

6th NURSING HOME RESEARCH INTERNATIONAL CONFERENCE

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ABSTRACTS

SYMPOSIA

S1- EMERGENCY DEPARTMENT TRANSFER OF NURSING HOME RESIDENT. THE OBSERVATIONAL FINE STUDY.

Yves Rolland (*Gérontopôle, Toulouse University Hospital, Toulouse, France*)

Communication 1: Factors Associated with Potentially Inappropriate Transfer to the Emergency Department among Nursing Home Residents, Yves Rolland (*Gérontopôle, Toulouse University Hospital, Toulouse, France*)

Communication 2: Nursing home residents' functional trajectories and mortality after a transfer to the emergency department: a descriptive study, Vincent Guion¹, Philippe de Souto Barreto², Yves Rolland² (*1. Pôle Autonomie et Handicap, Inserm Besançon, France; 2. Gerontopole of Toulouse, Institute of Ageing, Toulouse University Hospital, CHU Toulouse, UPS/Inserm UMR1027, Toulouse, France*)

Background: Functional decline and mortality are frequent and dreaded outcomes when transferring a nursing home resident to the emergency department, but little is known on the determinants of these outcomes. Previous studies have focused either on nursing home residents' hospitalisations or on emergency transfers in general population of older adults and have suggested their association with functional decline and risk of death. **Objectives:** To describe nursing home residents' (NHRs) functional trajectories and mortality after a transfer to the emergency department (ED). **Methods:** Design: Case-control observational multicentre study. Setting: 17 EDs in France. Participants: 1037 NHRs presenting to EDs over four non-consecutive weeks in 2016. Main outcome measures: Trajectories of activities of daily living (ADL) scores before transfer (time1), during hospitalisation (time2) and within one week after discharge (time3); and mortality. **Results:** Trajectory modelling identified four distinct trajectories of ADL. The first showed a high and stable (across time1, time2 and time3) functional capacity around 5.2/6 ADL points, with breathlessness as the main condition leading to transfer. The second displayed an initial 37.8% decrease in baseline ADL (between time1 and time2), followed by a 12.5% recovery of baseline ADL (time2-time3), with fractures as the main condition. The third displayed a similar initial decrease, followed by a 6.7% recovery. The fourth displayed an initial 70.1% decrease, followed by an 8.5% recover, with more complex geriatric polyopathy situations. Functional decline was more likely to occur after being transferred for a cerebrovascular condition or for a fracture, after being discharged from ED to a surgery department, and with a heavier burden of distressing symptoms during transfer. Mortality after ED transfer was more likely in older NHRs, those in a more severe condition, those who were more hospitalised in the past month, and those transferred for cerebrovascular conditions or breathlessness. **Conclusion:** Almost half of the residents transferred to emergency departments either decline on their functional ability or die. Identified trajectories of functional ability and factors associated with functional decline and mortality should help clinicians decide whether to transfer NHRs to ED or not, according to NHRs' robustness and expected resilience.

Communication 3: Factors associated with Emergency Medical Dispatcher request and residents' inappropriate transfers from Nursing Homes to Emergency Department, Xavier Dubucs (*Emergency Department, Toulouse University Hospital, Toulouse, France*)

Communication 4: Healthcare costs associated with potentially inappropriate medication prescribing in nursing home residents: results from the fine study, Audrey Dintilhac¹, Nadège Costa^{2,3}, Eugénie Gombault^{2,3}, Michaël Mounié³, Philippe Cestac^{1,2}, Laurent Molinier^{2,3}, Bruno Vellas^{2,4}, Yves Rolland^{2,4}, Blandine Juillard-Condât^{1,2}, Arnaud Pagès^{1,2} (*1. Department of Pharmacy, Toulouse University Hospital, Toulouse, France; 2. Center for Epidemiology and Research in POPulation Health (CERPOP), UMR 1295, Inserm, UPS Toulouse III University, Toulouse, France; 3. Economic Evaluation Unit, Medical Information Department, Toulouse University Hospital, Toulouse, France; 4. Gerontopole of Toulouse, Institute of Ageing, Toulouse University Hospital (CHU Toulouse), Toulouse, France*)

Background: Older adults have multiple comorbidities and take many medications. Then, they are particularly exposed to potentially inappropriate medication prescribing (PIP). Among them, institutionalized residents represent a more vulnerable population due to higher level of comorbidity and frailty. These PIP are associated with iatrogenic events (hospitalizations, falls, and confusion). These PIP could induce additional healthcare costs (in addition to medication costs alone) due to a more frequent use of the healthcare system (hospitalizations, outpatient visits,...). **Objectives:** The aim of this study was to explore the association between healthcare costs and PIP exposure among institutionalized older residents. We conducted a secondary analysis on the data from the FINE (Factors associated with INappropriate transfer to the Emergency department among nursing home residents) study, an observational, multicenter, case-control study. Seventeen emergency department in the Midi-Pyr n es region in France participated in the study. All nursing home residents admitted to the selected emergency department were included. **Methods:** The detection of PIP was performed using a computer algorithm combining 5 explicit criteria-based tools (STOPP/START criteria, European list of potentially inappropriate medications (EU(7)-PIM), French Alert and Mastering of drug Iatrogenicity (AMI) indicators, contraindications). The algorithm generated a number of medication-related non-compliances (NC) for each drug prescription. The economic analysis was carried out from the point of view of the French National Health Insurance with a time horizon of 6 months after transfer to the emergency department. Direct medical costs (hospitalization, visits and medical acts, paramedical acts, medications and medical equipment) and non-medical costs (transport) were taken into account. **Results:** Our study included a total of 616 residents, with a mean age of 86.5 ± 7.3 years, 69% women (n=425). They took 8.8 ± 3.6 medications. The computer algorithm estimated, on average, 4.8 ± 2.8 NC per resident. Our results do not show significant higher healthcare costs in residents exposed to PIP (total healthcare costs and non-medication healthcare costs). **Conclusion:** These results represent preliminary work in an underdeveloped economic literature. The cost of the residents' last year of life or palliative management could mask the impact of PIP on healthcare costs. Future work needs to be considered.

S2- PREVENTION OF ADMISSION TO NURSING HOMES (PAN) A LONGITUDINAL STUDY OF SLOW STREAM REHABILITATION IN SWISS NURSING HOMES.

Heike Geschwindner (*Nursing Research and Sciences, Senior Health Centres of the City of Zurich, Zurich, Switzerland*)

Communication 1: The long-term effectiveness of geriatric slow-stream rehabilitation - insights from the quantitative study part.

Maria Schubert (*Institute of Nursing, School of Health Professions, Zurich University of Applied Sciences, Winterthur, Switzerland*)

Background: The long-term effectiveness of a slow-stream-rehabilitation (SSR) in nursing homes for geriatric and multimorbid patients after a hospital stay are not well researched. **Objectives:** The main objective of the PAN study was to evaluate the effectiveness of the SSR with respect to functional independency, measured at four time points, and the number of participants living at home 6 and 12 months after discharge. **Methods:** 190 participants were included, who were admitted to a Swiss nursing home for SSR between May 2019 to April 2020. The main outcome, functional independency (measured with Barthel Index), was assessed at four time points (admission, discharge, and six and twelve months after discharge). Changes in the main and secondary outcomes, measured at four time points were analysed using descriptive and explorative statistics. **Results:** Of the 190 participants (median age 86 years, 66% female), three quarters were discharged home after SSR, of these about one third were still living at home after 12 months. Functional independency increased significantly from admission to discharge and continued to increase after discharge, especially for the group of participants who stayed home until the end of the study. **Conclusions:** SSR seems to have a positive effect on the functional independency, not only from admission to discharge but also after discharge.

Communication 2: Enabling and hindering factors to cope at home environment after slow-stream-rehabilitation – insights from the qualitative study part. Nicole Zigan (*Institute of Nursing, School of Health Professions, Zurich University of Applied Sciences, Winterthur, Switzerland*)

Background: After discharge home the relatives often provide support and informal care to the former patient. Dealing with many new demands is challenging for both patient and relatives. **Objectives:** The second objective of the PAN study was to explore and describe how the former patients and their relatives coped at home after discharge, inclusively barriers and supportive factors. **Methods:** Sixteen semi-structured individual or dyad interviews were conducted with 19 relatives (children, spouses, or friends) and 4 former patients of SSR, the mean interview duration was 55 minutes. The interviews took place three to twelve months after discharge from SSR and were conducted from August 2020 to May 2021. The interviews were analysed using content analysis. **Results:** The participants were between 33 and 88 years old. The results indicate that the former patients' ability to cope at home after SSR requires a more supportive and flexible social network than before SSR. Relatives were predominately involved in tasks related to organising and supporting the former patients with basic and instrumental activities of daily living (ADL/IADL), like preventive activities to ensure the functional status and safety at home. A strong hindering factor for relatives were practical issues with the outpatient care services, such as plannability, communication, and lack of staff continuity. **Conclusions:** Appropriate professional support of patients and caregivers related to prevention and safety at home before discharge from SSR ward. Relatives experience a sudden increase in support tasks and have to take many of

responsibilities to manage care and would benefit from low-threshold professional support.

Communication 3: Can typical patient courses after slow stream rehabilitation be observed? – Case Series. Heike Geschwindner, (*Nursing Research and Sciences, Senior Health Centres of the City of Zurich, Zurich, Switzerland*)

Background: Less is known about the long-term effect of a slow-stream-rehabilitation (SSR) in nursing homes for geriatric and multimorbid patients after a hospital stay. Even assuming a positive effect of SSR implies a benefit for all patients. **Objectives:** Additionally to the initial objectives of the PAN study and during the phase of data collection the question arose, if typical patient courses after discharge from SSR ward can be identified to explain an early or a postponed permanent nursing home admission. **Methods:** Case series were conducted to describe patients' courses after discharge from slow stream rehabilitation. For this reason study participants' medical and nursing records were evaluated retrospectively including the period from 2012 to 2020. **Results:** Different courses were identified: A short-term stay at home (approx. 6 months) is common. A permanent nursing home stay follows a further hospital stay or a deterioration of health. In single cases long-term courses were observed, too. Over several years repeated hospitalisations - slow stream rehabilitation in a nursing home - discharge home. **Conclusions:** Slow stream rehabilitation in a nursing home enables the patients to return home even after several hospitalisations.

ORAL COMMUNICATIONS

OC1- THE ROLE OF HUMAN RESOURCE MANAGEMENT PRACTICES AND ORGANIZATIONAL CULTURE IN REDUCING NURSE STAFFING TURNOVER: A SURVEY OF HIGH MEDICAID (UNDER-RESOURCED) NURSING HOMES IN THE US. Robert Weech-Maldonado¹, Akbar Ghiasi², Justin Lord³, Ganisher Davlyatov⁴, Larry Heard⁵, Kent Rondeau⁶ (1. *Department of Health Services Administration, The University of Alabama at Birmingham, Birmingham, Alabama, USA*; 2. *HEB School of Business & Administration, University of the Incarnate Word, San Antonio, Texas USA*; 3. *College of Business, Louisiana State University-Shreveport, Shreveport, Louisiana USA*; 4. *Department of Health Administration and Policy, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma, USA*; 5. *University of Alabama at Birmingham, Birmingham, Alabama USA*; 6. *University of Alberta, Edmonton, Alberta, Canada*)

Backgrounds: Nurse staffing turnover has been associated with nursing home quality, such as worse resident outcomes, higher rates of infection, and hospitalizations. Nurse staffing turnover can be worse in under-resourced nursing homes, such as those with a high proportion of Medicaid residents in the US. **Objectives:** To explore the role that human resource management (HRM) practices and organizational culture may have in explaining the variations in nursing staff turnover among high Medicaid nursing homes. **Methods:** Data consisted of survey and secondary data sources for 2017-2018. Survey data comprised 348 responses (33% response rate) from a national mailer of US nursing home administrators in high-Medicaid (85% or higher) facilities. Survey data were merged with secondary datasets including Long-Term Care Focus (LTCFocus) and the Area Health Resource File (AHRF). The dependent variables (nurse staffing turnover rates) consisted of the percentages of registered nurses (RNs)/licensed practical nurses (LPNs)/certified nurse aides (CNAs) that had

voluntarily quit the organization during the past year. The independent variables consisted of: 1) HRM practices: traditional, employee-centered, and high involvement practices; and 2) Organizational culture: clan, market, hierarchical, and non-dominant. Organizational and market variables were controlled for. Data were modeled using Poisson log-linear regression, and propensity score weights to adjust for potential survey non-response bias. **Results:** Every unit increase in the high involvement HRM practices was associated with a decrease of 5% ($p < 0.001$), 3% ($p < 0.01$), and 2% ($p < 0.05$) in the RN, LPN, CNA turnover rates, respectively. Compared to having a clan culture, nursing homes with a: 1) market culture had 2.3, 2.0, and 1.7 times higher RN, LPN, and CNA turnover rates ($p < 0.01$), respectively; 2) hierarchical culture had 1.8 ($p < 0.001$), 1.7 ($p < 0.001$), and 1.2 ($p < 0.05$) times higher RN, LPN, and CNA turnover rates, respectively; and non-dominant culture had 3.5, 2.5, and 2.2 times higher RN, LPN, and CNA turnover rates ($p < 0.001$), respectively. **Conclusion:** The findings of this study highlight the importance of organizational culture and HRM practices for practitioners and policy makers to more effectively target their efforts to reduce nurse turnover in under-resourced (high Medicaid) nursing homes.

