higher-income individuals and homeowners - potentially due to increased wealth or perception of wealth., CONCLUSIONS: Based on the associations identified in this review, it appears that potential gains to health associated with rising housing prices are inequitably distributed. Housing policies should consider the health inequities born by renters and low-income individuals. Further research should explore mechanisms and interventions to reduce uneven economic impacts on health.

Simard, J. (2024). <u>Vieillissement et crise du logement : gentrification, précarité et résistance</u>, Presses de l'université de Montréal : 285 p.

https://catalogue.santecom.qc.ca/cgi-bin/koha/opac-detail.pl?biblionumber=175489

Vieillir en ville est loin d'être simple. La précarité des personnes vieillissantes, souvent dépendantes de revenus fixes ou mal indexés, s'accroît. La crise du logement et la hausse du coût de la vie les frappent durement, sans parler du manque d'accessibilité des soins à domicile, rares et souvent trop coûteux. Les politiques publiques font la promotion de leur maintien dans leur milieu de vie et dans la communauté, mais dans les faits, les besoins restent immenses. Cet ouvrage plonge au coeur du problème en analysant la précarité résidentielle de locataires âgés de quartiers montréalais en pleine gentrification. À mi-chemin entre ouvrage anthropologique, enquête journalistique et manuel de gérontologie sociale critique, Julien Simard illustre concrètement les dynamiques d'exclusion sociale et donne à voir les tactiques de résistance et d'agentivité de ces gens qui font face à un véritable processus de mise à l'écart.

Gibson, A., N. Pope et al. (2023). "Identifying Aging Adults' Housing Preferences: An Age-Friendly Initiative." Journal of gerontological social work 66(1): 43-63.

https://dx.doi.org/10.1080/01634372.2022.2113490

Community planning around housing needs of older adults is, at present, very understudied. This study stemmed from a practical need to determine the housing preferences of residents as part of an Age Friendly Community initiative. Data presented in this paper focus on the quantitative component of a sequential mixed methods study examining attitudes and preferences about housing. This first phase of this project involved data collected from 1,514 residents aged 30+ using a researcher-devised survey of 43 items. There was little difference in housing preferences between older and younger respondents or among those with varying financial means. Analysis revealed the most important housing considerations were safety in home, affordability, privacy,

proximity to services frequently used, and accessibility. An unexpected finding was that almost half of older respondents expressed a willingness to share a home with a roommate. There were also differences in preferences on home environment based on current marital status. Data suggests that city planners and property developers should prioritize these preferences when planning for the housing-related needs of older residents. Future research should examine the interpretation of housing preferences, such as qualitative exploration of what it means for housing to be "safe" or 'affordable.'

Iwarsson, S., M. Granbom et al. (2023). "Synthesizing implications of a collaborative project on socially sustainable housing policies for the aging population." <u>BMC research notes</u> 16(1): 281. <u>https://dx.doi.org/10.1186/s13104-023-06565-y</u>

OBJECTIVE: Based on findings from four transdisciplinary original research studies on housing issues for the aging population, whereof three had a particular focus on marginalized groups, we report a co-produced synthesis of implications from a collaborative research project on socially sustainable housing policies. Researchers and non-academic partners in the ongoing Thematic Collaboration Initiative Social Rights and Housing for the Aging Population at Lund University collaborated in co-creative activities aiming at policy recommendations., RESULTS: Seven types of implications (i.e., themes) that represent macro and meso level approaches with potential to generate impact on social rights and housing for the aging population were identified. The content of legislation and regulations, financial institution strategies, and housing and neighbourhood development exemplify macro level implications. The three themes education and training, communicating with a diversity of stakeholders, and communicating with the public all relate to an overall need for integrated knowledge translation. The theme involving older adults as a resource delivered insight into underutilized capacities of the diverse target group. As the quest for integrated knowledge translation is growing stronger, this research note contributes to development of co-production approaches to synthesize implications of transdisciplinary collaboration, connecting research, practice and policy on societal challenges that ay population aging.