OC2- CAN SOCIAL ROBOTS EASE HEALTH CARE PROFESSIONALS (HCPs) WORKLOAD? SCOTTY'S APPROACH. Susanna Del Signore^{1,2}, Behrouz Fard³, Ina Flierman³, Gianluca Zia¹, Stefania Del Signore^{1,2}, Alessandro Loria¹, Stephanie Jansen^{4,5}, Marian Hurmuz^{4,5}, Lex van Velsen^{4,5} (1. *Bluecompanion Ltd, London, United Kingdom*; 2. *Bluecompanion France, Jambville, France*; 3. *Roessingh Centre for Rehabilitation, Enschede, the Netherlands*; 4. *eHealth department, Roessingh Research and Development (RRD), Enschede, the Netherlands*; 5. *Biomedical Signals and Systems Group, University of Twente, Enschede, the Netherlands*)

Backgrounds: 'SCOTTY', a technology transfer experiment funded by DIH-HERO (grant n.825003), aims to use social robots in physical rehabilitation context after spinal injuries, Intensive Care (for COVID-19) or orthopaedic surgery. A key expected benefit is to meaningfully reduce healthcare professionals' (HCPs) workload, and to mitigate patients' perceived isolation, e.g., during COVID-19 pandemic. **Objectives:** RDD and Bluecompanion to provide Roessingh Rehabilitation with a robotic Nursing and Physiotherapist Aid. **Methods:** After preliminary studies with Nao (a small social robot by Aldebaran, Paris, France) and with Virtual Agents, we selected Pepper, a 120-cm high humanoid social robot (by SoftBank Robotics, Paris, France) and integrated it in a customised web-based data platform. 'Scotty' character was shaped and enabled by Bluecompanion in close collaboration and according to the final users' requirements. **Results:** We operationalise the project from March 2021 to May 2022. Scotty as a Nurse-Aid follows "her" own daily agenda, compiled in advance by the HCPs. The robot is capable to collect standard medical data via a conversation with the patient, e.g., sleep, defecation (Bristol standardised questionnaire), fluid balance, etc. and get additional parameters via her integrated tablet. Time consuming self-evaluation questionnaires are completed by the patient with Scotty's help. All clinical data are automatically recorded in the electronic case report form (e-CRF). Scotty as a Physiotherapist-Aid is capable to show preselected physical exercises as short tutorial videos, and to remind the patient about prescribed physical programs. Beside core productive activities, the implementation of chatbot-led 'casual' conversations may establish an initial, clear interaction model between the HCPs, the patients and the robotic "persona". **Conclusion:** The benefits of Scotty's paradigm are based on its capacity 1) to capture and record medical data in a standardised way, 2) to present/explain to patients

their exercises by a customised video, and 3) to engage in a chat. Overall, the introduction of a social robot as 'HCP-Aid' within the rehabilitation ward constitutes an innovative approach. This can be replicated, adapted, and further developed in other healthcare infrastructures and specifically at the Nursing Home (NH). The sought-after advantages are to lighten the HCPs' daily workload while mitigating residents/patients' 'loneliness' in the busy ward.

OC3- RESIDENT AGGRESSION IN NURSING HOMES – PREVALENCE, INCIDENCE, AND DETERMINANTS - A CROSS-SECTIONAL STUDY (THE RAIN STUDY). Bjorn Lichtwarck¹, Anette Vaeringstad¹, Janne Myhre¹, Geir Selbaek^{2,3,4}, Oyvind Kirkevold^{1,2,5}, Sverre Bergh^{1,2} (1. *The Research Centre for Age-related Functional Decline and Disease, Innlandet Hospital Trust, Ottestad, Norway*; 2. *The Norwegian National Centre for Ageing and Health (Ageing and Health), Vestfold Hospital Trust, Tonsberg, Norway*; 3. *Faculty of Medicine, University of Oslo, Oslo, Norway*; 4. *Department of Geriatric Medicine, Oslo University Hospital, Oslo, Norway*; 5. *Departement of Health, Care and Nursing, Faculty of medicine NTNU, Norwegian University of Science and Technology, Gjøvik, Norway*)

Backgrounds: Resident aggression in nursing homes (NH) can be of a verbal, physical or sexual character, targeting other residents, relatives, NH-staff, and the inventory. Aggression is a result of complex interactions between the residents and the social and physical surroundings. Studies have shown that 25% - 30% of NH residents with dementia exhibit aggression. These studies are usually based on clinical scales with interviews with staff members reporting episodes of aggression as a part of a composite agitation syndrome, retrospectively for the last 2-4 weeks. The incidence and prevalence of events of aggression and their manifestations in Norwegian NH are not known, and few studies have investigated determinants exclusively for aggression. **Objectives:** To investigate the incidence, prevalence, manifestations, and determinants of resident aggression towards co-residents, staff, and inventory in Norwegian NH. **Methods:** We will include 1200 residents from 52 NH in a quantitative cross-sectional cohort design. Events of resident aggression will be registered in a registration form by the NH staff, prospectively for four weeks. Secondly, mixed multilevel model analysis will be used to explore determinants of aggression using data of the characteristics of the NH-residents, the NH staff, the organisation, and the physical surroundings of the NH. **Results:** We present some preliminary results from part one of the study, based on the two first included NH, with 100 residents. These 100 residents exhibited 323 events of aggression during four weeks (incidence). The four weeks prevalence of residents exhibiting at least one event of aggression was 53%, 1-5 events 31%, 6-10 events 12%, 11-20 events 9%, and more than 20 events 1%. The staff was targeted in 85% of the events, the co-residents in 19%, and the inventory in 12%. Verbal aggression was observed in 85% of the events, physical aggression in 61%, and sexual aggression in 2%. **Conclusion:** Preliminary results from our study indicate that the prevalence of resident aggression is high in NH. The study will provide new knowledge on aggression in NH that can inform the development of interventions to reduce this complex and harmful phenomenon.

OC5- IMPLEMENTING PHYSICAL ACTIVITY FOR OLDER ADULTS IN NURSING HOMES. Fanny Buckinx, Olivier Bruyère (*WHO Collaborating Centre for Public Health Aspects of Musculoskeletal Health and Aging, Division of Public Health, Epidemiology and Health Economics, University of Liège, CHU-Sart Tilman, Liège, Belgium*)

Backgrounds: The majority of nursing home residents are physically inactive. Most of their time is spent sleeping, doing nothing or watching TV in a lying or sitting position. **Objectives:** Promoting regular physical activity is considered to be an effective strategy in reducing all-cause mortality and improving quality of life among older adult from nursing homes. **Methods:** In order to move beyond the relatively monotonous lifestyle in nursing homes, making physical activity enjoyable and sociable could encourage residents to participate in activities more regularly. **Results:** Growing evidence indicates that gaming approaches for physical activity promotion, such as interactive video games or giant board games, led to increased enjoyment and motivation in addition to positive cognitive and physical outcomes. Interestingly, physical activity contests among nursing homes has been shown to be feasible and may improve the motivational climate and physical performance. **Conclusion:** At last, it has recently been suggested that participants of group exercise sessions tended to perceive motivational climate as more task-involving than ego-involving and highlighted the importance of individual positive feedback, new exercises and mutual aid.

OC6- DEVELOPMENT OF NEW EXERCISES TO PROMOTE PHYSICAL ACTIVITY IN NURSING HOME SETTINGS USING THE GAMOTION. Fanny Buckinx¹, Lucie Maton², Valentine Dalimier², Alexandre Mouton², Laetitia Lengelé^{1,3}, Olivier Buyère^{1,2} (*1. Department of Public Health, Epidemiology and Health Economics, WHO Collaborating Centre for Public Health Aspects of Musculoskeletal Health and Ageing, University of Liège, Belgium; 2. Department of Sport Sciences, University of Liège, Belgium; 3. Gérontopôle de Toulouse, Institut du Vieillissement, Centre Hospitalo-Universitaire de Toulouse, France*)

Backgrounds: The GAMotion is a giant physical activity boardgame intended to improve the level of physical activity and a broader array of physical and psychological outcomes among nursing home residents. **Objectives:** The aim of the present study is to develop new balance, muscle strength, walking and flexibility exercises to be included in the GAMotion, to promote physical activity in nursing home settings. **Methods:** A two-steps qualitative study combining Focus group and Delphi method was conducted among healthcare professionals divided into two independent samples. The first sample was asked to develop exercises during a focus group. During this discussion, the experts have listed the difficulties encountered by the elderly and then selected the appropriate exercises to overcome these difficulties. The second sample participated in a two-round Delphi method, each with a questionnaire. The first questionnaire asked participants to rate the exercises developed during the focus group on a 4-point Likert scale (from 0 : not adapted to 4 : very adapted) ; the second questionnaire asked them to rank the exercises from most suitable to least suitable. **Results:** The Focus group developed 12 strength, 12 flexibility, 9 balance and 9 walking exercises. Following the first round of the Delphi method, 2 exercises in each category did not reach the consensus and were then removed (consensus established: median ≥ 3 in the Likert scale and at least 75% of experts rating the exercises as «adapted» or «very adapted»). In the second round, the remaining 10 strength, 10 flexibility, 7 balance and 7 walking exercises were ranked by the experts. This classification

determined the 5 most suitable exercises from each category to be included in the GAMotion. **Conclusion:** A consensus based approach among healthcare professionals allowed us to contribute to the development of new exercises to be included in the GAMotion boardgame.

OC7- IMPACT OF THE IMPLEMENTATION OF DRUG RISK MANAGEMENT INDICATORS ON THE IMPROVEMENT OF THE QUALITY OF PRESCRIPTIONS IN NURSING HOMES: A QUASI-EXPERIMENTAL STUDY. Stéphane Sanchez^{1,2}, Jan Chrusciel¹, Mariam Ndioungue Biné², Didier Armaingaud², Aude Letty², Jean Luc Novella³, Paul Emile Hay^{2,4} (*1. Pole Territorial Sant Publique et Performance, H pitaux Champagne Sud, Troyes, France; 2. Fondation Korian pour le Bien Vieillir, Paris, France; 3. Pole Autonomie Santé, Centre Hospitalier Universitaire de Reims, Reims, France; 4. Direction médicale et soins Seniors, Korian, Paris, France*)

Backgrounds: In The iatrogenic risk associated with potentially inappropriate prescriptions (PPIs) and multiple medications is increased in the elderly. PPIs are particularly frequent among residents of nursing homes in France, where the daily consumption is 8 molecules and at least 33% of residents are exposed at 10 molecules prescribed per month. Different strategies have been tested to optimize drug prescription in this population (training for physicians; development of physician/pharmacist collaboration). Few studies exist, however, on the co-construction of drug risk indicators from routine data from electronic pill dispensers. **Objectives:** to assess the impact on the rate of potentially inappropriate prescriptions of anticholinergics, within 18 months, of a collaborative therapeutic optimisation programme based on routinely product risk indicators within voluntary institutions based on electronic pill dispenser data. **Methods:** We conduct a quasi-experimental study in 33 french nursing home. Our main outcome was at least one prescription containing any of the following molecules during a 9-month subperiod : alimemazine, amitriptyline, chlorpromazine, clomipramine, clozapine, cyamemazine, dexchlorpheniramine, hydroxyzine, levomepromazine, mequitazine, oxomemazine, periciazine (rule 10). We implemented a difference-in-differences analysis to estimate the effect of the intervention. As the study was quasi-experimental, we used propensity score weighting to minimize indication bias. We fitted a Generalized Estimating Equations difference-in-differences model that estimated the probability of having at least one prescription under anticholinergic rule at any time during a 9-month period for each patient. **Results:** We included 37 nursing home and 8137 residents. Although there were differences between the intervention and control groups, the values of these differences was generally small and propensity score weighting successfully balanced the groups on the covariates included in the model. The differences between the intervention group and the control group in the Before period was significant ($p < 0.01$). Results from multivariable analysis showed a significant decrease of 14 % in the intervention group with OR= 0,732 (CI 95% 0,589 to 0,912). It is estimated that approximately 70 events were prevented by the intervention. **Conclusion:** Our intervention based on the production of indicators from routine data to create an inter-professional dialogue has shown to be effective in reducing the prescription of anticholinergics. Furthermore, qualitative analysis indicates that interprofessional dialogue is a strength and an essential point to consider if duplication of the result is wanted.

OC8- PAIN IN NURSING HOME RESIDENTS WITH DEMENTIA AND ITS ASSOCIATION TO QUALITY OF LIFE. Anne-Sofie Helvik^{1,2}, Sverre Bergh^{2,3}, J Šaltytė Benth^{3,4,5}, Geir Selbaek^{2,6,7}, Bettina S. Husebo^{8,9}, Kjerstin Tevik^{1,2} (1. Department of Public Health and Nursing, Norwegian University of Science and Technology (NTNU), Trondheim, Norway; 2. Vestfold Hospital Trust, Norwegian National Advisory Unit on Ageing and Health, Tonsberg, Norway; 3. The Research Centre for Age Related Functional Decline and Diseases, Innlandet Hospital Trust, Ottestad, Norway; 4. Institute of Clinical Medicine, Campus Ahus, University of Oslo, Oslo, Norway; 5. Health Services Research Unit, Akershus University Hospital, Lorenskog, Norway; 6. Department of Geriatric Medicine, Oslo University Hospital, Oslo, Norway; 7. Institute for Clinical Medicine, University of Oslo, Oslo, Norway; 8. Department of Global Public Health and Primary Care, Centre for Elderly and Nursing Home Medicine, University of Bergen, Norway; 9. Municipality of Bergen, Bergen, Norway)

Backgrounds: Pain is a common symptom in NH residents with dementia. One study from the Netherlands have reported that about half of the NH residents with dementia had pain at admission. To the best of our knowledge, few studies have reported the prevalence of pain in newly admitted NH residents with dementia in Norway. Pain, use of pain medication and other health characteristics need to be taken into consideration when studying Quality of life in older adults with dementia. **Objectives:** We aimed to describe pain, use of analgesics and quality of life (QoL) in people with dementia admitted to a Norwegian nursing home (NH), and to explore if and how pain was associated with their QoL when adjusting for sociodemographic characteristics, other health conditions and use of analgesics. **Methods:** A total of 953 Norwegian NH residents with dementia (mean age 84.0, SD 7.5years, 35.8% men) were included at admission to the NH. Pain and QoL were assessed using the Mobilization-Observation-Behavior-Intensity-Dementia-2 (MOBID-2) Pain Scale and the Quality of Life in Late-Stage Dementia (QUALID) scale, respectively. Severity of dementia, personal level of activities of daily living, general medical health, neuropsychiatric symptoms, and the use of psychotropic drugs and analgesics were assessed. **Results:** In total, 36% of the participants had clinically relevant pain intensity (MOBID-2 \geq 3) and 52% received analgesics. Paracetamol was most frequently prescribed (45%). In an adjusted linear mixed model, more severe pain was associated with higher QUALID total scores, indicating poorer QoL (regression coefficient 0.52, 95% CI 0.36-0.69). **Conclusion:** The pain prevalence at NH admission was high in residents with dementia; half used analgesics, particularly paracetamol. More severe pain was associated with poorer QoL when adjusting for sociodemographic characteristics, other health conditions, and use of analgesics. The routine assessment of pain at NH admission can uncover undiagnosed and untreated pain and allow for adequate non-pharmacological and pharmacological pain management and likely increased QoL.

OC9- THE TEMPORAL TREND IN THE TRANSFER OF OLDER ADULTS TO THE EMERGENCY DEPARTMENT FOR TRAUMATIC INJURIES: A RETROSPECTIVE ANALYSIS ACCORDING TO THEIR PLACE OF RESIDENCE. Xavier Dubucs^{1,2}, Philippe de Souto Barreto^{2,3}, Clarisse Laffon de Mazieres^{2,3}, Dominique Lauque¹, Olivier Azema⁴, Sandrine Charpentier^{1,3}, Yves Rolland^{2,3} (1. Pôle médecine d'urgence, Centre Hospitalo-Universitaire de Toulouse, France; 2. Gérontopole de Toulouse, Institut du Vieillissement, Centre Hospitalo-Universitaire de Toulouse, France; 3. Unité Mixte de Recherche, UMR 1027, Université Toulouse III, France; 4. Observatoire Régional des Urgences de Midi-Pyrénées (ORU-MiP), Centre Hospitalier-Universitaire de Toulouse, France)

Backgrounds: There has been an increase in the number of visits by elderly subjects to emergency departments (EDs). The primary cause of this use is trauma. **Objectives:** The aim of this study was (1) to describe the temporal variability (time, day, and month) of transfers of NH residents aged 65 years to the ED for traumatic injuries; (2) to characterize their trauma; and (3) to specify the mode of transport to the ED by comparing them with community-dwelling older individuals who are transferred for the same reason. **Methods:** A monocentric, retrospective study of patients over 65 years of age, admitted to University Center Hospital emergency department for trauma between 2013 and 2017. 20,741 patients were included. **Results:** The mean age was 81.8 years (SD: 9.1 years). 11,879 (57.3%) patients were community-living with family, 5,077 (24.5%) were nursing home (NH) residents and 3,785 (18.22%) patients were community-dwelling alone. Overall, 33.3% of the NH residents were transferred during the weekend compared to 28.04% of the community-dwelling subjects (p<0.001). Ten percent (1,577 patients) of the community-dwelling subjects compared to 21.8% (1,109 patients) of the transfers of NH residents to ED occurred late at night (p<0.001). For the entire cohort, the primary reason for use of the ED was head trauma (32.0%), followed by cutaneo-mucous wounds (28.7 %) and limb fractures (25.9%). In most cases, NH residents were transferred by ambulance (5000 residents; 98.4%) compared to community-dwelling subjects (11,118; 70.1%; p<0.001). Length of stay at the ED was significantly higher for NH residents (6.5 hours; Q1: 4.7, Q3: 8.8) than for community-dwelling patients living alone (5.7 hours; Q1: 3.9, Q3: 7.9) and those living with family (5.4 hours; Q1: 3.5, Q3: 7.6; P < .001). The rate of hospitalization was significantly higher for community-dwelling individuals living alone (43.2%) than for individuals living with family (37.1%) and NH residents (27.1%; P < .001). **Conclusion:** In comparison with community-dwelling subjects, ED transfers from NH residents in the context of trauma-related emergency were higher during out-of-hours periods, length of stay at the ED were longer and they were less admitted in hospitalization.

OC10- PERSPECTIVES OF HEALTHCARE PROFESSIONALS ON RESIDENT AND INFORMAL CAREGIVER INVOLVEMENT IN MEDICATION-RELATED DECISION-MAKING AND THE MEDICINES' PATHWAY IN NURSING HOMES: A QUALITATIVE, EXPLORATIVE STUDY. Amber Damiaens¹, Ann Van Hecke², Jan De Lepeleire³, Veerle Foulon¹ (1. Department of Pharmaceutical and Pharmacological Sciences, KU Leuven, Leuven, Belgium; 2. Department of Nursing director, Ghent University Hospital and Department of Public Health and Primary Care, UGent, Ghent, Belgium; 3. Department of Public Health and Primary Care, KU Leuven, Leuven, Belgium)

Background: Research on person-centered care regarding medication decision-making and the medicines' pathway in nursing

homes is lacking. **Objectives:** This study aimed to provide an understanding of healthcare professionals' attitudes and perspectives on current resident and informal caregiver involvement in medication decision-making and the medicines' pathway in nursing homes. **Methods:** A qualitative, explorative study was performed by means of semi-structured interviews with 25 healthcare professionals from four nursing homes in Belgium. All healthcare professionals involved in the medicines' pathway (i.e. GPs, pharmacists, nurses and care aids) were considered for participation. Interview guide development was based on the composing activities of the medicines' pathway. Interviews were audio-recorded and transcribed ad verbatim. Transcripts were analyzed by means of an inductive thematic framework. Analysis was performed by an interprofessional team, consisting of researchers with a background in pharmacy and nursing. The researchers independently read the interview transcripts, highlighted meaningful paragraphs and noted preliminary reflective comments. Regular team discussions allowed the development of (sub)themes and ensured a rigorous and reliable data analysis. **Results:** Three overarching domains were identified: 1) features of, 2) drivers and barriers for, and 3) perceived consequences of resident and informal caregiver involvement in medication decision-making and the medicines' pathway. Involvement was mainly initiated by residents and informal caregivers themselves, pointing towards information and participation needs among both groups. Actions of healthcare professionals towards resident and informal caregiver involvement were mainly reactive and fragmentary, and were influenced by their perception of residents and informal caregivers' desire and capabilities to be involved, the perception of their own professional role, and by organizational factors such as the nursing home's philosophy. Furthermore, organizational concerns tempered the motivation to provide residents and informal caregivers with more medication-related responsibilities. **Conclusion:** Resident and informal caregiver involvement in medication decision-making and the medicines' pathway remains limited in nursing homes. Information and participation needs of residents and informal caregivers were not fully acknowledged by healthcare professionals. Thus, we can conclude that there is a need for initiatives to create and improve awareness on opportunities for resident and informal caregiver involvement in medication decision-making and the medicines' pathway.

OC11- THE BABEL (BETTER TARGETING, BETTER OUTCOMES FOR FRAIL ELDERLY PATIENTS) – ACP INTERVENTION: RESULTS FROM A CANADIAN CLUSTER RANDOMIZED CONTROLLED TRIAL. George Heckman^{1,2}, Allan Garland³, Heather Keller^{1,2}, Patrick Quail⁴, Veronique Boscart^{2,4}, Michelle Heyer⁵, Clare Ramsey³, Vanessa Vucea², Nora Choi³, Kdip Bains¹, Seema King⁴, Tatiana Oshchepkova⁴, Tatiana Kalashnikova⁴, Brittany Kroetsch¹, Jessica Steer³ (1. University of Waterloo, Waterloo, Ontario, Canada; 2. Schlegel Research Institute for Aging, Waterloo, Ontario, Canada; 3. University of Manitoba, Winnipeg, Manitoba, Canada; 4. University of Calgary, Calgary, Alberta, Canada; 5. Conestoga College, Kitchener, Ontario, Canada)

Backgrounds: Residents of nursing homes (NHs) benefit from access to care teams with whom they can discuss healthcare wishes. However, Advance Care Planning (ACP) in NHs requires improvement to better understand and respect those wishes. The BABEL-ACP approach overcomes common challenges by 1) confirming the identity and role of substitute decision makers (SDMs); 2) preparing SDMs for emergencies; 3) outlining the resident's clinical situation and prognosis; 4) ascertaining the resident's preferred decision-making philosophy; and 5) confirming the resident's preferred options for the medical challenges they are most likely to face at

end-of-life. This is done through discussions with the resident SDM, and care team, using semi-structured scripts and resources. **Objectives:** To determine if the comprehensive, person-centered BABEL-ACP approach resulted in improved care processes near the end of life, compared to usual care. **Methods:** This was an unblinded, cluster-randomized trial in 14 control and 15 intervention nursing homes located in 3 Canadian provinces (Alberta, Manitoba, Ontario) between 2018 and 2020. Participants were 713 residents (442 control, 271 intervention) aged ≥ 65 years with an elevated risk of death within the next year. Staff involved in ACP were trained in the BABEL approach. There were two co-primary outcomes: (i) comprehensiveness of ACP, assessed with the Audit of Advance Care Planning, and (ii) Comfort Assessment in Dying completed by the primary staff member involved in end-of-life care. Secondary outcomes included acute care visits and antimicrobial use. P-values were adjusted for all outcomes with the False Discovery Rate method. **Results:** The odds were 5.21-fold higher that intervention participants rated ACP as more comprehensive compared to control participants ($p=0.006$). Scores on the Comfort in Dying scale did not differ ($p=0.55$) between groups. Among secondary outcomes, antimicrobial use was significantly lower in intervention homes (rate ratio=0.79, $p=0.048$). Per protocol analysis suggests a trend towards lower acute care visits for the intervention group. **Conclusion:** The BABEL-ACP approach resulted in more comprehensive ACP and may reduce unwanted interventions towards the end of life. Our findings underscore the importance of allowing adequate time to address all important aspects of ACP for NH residents.

OC12- QUALITY OF LIFE AND PNEUMONIA IN NURSING HOME RESIDENTS: A 1-YEAR OBSERVATIONAL STUDY. Vincent Guion^{1,2,3}, Philippe de Souto Barreto^{1,4}, Matteo Césari⁵, Yves Rolland^{1,4} (1. Gerontopole of Toulouse, Institute on Aging, Toulouse University Hospital (CHU Toulouse), Toulouse, France; 2. Palliative care department, CHU de Besançon, Besançon, France; 3. Inserm CIC 1431, CHU de Besançon, Besançon, France; 4. CERPOP Centre d'Epidémiologie et de Recherche en santé des Populations UPS/INSERM UMR 1295, Toulouse, France; 5. IRCCS Istituti Clinici Scientifici Maugeri, Università degli Studi di Milano, Milan, Italy)

Backgrounds: Multimorbid patients like nursing home residents (NHRs) could be at higher risk of persistent decline in quality of life (QoL) after stressful events as infections compared to other populations. Available data in this population is mainly about mortality or morbidity after the infectious event, whereas in clinical practice and qualitative research most NHRs and their proxies express care goals in terms of QoL rather than mere longer life expectancy. **Objectives:** To compare the evolution of QoL in NHRs with and without (hospitalization for) pneumonia. **Methods:** Participants of the Incidence of pneumonia and related Consequences in nursing home Resident (INCUR) study, a twelve-month prospective observational study, were included. The INCUR study included 800 NHRs in France for which comprehensive assessments were performed at baseline, at 6 months and at 12 months, in 2012 and 2013. Participants' health related QoL was assessed at three time points: baseline, six months, and 12 months. NHRs with or without pneumonia and hospitalizations for this condition at any time during follow-up were compared using adjusted mixed-effects linear regressions on the QoL outcome. Pre- and post-pneumonia QoL were compared using a Wilcoxon signed-rank test. **Results:** A total of 622 NHRs (mean age 86.2; 73.3% women) were included; 13.8% ($n=86$) died, 19.9% ($n=124$) developed at least one episode of pneumonia and 6.4% ($n=40$) were hospitalized for pneumonia. Median QoL was 70 at baseline ($n=436$, interquartile range (IQR)=50-90), 80 at 6 months ($n=546$, IQR=50-90) and 76

at 12 months (n=468, IQR=50-80). QoL in NHRs with pneumonia showed a 2-point decrease during the 12-month follow-up, whereas QoL in NHRs without pneumonia showed an 8-point increase during follow-up. QoL in NHR hospitalized for pneumonia showed a 16-point decrease during the 12-month follow-up, whereas QoL in NHRs in the control group showed a 6-point increase. In linear regressions, neither pneumonia nor hospitalization for pneumonia were significantly associated with the evolution of QoL during follow-up. No significant difference was found between pre-and post-pneumonia QoL. **Conclusion:** QoL in NHRs remains stable over 12 months regardless of pneumonia events but seems to decline in NHRs hospitalized for pneumonia. Uncaptured short-term variations of QoL after pneumonia and/or related hospitalizations may occur.

OC13- ESTIMATING NURSING HOME QUALITY USING BIG DATA. Marlies Bar¹, Pieter Bakx¹, Bram Wouterse¹, Eddy van Doorslaer^{1,2,3} (1. *Erasmus School of Health Policy & Management, Erasmus University Rotterdam, The Netherlands*; 2. *Erasmus School of Economics, Erasmus University Rotterdam, The Netherlands*; 3. *Tinbergen Institute, The Netherlands*)

Backgrounds: Nursing home quality is an important concern among the general public and policymakers. However, measuring quality of nursing homes is complicated due to a lack of good data on outcomes and case-mix differences across nursing homes. **Objectives:** In this paper, we use routinely collected administrative data for the whole Dutch population to estimate the quality of nursing homes. **Methods:** We estimate the 180-day mortality and hospitalization rates for more than 1,300 Dutch nursing homes using data for over 80,000 new admissions in the Netherlands in 2015 to 2017. We use linked administrative sources providing a large set of data on the residents' socioeconomic status and health prior to admission that are used to correct for case-mix differences. To test and correct for remaining unobserved differences in patient characteristics across nursing homes, we exploit quasi-random differences in nursing home choice based on the geographical distance between a resident's prior home and a particular nursing home. **Results:** We find that 75 percent of Dutch nursing home residents choose a nursing home within 7.5 kilometers from their prior home, and almost 30 percent chooses the nursing home that is the closest. Moreover, our first results show a difference of 29.1 percentage points in the mortality rate between the best- and worst-performing nursing home, even after correcting for case-mix differences. There remains considerable variation across nursing homes when using the IV analysis. **Conclusion:** We show that administrative data can be used to evaluate nursing home quality based on patient outcomes. The main result implies that, even in a high-expenditure context like The Netherlands, nursing homes differ substantially on basic outcomes. Further research should be done to compare our quality estimates with other dimensions of nursing home quality.