Sheppard, C. L., C. Kwon et al. (2023). "Aging in Place in Social Housing: A Scoping Review of Social Housing for Older Adults." <u>La revue canadienne du vieillissement</u> 42(1): 69-79. <u>https://dx.doi.org/10.1017/S0714980822000125</u>

Access to affordable housing is a rising concern, and social housing is one approach to support lowincome, older renters. A scoping review was undertaken to understand the characteristics of older tenants and social housing services to identify strategies to promote aging in place. Seven peer review databases were searched to identify relevant articles. A total of 146 articles were included. Almost all examined socio-demographic and health characteristics of older tenants, while 72 per cent examined social housing services, including eligibility policies, staffing, and access to on-site services. This review points to a high vulnerability among older tenants and highlights the importance of co-locating services on-site with a tenant-facing support staff to identify vulnerable tenants and link them to services. More research on tenancy issues (e.g., unit condition, rental management) is needed to identify new opportunities for social housing landlords to help older tenants age in place. Mahmood, A., R. Patille et al. (2022). "Aging in the Right Place for Older Adults Experiencing Housing Insecurity: An Environmental Assessment of Temporary Housing Program." <u>International journal of environmental research and public health</u> 19(22). <u>https://dx.doi.org/10.3390/ijerph192214857</u>

Research on programs offering senior-specific housing supports and enabling "aging in the right place" (AIRP) for "older persons with experiences of homelessness" (OPEH) is limited. This paper presents an environmental assessment of a "transitional housing program" (THP) in Metro Vancouver, Canada, for OPEH to AIRP. Data were collected using Aging in the Right Place Environmental (AIRP-ENV) and Secondary Observation (AIRP-ENV-SO) audit tools designed to evaluate multi-unit housing for OPEH. The 241-item AIRP-ENV tool was used to assess the built environmental features of four multi-unit buildings of the THP. The AIRP-ENV-SO tool was used to collect contextual data on the function, safety, and land use of the surrounding neighborhood. Findings identified built environment and urban design features that support THP residents' safety, security, accessibility, functionality, social activity, autonomy, and identity. The THP buildings were rated 'Good' for accessibility, functionality, autonomy and identity, while 'Satisfactory' or 'Poor' for safety, security, and social activity. Findings point to the built environmental features (e.g., size and layout of spaces) required in the THP to create opportunities for increased social engagement among residents and enhanced safety and security. The AIRP-ENV and AIRP-ENV-SO audit tools can help inform programs across the housing continuum to develop supportive built environments that promote AIRP for OPEH.

Park, G.-R., M. Grignon et al. (2022). "How do housing asset and income relate to mortality? A population-based cohort study of 881220 older adults in Canada." <u>Social science & medicine</u> (1982) 314: 115429. <u>https://dx.doi.org/10.1016/j.socscimed.2022.115429</u>

OBJECTIVE: A growing body of research has documented a well-established link between socioeconomic conditions and mortality among older adults. This study aims to understand (a) whether housing assets and income are associated with mortality and (b) if the value of housing assets affects the relationship between income and mortality; both questions are studied among older adults aged 65 or over in Canada. METHODS: Using the population-based linked dataset (2011 Canadian Census Health and Environment Cohorts) of 881,220 older adults over six years of follow-up (2011-2017), this study uses survival analysis to estimate the link between housing assets, income level and mortality. We also assess the potential moderating effect of housing asset levels on the association between income and mortality by categorizing individuals along two dimensions: whether they are income-poor and whether they are housing assets-poor. RESULTS: The mortality rate was higher among both the lowest asset (HR = 1.346) and the lowest income group (HR = 1.203). The association is pronounced for older adults aged 65 to 74. Assets did not significantly moderate the link between income and mortality. Income-related inequalities in mortality are observed among each group of housing asset level. Compared to those who are neither income-poor nor housing assets-poor, individuals who were income poor but not housing assets-poor were more likely to die (HR = 1.067) over seven years of follow-up, and people who were housing assets-poor only were more likely to die (HR = 1.210). Being housing-assets poor and income-poor yielded a higher hazard ratio (HR = 1.291). CONCLUSIONS: Housing assets and income are associated with mortality of older adults. It is important to identify people who are assets poor and/or income poor who are at higher risks of mortality. Social policies aimed at reducing income insecurity and housing insecurity can reduce mortality inequalities.

Aouici, S. et L. Nowik (2021). "Mobilité résidentielle et vieillissement : pour le meilleur et contre le pire." <u>Retraite et société</u> N° 86(2): 21-45. <u>https://doi.org/10.3917/rs1.086.0022</u>

Sur l'ensemble des mobilités résidentielles observées chez les personnes à la retraite, une partie intervient en lien avec l'avancée en âge. Cet article vise à les distinguer des mobilités d'agrément et à en comprendre les logiques. En se concentrant sur la situation française, les résultats des enquêtes Logement de l'Insee, qui fournissent un état des lieux régulier des mobilités résidentielles, sont examinés dans un premier temps. L'enquête Amare (Ancrage et mobilité résidentielle à la retraite) est mobilisée à la suite. Par son approche qualitative, elle permet de comprendre plus finement la manière dont les mobilités résidentielles d'ajustement prennent forme pendant la retraite. L'analyse confirme la recherche de protection matérielle ou affective chez certains retraités par le biais de la mobilité résidentielle. Sous l'effet du vieillissement individuel, les mobilités d'ajustement relèvent souvent d'une combinaison d'intentions personnelles, difficilement dissociables, s'inscrivant dans la continuité de parcours biographiques et de configurations familiales spécifiques.

Laferrère, A. (2021). "Vieillir chez soi : apport des expériences étrangères et des comparaisons internationales." <u>Gérontologie et société</u> vol. 43 / n° 165(2): 11-30. <u>https://doi.org/10.3917/gs1.165.0011</u>

Vieillir sur place, à domicile, dans un logement privé, ordinaire, in the community, comme on dit en Angleterre, dans la communauté plutôt qu'en communauté – comme est classé un Ehpad en France –, mais tout en faisant communauté, en se sentant « chez soi » : tel est l'idéal, individuel et collectif. Vivre chez soi en avançant en âge, tout en en perdant, parfois, ses moyens, physiques et intellectuels, et en gérant des pathologies chroniques plus ou moins sérieuses. Le « sur place » évoque l'immobilité, comme si vivre et donc vieillir n'était pas justement une dynamique : celle de laisser derrière soi des objets, des lieux, des gens, et mourir finalement, sans rien emporter. Préférons donc au « sur place » le « chez-soi », la traduction usuelle de « in place » que Marie-Ève Joël et moi avions choisie pour le thème de ce numéro spécial.

Yuan, W., S. Gong et al. (2020). "How does rising housing price affect the health of middle-aged and elderly people? The complementary mediators of social status seeking and competitive saving motive." <u>PloS one</u> 15(12): e0243982. <u>https://dx.doi.org/10.1371/journal.pone.0243982</u>

Under the backdrop of China's aging population and continuous rising housing price and base on theories pertaining to social status seeking, marriage matching and intergenerational family relationships, use the 2010 and 2014 CFPS national survey micro data, we examine the impact of rising housing price on the health of middle-aged and elderly people and the underlying mechanisms. Rising housing price has a significant negative impact on the health of middle-aged and elderly people, and this effect is also reflected in their physical health, mental acuity and emotional well-being. The internal mechanism is that social status seeking motivation plays a significant mediator role. Through further analysis, we find that competitive saving motive is another intermediate mechanism that causes rising housing price to affect the health of middle-aged and elderly people; it is complementary to the social status seeking motivation. What's more, the mediation effect of the competitive saving motive is notably heterogeneous, as it exists only for middle-aged and elderly people with male or noncollege educated child but does not exist for those with female or college educated child.

Personeni, G., F. Clanché et al. (2023). "Évaluation en réalité virtuelle du risque de chutes chez les personnes âgées." <u>Hegel</u> 1(1): 45-53. <u>https://stm.cairn.info/revue-hegel-2023-1-page-45?lang=fr</u>

La chute est la première cause d'accident chez les personnes âgées. Chaque année, elle concerne 1 personne sur 4 chez les plus de 65 ans. Le risque de chute est multifactoriel : ses causes peuvent notamment être motrices, attentionnelles ou cognitives. Afin de mieux caractériser, comprendre et prédire ce risque de chute, nous proposons aux praticiens une solution technologique fondée sur la réalité virtuelle, permettant de collecter et d'identifier différents indicateurs du risque de chute. Cette solution simple d'utilisation, automatise le protocole expérimental et la collecte d'indicateurs, assure la reproductibilité des conditions expérimentales, et immerge le patient dans un environnement réaliste et des situations de la vie courante. Notre outil, compatible avec des dispositifs de réalité virtuelle grand public, utilise un total de 6 capteurs portés par le patient pour permettre une capture cinématique du corps complet, restitué en temps réel au patient sous la forme d'un avatar virtuel. Ces données cinématiques, rejouables pour le praticien, permettent d'alimenter un processus d'apprentissage numérique. L'expérimentation place le patient dans 6 situations de test, introduisant progressivement différentes tâches et obstacles afin de tester et de collecter des indicateurs sur ses capacités motrices, attentionnelles et cognitives, permettant des comparaisons inter-patient et inter-condition.