OC14- VARIABILITY IN ADVANCE CARE PLANNING SELF-EFFICACY AMONG LONG TERM CARE STAFF IN 3 CANADIAN PROVINCES: A CROSS-SECTIONAL STUDY. George A Heckman¹, Allan Garland², Vanessa Vucea³, Heather Keller¹, Patrick Quail⁴, Clare Ramsey², Nora Choi², Brittany Kroetsch³, Veronique Boscart⁵ (1. *Schlegel-University of Waterloo Research Institute for Aging, Waterloo, ON, Canada*; 2. *University of Manitoba, Winnipeg, MB, Canada*; 3. *University of Waterloo, Waterloo, ON, Canada*; 4. *University of Calgary, Calgary, AB, Canada*; 5. *Conestoga College Institute of Technology and Advanced Learning, Kitchener, ON, Canada*)

Backgrounds: Long term care (LTC) residents nearing end-of-life experience unmet needs and hospital transfers. Advance care planning (ACP) aims to align resident wishes with care at the end-of-life. Previous studies have demonstrated regional variability in hospitalization and mortality rates of residents at the end-of-life. It is unknown if these differences reflect policy or training differences. **Objectives:** In the context of a clinical trial, we assessed baseline self-efficacy among LTC staff normally involved in ACP. This analysis determines if there are inter-provincial differences in self-efficacy. **Methods:** The Better Targeting, Better outcomes for frail ELderly patients (BABEL) LTC Study is a cluster-randomized trial of standardized ACP in three Canadian provinces (ClinicalTrials.gov Identifier: NCT03649191). A validated ACP Self-Efficacy Survey was administered prior to the trial to LTC staff involved in ACP discussions in 31 homes [10 Alberta (AB), 10 Manitoba (MB), 11 Ontario (ON)]. The survey includes 17 items scored on a 5-point Likert scale. The Kruskal-Wallis test was used to compare survey item scores by province. Statistical significance was set at $p < 0.01$. **Results:** 586 surveys were completed. Most LTC staff involved in ACP conversations were nurses (70.0%), followed by nurse aides (10.7%), directors of care (4.6%), and social workers (3.5%). Most (86.2%) had worked in their current LTC home for at least 2 years, and 70.0% worked either day or evening shifts. Significant differences in staff self-efficacy were found across provinces with respect to 1) ensuring resident treatment preferences are honoured (mean \pm standard deviation, AB: 3.81 \pm 1.08, MB: 4.16 \pm 0.83, ON: 4.22 \pm 0.93, $p=0.0003$); 2) discussing written advance directives with residents (AB: 3.09 \pm 1.24, MB: 3.36 \pm 1.16, ON: 3.54 \pm 1.24, $p=0.004$); 3) helping residents understand their prognosis (AB: 3.35 \pm 1.06, MB: 3.72 \pm 0.86, ON: 3.70 \pm 1.01, $p=0.001$); 4) responding empathetically to resident concerns (AB: 4.12 \pm 0.90, MB: 4.26 \pm 0.81, ON: 4.44 \pm 0.69, $p=0.005$); and 5) communicating "bad news" (AB: 3.33 \pm 1.27, MB: 3.77 \pm 0.98, ON: 3.82 \pm 1.06, $p=0.0003$). **Conclusion:** Significant interprovincial differences exist in LTC staff self-efficacy about ACP discussions and should be considered as a confounder in future trial analyses. Further, differences suggest a need to tailor training provided as part of BABEL.

OC15- LANDSCAPE ASSESSMENT OF DATA AND DIGITAL READINESS OF SCOTTISH CARE HOMES (LADDER): A MAPPING STUDY. Heidi Koikkalainen¹, Lucy Johnston², Alistair Lawson¹, Paul Lapok¹, Lynda Anderson², Susan D Shenkin³ (1. *School of Computing, Edinburgh Napier University, Scotland*; 2. *School of Health and Social Care, Edinburgh Napier University, Scotland*; 3. *Ageing and Health, and Advanced Care Research Centre, Usher Institute, University of Edinburgh, Scotland*)

Backgrounds: Falls Digital transformation of the care home sector has been prioritised by recent national strategies in Scotland. Basic levels of data and digital readiness are required in all care homes before widespread digital transformation can be realised. **Objectives:**

The study aimed to map current data and digital readiness of care homes in relation to digital connectivity, systems used to collect and store resident data, and how information is shared with other care partners. **Methods:** The Scottish Care Inspectorate's public datastore was used to collate a list of all registered care homes in South East Scotland. 200 residential care homes for older people were invited to complete an online survey in November 2021. Some care homes and provider groups were also contacted directly over the phone, and additional information was gathered through online research. **Results:** Information was gathered about 110 care homes – representing 55% of all care homes for older people in South East Scotland. The study found that the extent of digital connectivity and electronic data collection capabilities were limited and unevenly dispersed across this Scottish care home region. Access to fast and reliable internet connection was lacking in many care homes, with only 42% describing their connection as 'good', and 27% reporting that internet connection is only available in some parts of the home. Most (65%) care homes – including all homes operated by Local Authorities – reported using paper-based systems for capturing and managing information about their residents. Of the care homes using digital care planning systems, 88% were privately owned. Digital data sharing was also found to be limited, with 58% of the care homes reporting that remote electronic access to resident information is not possible for any key health and community-based professionals. **Conclusion:** By exploring the current extent and nature of digital connectivity and data collection in Scottish care homes, this study has exposed the fragile and uneven digital landscape within the sector. To enable widespread digital transformation, the basic foundations must be laid out first for all care homes. This requires a well-informed route map and co-ordinated resources supported at a national and local level.

OC16- A NURSING MENTORING PROGRAMME ON NON-PHARMACOLOGICAL INTERVENTIONS AGAINST BPSD: EFFECTIVENESS AND USE OF ANTIPSYCHOTICS-A RETROSPECTIVE, BEFORE-AFTER STUDY. Philippe Voyer¹, Roxane Plante-Lepage¹, Edeltraut Kröger² (1. Laval University, Canada; 2. Centre of excellence on Aging, Canada)

Backgrounds: Behavioural and psychological symptoms of dementia (BPSD) are common and have significant implications for patients and caregivers. Non-pharmacological interventions (NPI) have shown to be effective in the management of BPSD. However, the use of antipsychotics to treat BPSD remains ubiquitous. The question arising is whether the effectiveness of NPI has an impact on the prescribing of antipsychotics to older adults with BPSD. To our knowledge, no study has examined nurses' recommendations on the use of antipsychotics. **Objectives:** This study aimed to observe the impact of a nursing mentorship programme promoting NPI for the management of BPSD and its association with the use of antipsychotics in older adults with major neurocognitive disorders (MNCD). **Methods:** This retrospective chart analysis study assessed whether the manifestations of BPSD or the use of antipsychotics had changed in older adults affected by MNCD, after the intervention of a nursing mentorship team mandated by the Centre of Excellence in Aging in Quebec City, Canada. The area for which the mentoring team provides services is mostly urban and comprises about 800,000 persons in 2020. The target population comprised all older adults affected by MNCD and presenting with one or more BPSD having benefitted from a nursing mentorship intervention; initially, all files of eligible older adults were analysed. The mentoring team comprised registered nurses with a bachelor's degree in nursing, experience in geriatric care and expertise in evaluation and clinical interventions. The team offered an intervention aimed at improving the skills of

healthcare teams or family caregivers, particularly concerning BPSD: a request from the resident's caregivers was first examined by the mentoring team; then one team member visited the resident's place of care for an assessment and an educational intervention with the caregivers on NPI suitable for and accessible to this resident, as well as for an evaluation of the resident's medical history and medication. **Results:** Results obtained from the medical files of 134 older adults having benefitted from the mentoring programme demonstrate that this intervention significantly reduced BPSD. The effect on antipsychotics use was modest: a 10% reduction in the use of antipsychotics has been observed among patients for which the NPI were effective. However, the use of antipsychotics remained widespread despite the nursing recommendations of the mentoring team of the Center of Excellence on Aging in Quebec (CEVQ). **Conclusion:** This study shows that the application of a duly developed intervention plan on NPI significantly reduced BPSD and the mean number of antipsychotics per resident, albeit only by 10%. The study also examined nursing recommendations for antipsychotics, aimed at decreasing their use and found a limited effect. Since other research has shown that antipsychotics reduction is greater when recommendations come from pharmacists, it may be beneficial for nurse mentors to partner with pharmacists and to collaborate in the review of pharmacological profiles and medication recommendations to physicians.

OC17- ASSOCIATIONS BETWEEN LENGTH OF STAY IN LONG TERM CARE FACILITIES AND PROVISION OF PALLIATIVE CARE. ANALYSIS OF THE PACE CROSS-SECTIONAL STUDY. Danni Collingridge Moore¹, Sheila Payne¹, Thomas Keegan¹, Luc Deliens², Tinne Smets², Giovanni Gambassi³, Marika Kylänen⁴, Violetta Kijowska⁵, Bregje Onwuteaka-Philipsen⁶, Lieve Van den Block² (1. International Observatory on End of Life Care, Lancaster University, Lancaster, United Kingdom; 2. VUB-UGhent End of Life Care Research Group, Vrije Universiteit Brussel (VUB), Brussels, Belgium; 3. Universit Cattolica del Sacro Cuore, Rome, Italy; 4. National Institute for Health and Welfare, Helsinki, Finland; 5. Unit for Research on Aging Society, Department of Sociology, Chair of Epidemiology and Preventive Medicine, Faculty of Medicine, Jagiellonian University Medical College, Krakow, Poland; 6. Amsterdam UMC, Vrije Universiteit Amsterdam, Department of Public and Occupational Health, Amsterdam Public Health research institute, Expertise Center for Palliative Care, Amsterdam, The Netherlands)

Background: Long term care facilities (LTCFs), including care and nursing homes, are a place of care for older adults at the end of life in Europe. Differences in population characteristics have been identified between shorter and longer stay residents, however differences in care at the end of life have not been fully explored. **Objectives:** The aim of this analysis is to explore associations between length of stay and end of life care in LTCF residents, controlling for characteristics associated with variation in length of stay. **Methods:** The analysis used data collected in the PACE study, a cross sectional mortality follow-back survey of 1,237 LTCF residents who died within a retrospective three-month period, conducted in Belgium, England, Finland, Italy, the Netherlands and Poland. Primary outcomes were quality of care in the last month of life (QoD-LTC), comfort in the last week of life (EOLD-CAD), contact with health services, presence of advance directives and consensus in care. Analysis was conducted using multilevel regression models. **Results:** Longer lengths of stay were associated with higher scores of quality of care in the last month of life and comfort in the last week of life. Total scores on the QoD-LTC were significantly higher in residents with a length of stay of 3 months to 1 year compared to under one month (p=0.002); and increased significantly up to and over five

years ($p=0.001$). Total scores on the EOLD-CAD were significantly associated with quality of dying in the last week of life after 5 years compared to under one month ($p=0.004$). Longer stay residents were more likely to have advance directives in place and have had end of life care discussed with themselves or their relatives. **Conclusion:** The findings of this analysis indicate that residents with longer lengths of stay experience higher quality end of life care than those with shorter lengths of stay on some of the measures explored, even after controlling for characteristics associated with variation in length of stay. Further research is needed to explore the underlying reasons for this trend.

OC18- FIESTAS, SAINTS AND SPIRITUALITY: INCORPORATING COMMUNITY RELIGIOUS RITUALS INTO CARE HOMES IN ANDALUSIA, SPAIN. C. Place (*School of Global Studies, University of Sussex, Brighton, UK*)

Backgrounds: Despite the reality that many care home residents are approaching the end of their lives and may be facing existential questions, spirituality remains a largely unexplored area of care homes research. This, coupled with concerns about care home residents' social isolation, particularly in light of the Covid-19 pandemic, make the incorporation of religious community rituals into care home practices in Andalusia, Spain, an interesting cultural context to investigate. **Objectives:** To uncover and explore how eldercare institutions in Andalusia are incorporating local community religious rituals into care practices to improve the spiritual wellbeing and sense of belonging of care home residents. **Methods:** Fourteen-months of ethnographic fieldwork was conducted in 2018/2019 in a care home in a small town in Andalusia. The researcher used participant-observation to adopt an active role in the care home, enabling embedded, ethnographic insights to emerge over sustained daily engagement at the institution. Semi-structured interviews were also conducted with care home residents, staff members and relatives. Thematic analysis was used to identify how incorporation of collective religious rituals into care practices influenced spiritual wellbeing and sense of belonging in care home residents. **Results:** The care home incorporated the town's saints' statue fiesta processions into their care practices. Engagement in activities at the care home to prepare for these fiesta processions, reaffirmed care home residents as important members of the community, which enhanced their sense of belonging. Devotional interactions with the Virgin Mary saints' statues were described by care home residents as comforting. The statues were explained as offering them spiritual, kin-like protection and companionship, which reduced the social isolation some residents had been experiencing since moving into the care home. **Conclusion:** This ethnographic study has revealed how community religious rituals are utilised for therapeutic purposes in care practices within care homes in Andalusia, Spain. Insights into the incorporation of collective rituals in eldercare can help towards reducing social isolation, generating sense of belonging and enhancing the spiritual wellbeing of people living in care homes. Such initiatives display the importance of moving towards more community-centred approaches to institutional eldercare.

OC19- DEVELOPMENT OF THE NURSING HOME CARE PROGRAMME FOR THE LAST DAYS OF LIFE AND IMPLEMENTATION STRATEGIES. Fien Van Sint Jan¹, Lieve Van den Block¹, Liesbeth Van Humbeeck², Nele Van den Noortgate², Tinne Smets¹ (*1. End-of-Life Care Research Group, Department of Family Medicine and Chronic Care, Vrije Universiteit Brussel & Ghent, University, Brussels, Belgium; 2. Department of Geriatric Medicine, Ghent University Hospital, Ghent, Belgium*)

Backgrounds: Studies show that care for nursing home (NH) residents at the end of life can be improved. **Objectives:** To develop a Care Programme (CP) to improve care in the last days of life for NH residents, to test the content and user-friendliness of the CP with professional experts and family members of NH residents; and to evaluate possible implementation strategies in terms of their usefulness, feasibility, and likelihood of facilitating the implementation of the CP in routine NH practice. **Methods:** The development of the CP and implementation strategies followed an iterative process in which we adapted the materials based on input from literature, professional experts involved in care for dying NH residents and family members of deceased NH residents in individual interviews and group discussions. **Results:** We studied and compared the LCP (UK), CAREFuL (BE), Zorgpad Stervensfase NH version (NL) and their implementation guides and developed the first version of the new NH CP and implementation strategies. We evaluated this version and the implementation strategies in interviews with five professional experts of the Palliative Care and Geriatrics working group of the Federation palliative care Flanders and two additional coordinating and advisory physicians. They suggested minor adaptations which we implemented in a second version. The second version of the CP and implementation strategies were evaluated in 5 group discussions and 6 interviews with professional experts involved in care for dying NH residents. Participants stressed the importance of good communication and symptom management as care goals in the dying phase. They considered the following implementation strategies as useful: support from management, training, facilitation by project champions and regular debriefing. Family members ($N=8$) valued the content of information leaflets on the dying phase and bereavement. Based on these results, we developed a next version of the CP and decided on key implementation strategies, including management support, facilitation by local project champions, training, and reflexive debriefing. **Conclusion:** We were able to develop the Nursing Home Care Programme for the Last Days of Life and identify key implementation strategies. The CP is now ready to be tested in a pre-post participatory action research study.