Osman, A., N. Kamkar et al. (2022). "Fall risk-increasing drugs and gait performance in community-dwelling older adults: A systematic review." <u>Ageing research reviews</u> 77: 101599. <u>https://dx.doi.org/10.1016/j.arr.2022.101599</u>

PURPOSE: Medication use, and gait impairment are two major risk factors for falls in older adults. There are several mechanisms linking fall risk-increasing drugs (FRIDs) and increased fall risk. One pathway involves gait performance as an intermediate variable. It is plausible that FRIDs indirectly increase fall risk by causing gait impairment. The purpose of this review was to systematically review the existing evidence on the association between FRIDs and gait performance in community-dwelling older adults without neurological movement disorders. METHODS: Two searches were performed using MeSH terms and keywords in the electronic databases MEDLINE, EMBASE, PsycINFO, CINAHL and grey literature. We included clinical trials and observational studies that assessed the association between a FRID class and any quantitative measure of gait performance. Quality assessment was performed using the Newcastle-Ottawa scale for observational studies and the Cochrane risk-of-bias tool for clinical trials. Study characteristics and findings were summarized in a descriptive approach for each drug class. RESULTS: A total of 11,197 studies were retrieved from both searches at the first step and a total of 23 studies met the final inclusion criteria. Fourteen studies assessed the association between psychotropic FRIDs and gait performance and nine assessed cardiovascular FRIDs. Four out of five studies found that drugs with sedative properties are associated with reduced gait speed in older adults. Three out of four studies found no association between statin use and gait speed. There is insufficient evidence on the association between FRIDs and other gait performance measures. CONCLUSION: Caution should be taken when prescribing drugs with sedative properties to older adults at risk of falls. Further research is required to assess the impact of the use FRIDs on gait performance measures other than gait speed.

Henwood, B. F., H. Rhoades et al. (2020). "Examining fall risk among formerly homeless older adults living in permanent supportive housing." <u>Health & social care in the community</u> 28(3): 842-849. <u>https://dx.doi.org/10.1111/hsc.12915</u>

Although permanent supportive housing (PSH) has been credited with a decline in the number of chronically homeless adults in the United States since 2007, the extent to which PSH can accommodate the needs of a prematurely aging population, including reducing the likelihood of falls, is unclear. The objective of this study is to examine the prevalence and correlates of falls with a sample of 237 tenants (45- to 80-year olds) from two PSH programmes in Los Angeles from 1 January 2017 to 10 August 2017. We also explore the location and severity of fall-related injury using a subsample of 66 tenants. Standard surveys queried demographics, health status, history of homelessness and falls. Multivariable logistic regression assessed the correlates of falling in the past year. More than half of the sample had fallen and more than 40% had multiple falls in the past year. Functional impairment, frailty and persistent pain were all associated with increased fall risk. For the 66 tenants who provided more detailed fall information, more than 40% fell at home and of those nearly half fell in their bathroom. Fall-related injuries were common, with more than one-third of the subsample experiencing serious injury. These findings suggest that fall prevention is needed in PSH but that more research is needed to understand the degree to which individual and environmental risk factors are contributing to falls.

Pirrie, M., G. Saini et al. (2020). "Risk of falls and fear of falling in older adults residing in public housing in Ontario, Canada: findings from a multisite observational study." <u>BMC geriatrics</u> 20(1): 11. <u>https://dx.doi.org/10.1186/s12877-019-1399-1</u>

BACKGROUND: Falls in older adults is a widely researched topic. However, older adults residing in public housing are a vulnerable population that may have unique risk factors for falls. This study aims to describe the prevalence and risk factors for falls, fear of falling, and seeking medical attending for falls in this population. METHODS: Sociodemographic and health-related data was collected as part of a community-based health assessment program with older adults in public housing. Three pre-screening questions identified individuals at potential risk for falls; individuals who screened positive performed the objective Timed Up and Go (TUG) test. Logistic regression was used to evaluate risk factors for four outcome variables: falls in the past year, seeking medical attention for falls, fear of falling, and objectively measured fall risk via TUG test. RESULTS: A total of 595 participants were evaluated, of which the majority were female (81.3%), white (86.7%), did not have a high school diploma (50.0%), and reported problems in mobility (56.2%). The prevalence of falls in the past year was 34.5%, seeking medical attention for falls was 20.2% and fear of falling was 38.8%. The TUG test was completed by 257 participants. Notably, males had significantly reduced odds of seeking medical attention for a fall (OR = 0.50, 95%CI 0.25-0.98) and having a fear of falling (OR = 0.42, 95%CI 0.24-0.76); daily fruit and vegetable consumption was associated with decreased odds of having a fall in the past year (OR = 0.55, 95%Cl 0.37-0.83), and alcohol consumption was associated with increased odds of fear of falling (OR = 1.72, 95%Cl 1.03-2.88). CONCLUSION: Older adults residing in public housing have unique risk factors associated with social determinants of health, such as low fruit and vegetable consumption, which may increase their risk for falls. The findings of this study can be used to inform falls interventions for this population and identify areas for further research.