OC20- CARE WORKERS' SATISFACTION WITH ELECTRONIC HEALTH RECORDS IN SWISS NURSING HOMES- A MULTI-CENTER CROSS-SECTIONAL SURVEY STUDY. Dietmar Ausserhofer^{1,2}, Lauriane Favez², Michael Simon^{2,3}, Franziska Zuniga² (*1. College of Health Care-Professions Claudiana, Bolzano-Bozen, Italy; 2. Institute of Nursing Science, Department of Public Health, University of Basel, Basel, Switzerland; 3. Inselspital Bern University Hospital, Nursing Research Unit, Bern, Switzerland*)

Backgrounds: Electronic health records (EHR) are increasingly introduced in healthcare organizations worldwide to improve safety, quality and efficiency of care. Yet, very little is known about the use of EHRs in nursing homes, e.g., how satisfied the end-users (i.e., care workers) are. **Objectives:** We aimed (1) to describe care workers' satisfaction with EHR in Swiss nursing homes; and (2) to explore the association between care workers' satisfaction and the prevailing EHR systems. **Methods:** We used survey data from 3,769

care workers (i.e., registered nurses, licensed nurses and nurse aids) from 107 nursing homes collected within the multi-center cross-sectional study “Swiss Nursing Homes Human Resources Project 2018” (SHURP 2018). Between 2018 and 2019 care workers were surveyed on their satisfaction with the EHR using six self-developed items (5-point Likert scale). Information on the EHR system was provided from the 107 nursing home managers. **Results:** Care workers’ satisfaction with EHR in Swiss nursing homes was relatively high, ranging from 70% (“The EHR allows a timely communication within the care worker team”) to 81% (“The EHR allows quick access to the residents’ information”). A total of 13 different EHR systems were used in the 107 nursing homes. Care workers’ satisfaction was significantly associated with the EHR system. Only half (49%) of the participants reported that there are enough computers allowing a timely documentation. **Conclusion:** Although the majority of care workers were satisfied with the EHR, between a fifth and a third were not satisfied with the systems in place. Only half of the care workers reported to have sufficient computers on their units. This might impede timely care planning and documentation and lead to leaving these care activities unfinished. As care workers’ satisfaction was associated with the EHR system, nursing home managers might carefully test and select the systems according to the needs of their care workers.

OC21- CAN VIRTUAL REALITY APPLICATIONS REDUCE SOCIAL ISOLATION AND LONELINESS AMONG RESIDENTS IN NURSING HOMES? – A MIXED-METHODS-STUDY ON DIGITAL TRANSFORMATION OPTIONS FOR RESIDENTS AND EMPLOYEES. Lena Schinner, Klaus Nagels in cooperation with Orpea Deutschland GmbH (*University of Bayreuth, Bayern, Germany*)

Backgrounds: The SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) pandemic led to contact-restricting measures worldwide, the effects of which were partially compensated by the utilization of digital approaches. Especially nursing homes had to enforce severe restrictions for the safety of their vulnerable residents. **Objectives:** Aim of this study was to develop and investigate an enhanced virtual reality (eVR) concept against social isolation and loneliness of residents in nursing homes. It included the active involvement of relatives. The study evaluated the attitude of residents and employees to the eVR concept and the technical requirements in the nursing homes. **Methods:** The mixed-methods study consisted of a four-week qualitative preliminary study (2019) with focus groups and expert interviews on attitudes to general virtual reality (VR) applications and the eVR concept in two German nursing homes. Fifteen residents and eight staff members were included. In 2020, during the pandemic, an online survey on the technology affinity, attitudes to the eVR concept, and technical requirements in facilities was conducted among staff from 138 facilities in Germany. **Results:** The evaluation of the qualitative study indicates partly positive reactions of the residents to VR applications. The employees of the focus groups also showed positive attitudes with regard to the future implementation of VR applications. Among the 114 evaluable questionnaires of the online survey, the dimensions on «technology affinity» and four of the dimensions on «attitude towards the eVR concept» were significantly characterized by high technology affinity or positive attitude towards the eVR concept. Only the dimension «facility-specific equipment» resulted in a highly significant negative deviation due to a lack of infrastructure (e.g. WLAN). 22% of respondents assess the implementation of the eVR concept as feasible, 32% state that WLAN is accessible to residents. **Conclusion:** The study results imply that eVR approaches can be an effective and feasible extension for measures against loneliness and social isolation

in nursing homes. Although employees show a willingness to use and learn, the majority of facilities still lack the technical infrastructure to implement digital approaches. Additionally, training programs for employees are needed. The SARS-CoV-2 pandemic led to initial awareness of feasibility studies. Further studies are needed to prioritize the necessary digital transformation processes in nursing homes according to evidence-based effectiveness.

OC22- ITERATIVE CO-DESIGN OF A COMMUNICATION AND INFORMATION SHARING TOOL FOR RESIDENT AND FAMILY-LED CARE PLANNING HUDDLES IN LONG-TERM CARE: A QUALITATIVE DESCRIPTIVE STUDY. Lisa Cranley¹, Shohsana Helfenbaum², Daniel Galessiere², Gajan Sivakumaran³, Raquel Meyer², Wendy Duggleby⁴, Linda McGillis-Hall¹, Katherine S. McGilton^{1,5} (*1. Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, Canada; 2. Ontario Centres for Learning, Research and Innovation in Long-Term Care, Baycrest Hospital, Toronto, Canada; 3. Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Canada; 4. Faculty of Nursing, University of Alberta, Edmonton, Alberta, Canada; 5. Toronto Rehabilitation Institute, University Health Network, Toronto, Canada*)

Backgrounds: Engaging residents of long-term care homes and their families in the development of care plans supports active participation in decision-making, and can foster positive and meaningful care experiences and outcomes for all care partners. **Objectives:** To incorporate user feedback for iterative co-design of a communication tool to facilitate resident and family information sharing for care planning with long-term care staff and leadership, as part of a resident and family-led huddle intervention (regular, brief face-to-face meetings with the healthcare team) in long-term care homes. **Methods:** A qualitative descriptive study was used. The communication tool was co-developed in 2019 as phase 1 of a larger, patient engagement intervention study conducted in four long-term care homes in Ontario, Canada. Residents and families were recruited at resident and family council meetings from two of the four long-term care homes, and invited to participate in 30-minute individual or group interviews. Participants were asked to provide feedback and design ideas on the tool’s utility (e.g., usability, ease of understanding, language). Individual interviews were conducted with two residents (older adults) and two family members, and a focus group was conducted with another six family members. Interviews took place prior to huddle implementation. Content analysis was used to analyze the data. Ongoing evaluation of the tool’s utility with staff, leaders, residents, and families is planned once the huddles are initiated. **Results:** The co-design allowed for improvement of the tool’s utility. Some language was rephrased, and the tool was revised to overtly follow SBAR (Situation-Background-Assessment-Recommendation) reporting. All participants indicated that the communication tool would be useful in assisting them to communicate and exchange information about their care plan with the team if they were to participate in a huddle. **Conclusion:** Iterative co-design of a communication tool for care planning during huddles is a meaningful and empowering patient engagement activity that promotes shared decision-making, and the tailoring of an intervention. The tool offers promise for creating structures and processes that can be applied in long-term care homes seeking to achieve quality and safety improvement through collaborative and relational care practices.

POSTERS

P1- DO RESEARCHERS AND PRACTITIONERS EVALUATE THE QUALITY OF THE ENVIRONMENT IN NURSING HOMES DIFFERENTLY? A COMPARISON OF ENVIRONMENTAL AUDITS IN GERMAN NURSING HOMES.

Anne Bleckmann^{1,2}, Rebecca Palm^{1,2}, Bernhard Holle^{1,2}
(1. German Centre for Neurodegenerative Diseases, Site Witten, Witten Northrhine-Westphalia, Germany; 2. Witten/Herdecke University, Faculty of Health, Department for Nursing Science, Witten Northrhine-Westphali, Germany)

Backgrounds: The physical environment is crucial for dementia-specific long-term care. For this reason, it is useful to assess the quality of the environment systematically. The German Environmental Audit Tool (G-EAT) is an instrument that allows displaying environmental quality in a structured way. It is based on the Australian tool EAT-HC and was adapted for the use in German-speaking countries. In the future, the tool may be used in research and in practice. For this purpose, it is necessary that it can be applied and interpreted by both facility-external and internal persons. **Objectives:** The aim was to find out whether G-EAT questions are answered differently by researchers and nursing home staff members and to obtain possible indications of the deviations. **Methods:** The data were collected in 40 German nursing homes 2019 as part of the reliability study of the G-EAT. The systematic assessment was carried out by two researchers and one to three staff members of the nursing home. Participants were asked to comment on their answers and to explain their choices to the question. The relative response frequencies of internal and external assessors were compared using descriptive statistics and were synthesized with the qualitative comments. **Results:** For eight of the 72 items, researchers and nursing home staff responded in opposite ways. In most cases (n=6) staff members rated the environment less dementia-specific as the researchers. In another seven items, there were conspicuous features in the response behavior (missing answers of staff members, ceiling effects). These differences between research and nursing home staff were most pronounced for the dimension «Manage levels of stimulation» and “Reducing risks unobtrusively”. The analysis of the internal assessors’ comments on the respective items showed a misunderstanding of the question’s construct or linguistic incomprehensibility. **Conclusion:** In order to improve the comparability of collected data with the G-EAT that were assessed by different persons, a detailed manual for correct assessment of the questions has to be prepared in order to counteract knowledge-based differences in response behavior.

P2- CARE HOME PARTICIPATION IN RESEARCH.

Emma Law, Rosalie Ashworth (NRS Neuroprogressive and Dementia Network, ENRICH Scotland)

Backgrounds: In 2014, we conducted a survey of 130 Scottish Care Homes (Law et al. 2021) and found as little as 7.7% recalled research involvement. This survey has been repeated in 2022, to look at whether the landscape of care home research involvement has changed. **Objectives:** The research aimed to explore the research participation, opportunities and barriers, experienced by care homes staff, their residents and families, including during the Covid-19 pandemic. **Methods:** An online survey was distributed to Scottish care homes for older adults and/or people living with dementia or neuroprogressive conditions. The 2022 survey is open to responses online as well as a printed version to distribute at care home-related events. The results will be analysed and written up by the Neuroprogressive and Dementia Network and ENRICH Scotland.

Results: The 2014 findings found that Care home staff recognised the value of research for staff and residents but felt that time and workload pressures create obstacles. These obstacles have only increased since the pandemic, therefore a more up to date survey of research participation will help look at how best to approach increasing research in care homes given the shift in barriers. **Conclusion:** Findings: The findings will be used to inform policy and practice around research engagement and care homes. The suggestions for future research generated by care home staff will inform future research proposal development.

P4- WHAT VALUE IS CREATED BY STARTING LEARNING COMMUNITIES FOR NURSES? A QUALITATIVE DESCRIPTIVE CASE STUDY.

Wendy Heemskerk¹, Christian Wallner^{2,3}
(1. Haga Teaching Hospital, the Hague, the Netherlands; 2. University of Applied Sciences Leiden, Faculty of Health, Leiden, the Netherlands; 3. Marente, Nursing home and home care organization, Voorhout, the Netherlands)

Backgrounds: Quality improvement of care and complex patient care requires critical thinking and continuous professional development of nurses. Learning communities can support an environment professional growth and contribute to improvement of practice and collaboration. From this perspective, learning communities comprised of nurses, students and educators were established within a hospital and a nursing home care setting in the Netherlands. **Objectives:** To examine the value created by learning communities during the starting phase. The study focused on the value created within community sessions, the so-called ‘immediate value’ such as getting answers, receiving feedback or helping each other. **Methods:** A qualitative descriptive case study was conducted within a hospital (case 1; 2016-2017) and within a nursing home care setting (case 2; 2019-2020). Multiple sessions of two learning communities were observed. Members’ experiences and stories were additionally collected by interviews, focus group discussions and diaries. The value creation framework of Wenger et al. (2011) provided the basis for our study design. **Results:** Immediate value during learning community sessions is observed in several aspects, such as returning presence at sessions, member interaction, asking questions, giving feedback and having fun. Study 1 mainly focused on the occurrence of asking questions to activate critical thinking. During 4 sessions, a total of 472 questions were asked (nurses: 317, students: 155). Only the minority of pronounced questions (85) were framed at the high level (analysis, synthesis, and evaluation). According to the members, participation in discourse increased by clear expectations, familiarization with community learning and an atmosphere where members felt confident. Data analysis of study 2 is currently being finalized. **Conclusion:** Findings of study 1 show that asking questions emerges within a starting learning community; inducing immediate value by getting answers, feedback or help. While low-level questions are helpful to facilitate community processes, high-level questions are needed to promote critical thinking of members. We conclude that a learning community, even in a starting phase, can stimulate nurses’ professional development. However, it is needed to facilitate a community-building process that stimulates sharing expectations between members and an atmosphere is needed in which members feel confident to learn and experiment.

P5- SENIORS LIVING IN ASSISTED-LIVING HOMES ARE A FRAIL POPULATION? Justine de Kerimel, Sandrine Augusto, Caroline Berbon, Neda Tavassoli, Christine Lafont, Maria Soto, Yves Rolland, Bruno Vellas (*Regional Team of ageing and prevention of dependency, Toulouse University Hospital, France*)

Introduction: In France and abroad, demographic and societal changes have led many elderly people to live in institutions. Between home and Nursing Home is an intermediate housing intended for the elderly who are still independent in the activities of daily living, called “assisted living house”. Currently, nearly 130,000 people in France live in private apartments and collective spaces of these assisted-living houses. We don’t know much about the demographic characteristics of the people living in these structures. This is why in 2017, the Gerontopole of the Toulouse University Hospital conducted a prospective, observational and descriptive survey entitled «Descriptive survey of the population living in residences for the elderly (ERICA)» in 29 assisted-living houses including 1200 seniors. The results of this survey showed that 96% (n= 780) of this population presented some Fried’s criteria of frailty. Following the results of this first survey, the subjects identified as frail were assessed by a gerontological assessment nurse. Based on the results, a personalized care plan was developed and explained to the resident. **Objectives:** - Confirm the diagnosis of frailty in the subjects identified as «frail» during the initial investigation, - Establish «profiles» based on altered capacities in order to develop services and care, that can be adapted to the needs of this population and facilitate compliance with the care plan. **Method:** A gerontological assessment nurse approached the subjects identified as «frail”, and who were agree to be contacted (n=459), to suggest them a comprehensive geriatric assessment within their assisted-living house. **Results:** Currently, the comprehensive geriatric assessment has been performed for 126 (27,5%) subjects [mean (SD) age 85.5 (7) years, 79.4% female]; 85.7% (n= 108) had an ADL \geq 5 and 14.3% (n= 18) were dependent. According to Fried’s criteria, 36.5% (n= 46) were frail, 34% (n= 43) were pre-frail and 15% (n= 19) were robust. The comprehensive geriatric assessment showed that 53.9% (n= 68) of the residents had depression symptoms (score \geq 1 on the Mini-GDS) and 45.0% (n= 55) had an impairment in physical performance (SPPB <7). **Conclusion:** Assessments carried out in assisted-living houses showed that most of the seniors remain independent in their homes but presented Fried’s criteria of frailty. Mobility and mood are the areas most often affected. A partnership with the assisted-living house should make it possible to define the service and care offer in order to promote acceptance of the recommendations made during the assessment.

P6- ONLINE SUPPORTIVE CONVERSATIONS AND REFLECTION SESSIONS [OSCARs] TO SUPPORT STAFF IN RELATION TO DEATH AND DYING DURING COVID-19 PANDEMIC. Jo Hockley¹, Julie Watson², Lucy Johnston³, Susan Shenkin¹ (*1. The Usher Institute, University of Edinburgh, Scotland; 2. School of Health & Social Science, University of Edinburgh, Scotland; 3. Edinburgh Napier University, Scotland*)

Backgrounds: Whilst it is acknowledged that care homes (CHs) are increasingly becoming the ‘de facto’ hospice, many CH staff have never experienced the trauma caused by so many deaths in such a short time due to the COVID-19 pandemic. Trauma Guidance suggests opportunities for structured, time-limited discussions about challenging experiences should be offered. **Objectives:** To test the feasibility of ‘online’ supportive conversations and reflection [OSCARs] in order to support care home staff in their care of dying residents and their families. **Methods:** Fortnightly OSCaRS were delivered to small

groups of CH staff via a secure online platform in three CHs over 10 weeks (May to August ’20). All sessions were digitally recorded. Additional post-study questions asked of OSCaRS participants and in-depth staff interviews were undertaken (n=10). Thematic analysis of the data was undertaken, focussing on feasibility of the intervention and staff reported impact and value. **Results:** Eleven OSCaRS were facilitated by two experienced palliative care nurses with thirty-four different CH staff attending (some attended more than once). Undertaking OSCaRS was seen to be feasible. Sessions provided an opportunity for people from the wider team to come together – some of whom staff would not normally chat to. Individuals said they felt ‘lifted’ – being ‘lifted together.’ Sessions aided team cohesion and gave an opportunity to speak about the deaths to someone outside the CH giving much needed support at a time when few people were visiting. Staff appreciated information re death/dying given by the facilitators during the session. **Conclusion:** OSCaRS are a feasible and valuable addition to current approaches that provide much needed practice-based opportunities for CH staff to learn about delivering palliative and end of life care. OSCaRS also served to provide emotional support to CH staff. External facilitators with a knowledge of end of life care and care home practice are in an ideal place to support CHs in this way. This small feasibility study has caught the attention of the local health/social care authority. Dissemination of the OSCaRS to a further 50 CHs is planned.

P7- AN EXPLORATION OF CARE HOME STAFF’S PERCEPTIONS REGARDING PHYSICAL ACTIVITY AMONG OLDER ADULTS: A QUALITATIVE SYSTEMATIC REVIEW. Fran Hallam^{1,2}, Sarah Lewis^{1,2} (*1. School of Medicine, University of Nottingham, Nottingham, United Kingdom; 2. Nottingham University Hospitals NHS Trust, Nottingham, United Kingdom*)

Backgrounds: Older adults living in care homes often require support from care home staff to participate in physical activity; however, little is known about how staff perceive physical activity among this population. **Objectives:** The aim of the review was to explore care home staff’s perceptions of physical activity among older adults. **Methods:** A systematic review was conducted in 2021 in line with the Joanna Briggs Institute (JBI) meta-aggregative approach to qualitative synthesis. AMED, CINAHL, EMBASE, PsycINFO and MEDLINE were searched in April-May 2021 for peer-reviewed studies which used qualitative approaches to explore how care home staff in any occupational role perceive physical activity. Included studies were critically appraised using the JBI Critical Appraisal Checklist for Qualitative Research. Findings from included studies were extracted, synthesised and assigned a level of credibility. Synthesised findings were given a confidence rating using the ConQual approach. **Results:** 26 studies met the inclusion criteria. 508 primary findings were extracted, and supported findings were aggregated into 38 categories and 8 synthesised findings. All synthesised findings were assigned a low confidence rating due to dependability and credibility issues across the studies. Care home staff perceived residents’ individual needs, preferences and past experiences influenced their participation in physical activity. They felt physical activity benefitted residents’ health and wellbeing in numerous ways although also identified a small number of potential risks. Care home staff held conflicting views regarding their role in promoting physical activity. Support from others, environmental and organisational influences, and the design and delivery of physical activity interventions were described as influential factors affecting residents’ activity levels. **Conclusion:** Asset-based, collaborative approaches are required to provide individualised physical activity approaches which are acceptable to care home staff and older adults, and to embed physical

activity promotion into each care home's organisational structures and support systems. Health and social care policies should ensure that care homes have access to sufficient resources to plan and develop physical activity strategies which meet the heterogenous and complex needs of older residents.

P8- IMPLEMENTING A NEW LONG-TERM RESIDENTIAL CARE CONCEPT FOR PEOPLE WITH DEMENTIA: A PROCESS EVALUATION REFLECTING ITS CHALLENGES. S Portegijs¹, APA van Beek¹, LHD van Tuyl¹, C Wagner^{1,2} (1. Netherlands Institute for Health Services Research (Nivel), CR Utrecht, The Netherlands; 2. Department of Public and Occupational Health, Amsterdam Public Health Research Institute (APH), Amsterdam UMC, Vrije, Universiteit Amsterdam, BT Amsterdam, The Netherlands)

Backgrounds: The Dementia-friendly communities aim to enhance participation in daily life of persons with dementia, provide a feeling of being valued and safe, decrease stigma and increase normalization and positive attitudes towards dementia. Currently, there is little insight in how institutionalized dementia care can be part of dementia friendly communities. Hence, this case study follows a nursing home that focuses on bringing dementia care back into the community, by providing the opportunity for residents to leave the facility independently and developing a communal park area and amenities for both the residents and people from the community. **Objectives:** The aim of this study is to gain insight into the process of implementing an innovative living concept for people with dementia focusing on closing the gap between institutionalized dementia care and the community. This study focuses on barriers and facilitators and implications for similar initiatives in other care organizations. **Methods:** A mixed method process evaluation was carried out. Three focus groups with managing directors and project managers of the nursing home were conducted at different moments in time during the change process. In addition, a focus group with nursing staff and interviews with family members and residents were carried out, and relevant policy documents were investigated. Results were analysed by using the Theoretical Framework of Adaptive Implementation by Meiland et al. (2004). **Results:** (Preliminary) Multiple factors influence the innovation of long-term care facilities towards dementia friendly communities, including: the social networks among the neighbourhood residents and their relationship with the residents with dementia and employees of the nursing home, the extent to which the concept is supported within the care organization, vision and commitment from leadership, administrative burden on municipal and regional level and disruptive events such as the COVID-19 pandemic. **Conclusion:** Changing the way long-term care is organized and the accompanying living situation of people with dementia is challenging. The results in this study provide a meaningful insight into the facilitators and barriers when implementing a new long-term residential care concept for people with dementia. Care organizations aiming to change long-term dementia care can benefit from the lessons learned within this study.

P9- ADHERENCE AND BARRIERS TO THE VITAMIN D AND CALCIUM SUPPLEMENT RECOMMENDATION AT DANISH NURSING HOMES: A CROSS-SECTIONAL STUDY. Charlotte Mortensen¹, Inge Tetens², Michael Kristensen¹, Pia Snitkjaer¹, Anne Marie Beck^{1,3} (1. Department of Nursing and Nutrition, Faculty of Health, University College Copenhagen, Copenhagen, Denmark; 2. Department of Nutrition, Exercise and Sports, Faculty of Science, University of Copenhagen, Copenhagen, Denmark; 3. Dietetic and Nutritional Research Unit, Herlev Gentofte Hospital, Herlev, Denmark)

Backgrounds: Vitamin D and calcium supplements are recommended in Denmark to all nursing home residents due to the supplement's preventive effect on osteoporosis and bone fractures, however the implementation of the recommendation as well as knowledge of it among nursing home staff are currently unknown. **Objectives:** The objectives of this study were to investigate adherence, knowledge, attitudes, and potential barriers to The Danish Health Authority recommendation of providing all nursing home residents daily supplements with 20 µg vitamin D and 800-1000 mg calcium. **Methods:** This was a cross-sectional study conducted in May-June 2020 among 50 randomly selected nursing homes widely distributed in Denmark. An electronic 20-item survey was sent by e-mail to each nursing home. Questions included degree of adherence to the recommendation at each nursing home estimated as percentage of residents receiving both supplements ≥ 5 days per week. Moreover, questions included respondent's knowledge and attitudes towards the recommendation, and experienced barriers in relation to adherence. **Results:** Respondents from 41 nursing homes answered the questionnaire, and these were mainly nurses (63%) or nursing home leaders (20%). Low adherence (<40% of residents receiving both supplements) was reported at 35% of nursing homes, and only 8 % of the nursing homes had a high adherence (>80% of residents receiving both supplements). Most respondents (88%) had knowledge of the recommendation and 62% rated importance of increased adherence at their nursing home as 4-5 on a 1-5 scale. Common explanations of low adherence to the recommendation were a lack of prescription by the general practitioner (60%), resident-refusal to eat the tablets (43%) and chewing-swallowing difficulties among residents (40%). **Conclusion:** The recommendation of daily vitamin D and calcium supplements to Danish nursing home residents is poorly implemented even though knowledge of the recommendation is relatively high. Barriers relate to an ambiguity of responsibility between the general practitioners and the nursing home staff, as well as the high number of tablets to be consumed in total by the residents. These barriers must be targeted to improve adherence in this vulnerable group of institutionalized older adults.

P10- COMPARISON OF CONTENT VALIDITY OF THE ENVIRONMENTAL ASSESSMENT TOOL -HIGHER CARE (EAT-HC): LESSONS LEARNED FROM GERMANY, JAPAN, AND SINGAPORE. Anne Fahsold^{1,2}, Sumiyo Brennan³, Therese Doan⁴, Joanna Sun⁵ (1. Deutsches Zentrum für Neurodegenerative Erkrankungen e.V., Witten, Germany; 2. Witten/Herdecke University, Witten, Germany; 3. Institute for Gerontology, J. F. Oberlin University, Tokyo, Japan; 4. School of Nursing, San Francisco State University, CA, USA; 5. Wicking Dementia Research and Education Centre, University of Tasmania, Hobart, Tasmania, Australia)

Backgrounds: The built environment of nursing homes has been shown to affect the residents' quality of life. Using person-centered care principles, the EAT-HC was developed in Australia for residents

living with advanced dementia. The instrument contains 77 items covering 10 dimensions of the built environment. EAT-HC was adapted for use in Germany, Japan, and Singapore. Dialogues between the three research teams form the impetus for this study. **Objectives:** The objectives of this study are (1) to compare the content validity assessment of EAT-HC among three nations and (2) to present adaptations carried out in the respective nations for items with poor content validity. **Methods:** Secondary data analyses were conducted to compare aging experts' perspectives from research and practice among the three nations. Experts were asked to evaluate if items were relevant to assessing their nursing homes' built environment to enhance the residents' quality of life. The content validity ratio (CVR) was computed from the experts' ratings and matched with qualitative data (comments and interviews). **Results:** None of the 77 items showed poor content validity across the three nations. Bilateral intersections were found for items in two dimensions "Unobtrusively reducing risks" (n=3) and «Allow people to see and be seen» (n=3). These items may imply restraint or privacy issues in different cultural aspects. Also, the definition of «contrast» was unclear among experts, requiring more examples to understand the meaning of the items evaluating contrast. **Conclusion:** The results revealed cultural characteristics of each of the three nations. In Germany, security through environmental safety features and segregation of residents with dementia were highly controversial. In Japan, limited scholarly studies of facility dementia care necessitated gerontologists to educate facility directors and architects to balance the cultural aspects of design. In Singapore, there was a clear gap in dementia design literacy for healthcare practitioners and designers. This study identified cultural barriers/facilitators and culturally sensitive aspects of the three nations that may benefit further adaptation of the EAT-HC worldwide.