Senderovich, H. et P. M. Tsai (2020). "Do Exercises Prevent Falls Among Older Adults: Where Are We Now? A Systematic Review." Journal of the American Medical Directors Association 21(9): 1197-1206.e1192. <u>https://dx.doi.org/10.1016/j.jamda.2020.05.010</u>

OBJECTIVE: To determine whether single interventions (SI), multifactorial interventions (MI), or multiple component interventions (MCI) including vitamin D supplementation prevent the incidence of falls and fall risk factors among older adults who are community-dwelling or living in long-term care facilities., DESIGN: Systematic review. METHODS: PubMed, Scopus, MEDLINE, and Cochrane were searched with restrictions applied to publication year (2015-2019) and language (limited to studies published in English). After duplicate removal and title and abstract screening, 2 authors independently identified eligible studies on the basis of inclusion criteria. Risk of bias and quality of evidence were assessed. RESULTS: Thirty-four studies were included after screening titles and abstracts from 855 citations and 129 full-text articles. Thirteen randomized-controlled trials and clinical trials (5 on MI, 1 on MCI, and 7 on SI) including 2232 participants and 21 systematic reviews (assessing SI, MI, MCI, or all) were extracted for qualitative synthesis. Fifteen out of 20 studies that reported outcomes on falls rate found a significant reduction. Seventeen out of 23 studies with outcomes on fall risk factors concluded a significant improvement. Five studies found no significant differences in falls incidence, and 5 studies found no significant differences in fall risks. One study reported worsened outcomes, including poorer balance. CONCLUSION AND IMPLICATIONS: Although results are inconclusive, SI, MI, and MCI involving exercises may prevent falls. Vitamin D supplementation may be beneficial alongside exercise; however, whether vitamin D use consistently reduces falls incidence or fall risks remains uncertain. Exercises that are individually tailored to participants' capabilities and risks may be the most effective falls prevention interventions. Implementation may reduce medical costs and improve quality of life for older adults who are community-dwelling or are living in long-term care facilities.

Sherrington, C., N. Fairhall et al. (2020). "Exercise for preventing falls in older people living in the community: an abridged Cochrane systematic review." <u>British journal of sports medicine</u> 54(15): 885-891. <u>https://dx.doi.org/10.1136/bjsports-2019-101512</u>

OBJECTIVES: To assess the effects of exercise interventions for preventing falls in older people living in the community. SELECTION CRITERIA: We included randomised controlled trials evaluating the effects of any form of exercise as a single intervention on falls in people aged 60+years living in the community. RESULTS: Exercise reduces the rate of falls by 23% (rate ratio (RaR) 0.77, 95% CI 0.71 to 0.83; 12 981 participants, 59 studies; high-certainty evidence). Subgroup analyses showed no evidence of a difference in effect on falls on the basis of risk of falling as a trial inclusion criterion, participant age 75 years+ or group versus individual exercise but revealed a larger effect of exercise in trials where interventions were delivered by a health professional (usually a physiotherapist). Different forms of exercise had different impacts on falls. Compared with control, balance and functional exercises reduce the rate of falls by 24% (RaR 0.76, 95% CI 0.70 to 0.81; 7920 participants, 39 studies; high-certainty evidence). Multiple types of exercise (commonly balance and functional exercises plus resistance exercises) probably reduce the rate of falls by 34% (RaR 0.66, 95% CI 0.50 to 0.88; 1374 participants, 11 studies; moderate-certainty evidence). Tai Chi may reduce the rate of falls by 19% (RaR 0.81, 95% CI 0.67 to 0.99; 2655 participants, 7 studies; lowcertainty evidence). We are uncertain of the effects of programmes that primarily involve resistance training, dance or walking. CONCLUSIONS AND IMPLICATIONS: Given the certainty of evidence, effective programmes should now be implemented.