P11- COMMUNICATION ABOUT EUTHANASIA IN DUTCH NURSING HOMES: A QUALITATIVE STUDY. M.J.H.T. Rikmenspoel¹, G.A.M. Widdershoven², B.D. Onwuteaka-Philipsen³, H.R.W. Pasman⁴, F. de Boer⁵ (1. Amsterdam Public Health research institute, Amsterdam UMC, The Netherlands; 2. Professor, Dep. of Ethics, Law and Humanities, Amsterdam Public Health research institute, Amsterdam UMC, Vrije Universiteit Amsterdam; 3. Professor, Dep of Public and Occupational health, Expertise Center for Palliative care, Amsterdam Public Health research institute, Amsterdam UMC, Vrije Universiteit Amsterdam, the Netherlands; 4. Associate professor, Dep of Public and Occupational health, Expertise Center for Palliative care, Amsterdam Public Health research institute, Amsterdam UMC, Vrije Universiteit Amsterdam, the Netherlands; 5. Retired University Teacher, Dep. of Ethics, Law and Humanities, Amsterdam UMC, Vrije Universiteit Amsterdam, the Netherlands)

Backgrounds: In the public debate about euthanasia the voice of inhabitants of nursing homes is barely heard. Their views, needs and experiences regarding communication about euthanasia are unknown. **Objectives:** We aim to gain insight in experiences of competent nursing-home residents in their communication around euthanasia. **Methods:** The design is qualitative. In the setting of Dutch nursing homes 15 residents who had mentioned euthanasia explicitly as a future option have been interviewed. The participants' age range is between 30-35 and 85-90 years. Data were analysed with a Grounded Theory approach, focusing on the views and experiences of respondents with communication around euthanasia. **Results:** We found three main categories: the possibility to discuss euthanasia; the experiences during communications with professionals, co-residents and family members; and expectations resulting from those communications. Respondents considered the physician the first

person to turn to. The possibility to discuss euthanasia was influenced by openness, both on the side of the respondent and on the side of the physician and care staff, which this was not always a given. Experiences included the importance but also at times the lack of understanding and support by others as well as the need to be clear and consistent about their wish for euthanasia in the future. Expectations included the assumption that arrangements on paper are an important precondition for euthanasia, and are sometimes considered sufficient as such. **Conclusion:** Nursing home residents who want to discuss their thoughts and wishes regarding euthanasia have varying experiences concerning communication with professionals and co-residents in the nursing home. Openness, understanding and support are important for residents in communication about their intentions. Conversations with the doctor are based on trust. Expectations of respondents concerning the advance directive are high, and may not always be realistic.

P12- ASSESSMENT OF NURSING CARE QUALITY IN LONG-TERM CARE GERIATRIC FACILITIES. Claudia Konson¹, Michael Gdalevich², Ildar I. Khayrullin³ (1. International Medical Cluster Foundation, Moscow, Russian Federation and Ministry of Health, Southern District, Israel; 2. Ministry of Health, Southern District, Israel; 3. International Medical Cluster Foundation, Moscow, Russian Federation)

Backgrounds: People tend to live longer worldwide. It raises a problem of health concerns associated with longer living. In some cases, elderly people need long-term care and medical assistance in their everyday life. The quality criteria and formal algorithms for this type of medical care are lacking. **Objectives:** This research aims to show the value of clinical assessment tools and early interventions for long-term medical care. **Methods:** In a 1-year prospective cohort study conducted in 2 nursing homes we assessed functional and cognitive status using Bartell and MMSE scales in 130 geriatric patients. 80,9% of patients had had >5 comorbidities and took 5-8 medications. Then we implemented more than 20 standard procedures, algorithms, and documents, that are discussed in detail in Guidelines for nurses in geriatric care (2019, Russian Ministry of Health) in nurses' everyday practice. It focused on the assessment of nutritional status, risk of falls, bedsores, and other age-associated problems. Early detection of potential causes for status deterioration, which is possible due to formal assessment tools and complex approach, helped to implement early nutritional support, walking assistance and other interventions. The ability of nurses' to perform mentioned algorithms was a key to assessing care quality. We re-assessed functional and cognitive status in 1 year. **Results:** Functional status remained unchanged in 89,7% of patients and 87,9% preserved their cognitive status. Compared to literature data in nursing homes about 65% and 85% of patients preserve their functional and cognitive status, respectively. This approach to nurses' care has been implemented in 10 Russian and Israeli clinics and Guidelines for nurses' care in geriatric patients have been issued. **Conclusion:** Implementation of standardized algorithms in nurses' care may help to improve outcomes in geriatric patients.

P13- PREVALENCE OF DRUG-DRUG INTERACTIONS AND EVOLUTION OVER TIME IN BELGIAN NURSING HOME RESIDENTS: ANALYSIS FROM THE COME-ON TRIAL. Simon Lion¹, Perrine Evrard¹, Anne Spinewine^{1,2} (1. Clinical pharmacy research group, Louvain Drug Research Institute, UCLouvain, Bruxelles, Belgium; 2. Clinical pharmacy, CHU UCL Namur, site Godinne, Yvoir, Belgium)

Background: Nursing home residents (NHRs) are often exposed to polypharmacy and therefore to drug-drug interactions (DDIs),

which can lead to clinically significant consequences. **Objectives:** We aimed to: (i) describe the prevalence of DDIs and evolution over time in Belgian NHRs, and (ii) analyze factors associated with a favorable evolution over time. **Methods:** We performed a substudy of the COME-ON study, a cluster-randomized controlled trial conducted in 54 Belgian NHs (1804 NHRs) between April 2015 and June 2016. COME-ON analyzed the effect of a complex intervention - encompassing healthcare professionals' training, multidisciplinary local concertation and repeated interdisciplinary case conferences. 901 NHRs with complete data at baseline and end of study (month 15) were included in this substudy. We identified DDIs at baseline and end of study based on an international validated list of 66 potentially clinically significant DDIs. We defined favorable evolution over time as having ≥ 1 DDI resolved at the end of study, without a new DDI being introduced. We analyzed factors associated with favorable evolution using multivariable logistic regression. **Results:** At baseline, 52.7% (n=475) of NHRs had at least one DDI (median:1, range: 0;8). The most common DDI was "Concomitant use of at least three central nervous system active drugs" (n=294; 32.6%). At the end of the study, prevalence decreased from 52.7% to 49.6%. This decrease was only seen in the intervention group (6.3% absolute decrease in intervention group vs 1.0% absolute increase in control group). Among the 475 NHRs with at least one DDI at baseline, 136 (28.6%) had a favorable evolution over time. The factors associated with a favorable DDI evolution were: being in the intervention group (odds ratio=2.28; 95%CI: [1.45; 3.64]), being aged 85 or more (OR=1.74 [1.14; 2.69]), and private non for profit (OR=1.62 [1.01; 2.67]) or private for profit (OR=2.86 [1.14; 7.07]) nursing home ownership (versus public ownership). **Conclusion:** The prevalence of potentially clinically significant DDIs is very high in NHRs, yet it is encouraging that a medication review intervention is associated with a favorable evolution over time. Further epidemiological and improvement research are required to further decrease the risk of clinically significant DDI situations.

P14- IS THERE AN ASSOCIATION BETWEEN NORTON SCALE AND COGNITIVE IMPAIRMENT IN HIP FRACTURE PATIENTS? Nadya Kagansky, Ilia Stambler, Eliyahu Hayim Mizrahi (*Medical Geriatric Center Shmuel HaRofo, Rehov HaBanim 3, Beer Yakov, Israel*)

Backgrounds: Geriatric assessment as an integrative part of assessment is composite of a large number of scales. Sometimes it is difficult to transfer all of them. Norton Scale Score (NSS) assesses the degree of risk to develop bedsores. In the previous studies, we found the correlation between Norton Scale and Functional Assessments. Correlation between Norton Scale and Cognitive Assessments was not evaluated yet. The aim of this study was to determine if there is an association between Norton scale score and cognitive impairment. This association can further decrease the number of numerous investigations in frail older patients, especially in older patients with communicative difficulties. **Objectives:** 224 geriatric patients consecutively admitted to a geriatric post-acute rehabilitation ward of Shmuel Harofe Geriatric Medical Center after a traumatic pertrochanteric or sub-capital hip fracture, have undergone fracture fixation, and were in a stable medical condition enabling immediate active post-operative rehabilitation therapy. **Methods:** We have performed an observational cohort study. The collected data included demographic data, data on chronic illnesses. Results of cognitive status assessment (Mini Mental State Examination-MMSE) and Norton Scale assessment were received from the computerized patient's charts. We evaluated the association between these two scales. **Results:** The study included 224 consecutive hip fracture patients with mean age of 81.78 7.19 years. Norton

scores at admission, age, education, and previous stroke, emerged as the only statistically significant parameters differing between those with cognitive decline and without it. After adjusting for confounding variables, lower Norton Scores at admission (OR 1.303 CI 1.097-1.548, P=0.003) were associated with an increased risk finding cognitive impairment. **Conclusion:** Our findings suggest that there is an association between Norton Scale scores and cognitive impairment. Norton score parameters, under certain circumstances, such as speech and other communication difficulties, can be used as a proxy measure for MMSE to indicate cognitive impairment. These findings can be even more helpful in the present time of «COVID-19», when we have to evaluate older patients with facial masks and others defensive suits.

P15- A SCOPING REVIEW ON NURSE-LED CARE MODELS IN RESIDENTIAL LONG-TERM CARE – FOCUSING ON THE ACTIVITIES AND LEVELS OF AUTONOMY. Kathrin Schmüdderich^{1,2}, Martina Roes^{1,2}, Rebecca Palm², Bernhard Holle^{1,2} (*1. Deutsches Zentrum für Neurodegenerative Erkrankungen e.V., Witten, Germany; 2. Witten/Herdecke University, Faculty of Health, Department for Nursing Science, Witten, Germany*)

Backgrounds: The implementation of nurse-led care models in which highly qualified nurses lead und coordinate residents' care autonomously is highly recommended. However, the scope and the way in which autonomy is conceptualized in nurse-led care models is so far unclear. **Objectives:** This scoping review aimed to identify key characteristics and factors related to nurse-led care models in nursing homes. Here, we specifically aimed to examine the activities and levels of autonomy in the included models. **Methods:** For the scoping review, we conducted a systematic search in CINAHL via EBSCO, MEDLINE via PubMed, Cochrane Library and Scopus. We included English and German articles that evaluated the implementation of nurse-led care models in nursing homes. The final update was made on 19.01.2021. We independently screened the full texts and assessed them for methodological quality. To describe the activities and levels of autonomy in the included models, the roles, tasks, and responsibilities of the leading nurses and the multidisciplinary team were synthesized and compared. **Results:** In the included 13 studies of 12 nurse-led care models, 13 autonomous activities of the leading nurses were reported. Most refer to clinical and work autonomy. Only one study reported an activity that refer to organisational autonomy. The activities of autonomy varied across the nurse-led care models. High levels of independently practice were described in almost all models in the activities assessment, care coordination, training/education of staff and communication. In some models, the leading nurses were further responsible for the activities diagnostic, prescribing, emergency care, treatment of problems, education of families/residents, implementation of evidence-based standards, and root cause analysis. The levels of autonomy ranged from independent decision-making to making independent recommendations to collaborative discussions and shared-decision making within the multidisciplinary team. **Conclusion:** The studies reported different activities and levels of autonomy of the leading nurses. What was concretely understood by autonomy varied greatly. To describe the activities and levels of autonomy in nurse-led care models, clarifications of the definitions and scope of autonomy in the nursing home setting are needed. Further research should therefore focus on how autonomy is perceived and realized in multidisciplinary team collaboration.

P16- METHODS TO ELICIT AND EVALUATE THE ATTAINMENT OF PATIENT GOALS IN MEDICATION OPTIMIZATION INTERVENTIONS FOR NURSING HOME RESIDENTS: A SCOPING REVIEW. Amber Damiaens¹, Evelien Maes¹, Hanne Van Roosbroek¹, Ann Van Hecke², Veerle Foulon¹ (1. *Department of Pharmaceutical and Pharmacological Sciences, KU Leuven, Leuven, Belgium*; 2. *Department of Nursing director, Ghent University Hospital and Department of Public Health and Primary Care, UGent, Ghent, Belgium*)

Backgrounds: Aligning treatment plans with patient goals may hold a new approach to medication optimization interventions and to improve person-centered care in nursing homes. Nevertheless, earlier research has shown that the implementation of person-centered care is challenging, and that support is needed to elicit and evaluate patient goals. **Objectives:** This scoping review aimed to identify and describe methods, both to elicit patient goals and to evaluate the attainment of these goals, that can be used in medication optimization interventions for nursing home residents. **Methods:** A scoping review was performed, guided by the methodological framework of Arksey and O'Malley. First, a broad search was performed, not focusing solely on medication optimization interventions, nor on nursing home residents. In a second step, included papers were reconsidered to identify patient goal elicitation and evaluation methods that can be used in medication optimization interventions for nursing home residents. PubMed, Embase, CINAHL, and Web of Science were searched. A two-stage selection process was performed: 1) screening of titles and abstracts, 2) screening of full texts. Selection of references and data extraction were performed by three independent reviewers, followed by team discussions to solve discrepancies. An inductive thematic analysis was applied to synthesize the extracted data. In a final step, expert consultations were performed to validate the review's findings and to identify remaining knowledge gaps in current literature to feed the discussion section of the review. **Results:** A total of 96 references was included in the review. Thirty-eight patient goal elicitation methods were identified. Five elicitation methods were specifically developed for nursing home residents. However, none of these contained a medication-related assessment. Twelve patient goal evaluation methods were identified, of which three were used in nursing home residents and one was used to investigate patient goal attainment after a medication optimization intervention in older adults. **Conclusion:** No comprehensive method was identified that allows the elicitation and evaluation of patient goals and integration thereof in a medication optimization intervention for nursing home residents. Nevertheless, some of the instruments contain components that might be promising when adapted into a medication optimization intervention.