Torres, M., G. Pédrono et al. (2020). <u>Chutes des personnes âgées à domicile : caractéristiques des chuteurs et des circonstances de la chute. Volet « Hospitalisation » de l'enquête ChuPADom, 2018, Santé publique France : 138 p.</u>

https://catalogue.santecom.qc.ca/cgi-bin/koha/opac-detail.pl?biblionumber=160532

Les chutes sont à l'origine d'une morbidité et d'une mortalité importantes, représentant ainsi un problème de santé publique majeur. ChuPADom est une enquête prospective multicentrique composée de deux volets. Le volet « Hospitalisation » avait pour objectifs de décrire les caractéristiques et les circonstances des chutes à domicile chez les personnes âgées de 65 ans et plus hospitalisées et d'identifier des profils de chuteurs.

Resnick, B., E. Galik et al. (2019). "The Impact of Physical Activity and Function on Falls in Assisted Living Residents." Journal of aging and physical activity 27(4): 816-822.

https://dx.doi.org/10.1123/japa.2018-0291

The purpose of this study was to describe physical activity and function of older adults in assisted living communities and test the association between moderate and vigorous activity and falls. This study used baseline data from 393 participants from the first two cohorts in the Function-Focused Care in Assisted Living Using the Evidence Integration Triangle study. The majority of participants were female (N = 276, 70%) and White (N = 383, 97%) with a mean age of 87 years (SD = 7). Controlling for age, cognition, gender, setting, and function, the time spent in moderate or vigorous levels of physical activity was associated with having a fall in the prior 4 months. Those who engaged in more moderate physical activity were 0.6% less likely to have a fall (OR = 0.994, Wald statistic = 5.54, p = .02), and those who engaged in more vigorous activity were 2% less likely to have a fall (OR = 0.980, Wald statistic = 3.88, p = .05).

Tricco, A. C., S. M. Thomas et al. (2019). "Quality improvement strategies to prevent falls in older adults: a systematic review and network meta-analysis." <u>Age and ageing</u> 48(3): 337-346. <u>https://dx.doi.org/10.1093/ageing/afy219</u>

BACKGROUND: Falls are a common occurrence and the most effective quality improvement (QI) strategies remain unclear. METHODS: We conducted a systematic review and network metaanalysis (NMA) to elucidate effective quality improvement (QI) strategies for falls prevention. Multiple databases were searched (inception-April 2017). We included randomised controlled trials (RCTs) of falls prevention QI strategies for participants aged >=65 years. Two investigators screened titles and abstracts, full-text articles, conducted data abstraction and appraised risk of bias independently. RESULTS: A total of 126 RCTs including 84,307 participants were included after screening 10,650 titles and abstracts and 1210 full-text articles. NMA including 29 RCTs and 26,326 patients found that team changes was statistically superior in reducing the risk of injurious falls relative to usual care (odds ratio [OR] 0.57 [0.33 to 0.99]; absolute risk difference [ARD] -0.11 [95% Cl, -0.18 to -0.002]). NMA for the outcome of number of fallers including 61 RCTs and 40 128 patients found that combined case management, patient reminders and staff education (OR 0.18 [0.07 to 0.47]; ARD -0.27 [95% CI, -0.33 to -0.15]) and combined case management and patient reminders (OR, 0.36 [0.13 to 0.97]; ARD -0.19 [95% CI, -0.30 to -0.01]) were both statistically superior compared to usual care.. CONCLUSIONS: Team changes may reduce risk of injurious falls and a combination of case management, patient reminders, and staff education, as well as case management and patient reminders may reduce risk of falls. Our results can be tailored to decisionmaker preferences and availability of resources. SYSTEMATIC REVIEW REGISTRATION: PROSPERO (CRD42013004151).

Gagné, M., C. Blanchet et al. (2018). <u>Chutes et facteurs associés chez les aînés québécois vivant à</u> <u>domicile</u>, Institut national de santé publique du Québec : 17 p.

https://catalogue.santecom.qc.ca/cgi-bin/koha/opac-detail.pl?biblionumber=109845

L'objectif général de la présente étude est d'identifier des facteurs de risque et de protection pouvant être associés aux chutes chez les aînés québécois vivant à domicile et de vérifier les liens entre la survenue des chutes, certains problèmes de santé chroniques et le cumul de facteurs de vulnérabilité.