P17- GEROCOVID: A STANDARDIZED ELECTRONIC REGISTRY TO ANALYSE OLDER ADULTS LONG-TERM HEALTH TRAJECTORIES DURING THE COVID-19 PANDEMIC. Susanna Del Signore^{1,2}, Raffaele Antonelli Incalzi³, Graziano Onder⁴, Alba Malara⁵, Caterina Trevisan^{6,12}, Angela Marie Abbatecola⁷, Gianluca Zia², Stefania Del Signore², Annapina Palmieri⁴, Anna Di Lonardo⁴, Gilda Borselli⁸, Marcello Russo⁷, Marianna Noale⁹, Stefano Fumagalli¹⁰, Pietro Gareri¹¹, Enrico Mossello¹⁰, Stefano Volpato¹², Fabio Monzani¹³, Alessandra Coin⁶, Giuseppe Bellelli¹⁴, Chukwuma Okoye¹³, Elisa Bottoni¹⁵, Carmine Cafariello¹⁶ on behalf of the GeroCovid Observational & GeroCovid Vax Group (1. *Bluecompanion France, Jambville, France*; 2. *Bluecompanion Ltd, London, United Kingdom*; 3. *Unit of Geriatrics, Department of Medicine, Campus Bio-Medico University and Teaching Hospital, Rome, Italy*; 4. *Department of Cardiovascular, Endocrine-Metabolic Diseases and Aging, Istituto Superiore di Sanità, Roma, Italy*; 5. *ANASTE-Humanitas Foundation, Rome, Italy*; 6. *Geriatrics Division, Department of Medicine (DIMED), University of Padua, Italy*; 7. *Azienda Sanitaria Locale (ASL) Alzheimer's Disease Day Clinic, Frosinone, Italy*; 8. *Italian Society of Gerontology and Geriatrics (SIGG), Florence, Italy*; 9. *Aging Branch, Neuroscience Institute, National Research Council, Padua, Italy*; 10. *Geriatric Intensive Care Unit, Department of Experimental and Clinical Medicine, University of Florence, Italy*; 11. *Center for Cognitive Disorders and Dementia - Catanzaro Lido, ASP Catanzaro, Italy*; 12. *Department of Medical Science, University of Ferrara, Italy*; 13. *Geriatrics Unit, Department of Clinical and Experimental Medicine, University of Pisa, Italy*; 14. *School of Medicine and Surgery, University of Milano-Bicocca and Acute Geriatric Unit, San Gerardo Hospital, Monza, Italy*; 15. *Centro Benessere (Rehabilitation center) Frosinone, Italy*; 16. *Geriatrics Outpatient Clinic and Territorial Residences, Italian Hospital Group, Rome, Italy*)

Backgrounds: Bluecompanion, in partnership with the Italian Society of Gerontology and Geriatrics (SIGG) and its clinical investigators' network, deployed on March 2020 a web-based data platform able to capture the health trajectory, with key clinical and functional characteristics, of older persons, both community dwelling or Nursing Home residents, suffering or at-risk of COVID-19. **Objectives:** To build an electronic registry enabling large geriatric studies on relevant samples of Italian territory during Covid-19 pandemic. **Methods:** The GeroCovid e-Registry was developed by adapting a proprietary electronic platform (e-Trajectories). E-Trajectories is based on the CleanWeb engine by Telemedicine-Technologies (Boulogne-Billancourt, France), embedded in a dedicated web platform designed for integrating data from different sources. All data are recorded on web servers located in the EU (France and Poland). ICT operations are compliant with the European General Data Protection Regulation (GDPR) and with the relevant international standards for clinical trials (ISO 9001 certification and FDA CFR 21 part 11). Bluecompanion provided on-line training sessions for investigators, as well as technical support. Data collection underwent quality checks and investigators were required solve raised queries. All individual clinical data were anonymized before data entry. **Results:** Two consecutive large observational studies were conducted by the GeroCovid Investigators' network: "GeroCovid Observational" collecting 3544 cases in 86 Italian "multisetting" investigational sites (plus in 3 sites in Norway), and "GeroVax" an Italian Medicines Agency (AIFA) sponsored study led by the Italian Istituto Superiore di Sanità recruiting 3280 participants in 73 Nursing Homes for long-term follow-up of residents who underwent COVID vaccination (from January 2021 to May 2022). Overall, the standardized clinical data capture by e-Trajectories allowed to test

several statistical hypotheses to clarify the influence of initial clinical characteristics over the short and long-term health outcomes. The longitudinal follow-up of targeted subpopulations enables to study relationships between individual health trajectories and comorbidities. **Conclusion:** Overall, the development of a specialised web-based investigational data platform generated a conspicuous amount of high-quality longitudinal clinical data despite a critical context, the COVID-19 pandemic, and succeeded to study an often “difficult to reach” population, older persons suffering from multiple comorbidities, living in the community or in Nursing Homes.

P18- COVID-19 NURSING HOME INCIDENCE RATES IN SOCIALLY DEPRIVED COMMUNITIES IN THE US.

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Backgrounds: The COVID-19 pandemic highlighted existing systemic racial/ethnic disparities and other failures in the US nursing home industry. The inclusion of socioeconomic factors can provide context to health disparities research, given that health inequities vary along social and economic gradients. **Objectives:** We examined the relationship between community resource scarcity, as conceptualized by the Social Deprivation Index (SDI), and COVID-19 incidence rates in US nursing homes. **Methods:** Our study utilized four secondary data sets: Centers for Medicare and Medicaid Services’ (CMS) Nursing Home COVID-19 Public File, Brown University’s LTCFocus, Robert Graham Center’s Social Deprivation Index, and CMS Nursing Home Payroll Based Journal (PBJ) Daily Nurse Staffing. The study sample consisted of all US nursing homes included in the CMS Nursing Home COVID-19 Public File from January 1, 2020 to July 11, 2021, or 15,382 nursing homes. After merging with the other secondary datasets, we had 13,772 nursing homes in our final analytic sample. The dependent variable was comprised of COVID-19 infections per nursing home facility. The independent variable represented the SDI of the nursing home community. The SDI is a composite measure of socio-economic factors (percent living in poverty, less than 12 years of schooling, crowding, no car, non-employed, renter occupied, and single parent households at the zip code level). Given the overdispersion of the count dependent variable, negative binomial regression was used. We controlled for interstate differences, organizational enabling factors, as well as, facility-level resident and other community-level characteristics. **Results:** Nursing homes located in communities with high levels of social deprivation had 7.5% higher COVID-19 infection rates (Incidence Rate Ratio [IRR] = 1.07; $p < 0.01$), and those located in communities with medium levels of social deprivation had 4.4% higher COVID-19 infection rates (Incidence Rate Ratio [IRR] = 1.04; $p < 0.05$), compared to nursing facilities located in areas of low social deprivation. **Conclusion:** From a policy perspective, nursing homes that are located in socially deprived communities, may need additional resources, such as funding for staffing and personal protective equipment in the face of the pandemic. The COVID-19 pandemic has sharpened the focus on healthcare disparities and societal inequalities in the delivery of long-term care.

P19- MEASURING APPROPRIATENESS OF TRANSFERS FROM NURSING HOMES TO HOSPITAL EMERGENCY DEPARTMENTS. Maria Montoya-Martínez, I Andreo-Serrano (Hospital Morales Meseguer, Murcia, Spain)

Background: Geriatric Nursing Home (NH) population has shown a higher risk of transfers to Emergency Departments (ED) than their community-dwelling counterparts. Nevertheless, some of these transfers are potentially unnecessary and even detrimental for the patient well-being. Thus, it is of interest to evaluate appropriateness of transfers from NH to ED. **Objectives:** The aim of this study is to evaluate the appropriateness of transfers from NH to ED of Morales Meseguer hospital and identify their causes. **Methods:** This is a longitudinal retrospective study. We collected data on patients transferred from NHs to the EDs from May to July 2021. Our data comprises variables focusing on: NH management and care planning, NH coordination with health sectors and clinical outcomes. Data were obtained using hospital electronic records. Informed consent was signed by NH directive teams. We measured appropriateness of ED transfers upon on an algorithm based on tools used in previous studies. It evaluates: consistency with advance care planning (ADC) and/or functional prognosis, existence of an acute condition and need of a diagnostic or therapeutic intervention. We used stata14 and performed a descriptive statistics. **Results:** Ninety nine transfers from NH to ED, corresponding to 87 patients, were evaluated. 26% were considered inappropriate. Following the algorithm created, the primary reasons were: inconsistency with ADC (2%), inconsistency with functional prognosis (6%) and lack of an acute health condition (18%). When inconsistency with ADC was present, lack of an acute health condition co-occurred. Patients who underwent an inappropriate transfer (IT) had 83.9 (1.73) years, came from a NH with a 0.08 (0.02) ratio care-worker: resident, survived a mean of 4.2 (0.3) months and 0% died within the 72 hrs after ED visit; whereas patients who had an appropriate transfer were 85.3 (0.74), came from a NH with a 0.11 (0.01) ratio care-worker, lived a mean of 3.3 (0.2) months and 10% died within the following 72 hrs after transfer. Comparing both sexes we found that 22% of women had an IT, as for men this was 33%. **Conclusion:** Inappropriate transfers from NH to ED frequently occur. Lack of an acute health condition was the most common cause. Interestingly, when there was inconsistency with ADC, other reasons of inappropriate ED transfers co-existed. Evaluating prevalence and causes of ED transfers from NH is essential. It represents the first step prior tailoring health policies which tackle causes for this patient-wellbeing and health system issue.

P20- IMPACT OF COVID-19 ON FRAILTY AND AGING IN NURSING- HOME RESIDENTS. Andrea Fabbo¹, Sonia Braglia¹, Giovanni Dolci², Barbara Manni¹, Jovana Milic², Giovanni Guaraldi², (1. Geriatric Service, Primary Care Department, AUSL Modena, Italy; 2. Infectious Diseases Clinic, University of Modena and Reggio Emilia, Modena, Italy)

Backgrounds: The presence of frailty, a common condition in older age has been associated with atypical presentation of SARS COVID-19, such as delirium, reduced mobility and falls, and a more severe negative outcomes including increased mortality. Frailty is associated with vulnerability despite of reduced degree of inflammation in response of COVID -19 infection. However, there is still a lack of evidence regarding the extent to which the pandemic has affected the cognitive and physical performance of such a vulnerable population, in particular those having survived COVID-19. **Objectives:** The objective of this study was to describe aging trajectories, through the analysis of frailty, polypharmacy,

cognitive status, physical impairment and disability, in the elderly residents in nursing homes (in the city of Modena) between March 2019 and October 2020, in order to evaluate the impact of Covid-19 pandemic on this vulnerable population. Secondary outcomes were to assess probable changes of clinical features pre- and post-pandemic. **Methods:** This retrospective, multicentric observational cohort study enrolled 107 older residents of four nursing homes in Modena Northern Italy. Patients were divided into two groups (COVID-19 and non-COVID-19) according to COVID-19 disease acquisition. Data collection was carried out from March 2019 to October 2020. Demographic and clinical cohort 's features were gathered by a digital (computerized) folder (Softwer ABC Web) that is usually completed in daily clinical practice. The data collected were demographic data (sex and age) and a multidimensional assessment including weight, frailty (CFS), polypharmacy, cognitive status (MMSE), disability (ADL), gait (Tinetti scale) and multimorbidity (cumulative illness rating scale-CIRS) at four time points: March 2019 (T0), October 2019 (T1), May 2020 (T2) and October 2020 (T3). COVID-19 cases occurred between T1 and T2 period. Statistical analysis was performed using StataIC 16.1. T-test for independent samples was used to compare residents of nursing homes with or without COVID-19. The effect of COVID-19 infection on changes in aging trajectories over time was tested in the mixed linear model. **Results:** Out of 107 residents included in the study, 15 patients died during the observational period in the COVID-19 group (vs. 0). The patients' characteristics at T0 in the COVID-19 and non-COVID-19 groups are described in Table 1. Overall, the change of CFS score was higher between T1-T2 than between T0-T1 (mean delta CFS T2-T1= 0.101, 95% CI 0.088-0.114 vs. mean delta CFS T1-T0= 0, 95% CI -0.008-0.008; $p < 0.001$). In particular, CFS increase was higher in COVID-19 group (0.232 vs. -0.07, $p = 0.02$). In the entire study population, weight change between T1-T2 was different to weight change between T0-T1 (mean delta weight -1.37 vs. mean delta weight 0.88, $p < 0.001$). CIRS score change was significantly higher in the period T2-T3 than in a period T1-T2 (0.03, 95%CI -0.03-0.09 vs. 0.23, 95%CI 0.14 to 0.33, $p < 0.001$). In detail, COVID-19 group had higher increase in the CIRS score in the T2-T3 period (0.469 vs. -0.022, $p < 0.001$). The interaction between time and COVID-19 infection was significantly correlated with frailty change over time (log likelihood -676.912, $p = 0.017$) but not with body weight, polypharmacy, dementia, disability in a mixed linear model. **Conclusion:** Aging trajectories of nursing home residents were negatively affected by COVID-19 pandemic, independently of COVID-19 disease. This phenomenon was more accentuated in the patients who had COVID-19, in particularly depicted by higher mortality, frailty progression and increase in polypharmacy.

P21- THE PERCEPTIONS, NEEDS AND PREFERENCES OF INFORMAL CAREGIVERS OF NURSING HOME RESIDENTS WITH DEMENTIA REGARDING PHYSICAL THERAPY: A QUALITATIVE STUDY. Dennis E. Boer¹, Shanty Sterke^{2,3,4}, Charlotte Schmidt¹, Thea Vliet Vlieland^{5,6} (1. Department of Physical therapy, Kennemerhart, Haarlem, the Netherlands; 2. Research Centre Innovations in Care, Rotterdam University of Applied Sciences, Rotterdam, The Netherlands; 3. Department of Physical therapy, Aafje Nursing Homes, Rotterdam, The Netherlands; 4. Department of Public Health, Erasmus University Medical Center, Rotterdam The Netherlands; 5. University of Applied Sciences Leiden, Leiden, The Netherlands; 6. Department of Orthopedics, Rehabilitation and Physical Therapy, Leiden University Medical Center, Leiden, The Netherlands)

Backgrounds: Informal caregivers often support nursing home residents with dementia in making therapeutic decisions. **Objectives:** To explore the perceptions, needs and preferences

of informal caregivers of nursing home residents with dementia regarding physiotherapy. **Methods:** We conducted eleven semi-structured interviews with informal caregivers of nursing home residents with dementia. The study was conducted in 2021 and took place in four nursing homes of the same healthcare organization that is located in and around the Dutch city Haarlem. Interviews were conducted digitally and took place between April 15th and May 18th, 2021. Thematic analysis was used. **Results:** The perceptions, needs and preferences were organized in five themes: 1) visibility and familiarity; 2) communication; 3) aim and content; 4) dosage and location; 5) level of expertise and the role of the physiotherapist within the interdisciplinary team. Informal caregivers' perceptions of physiotherapy included a lack of visibility and familiarity. They expressed a need for more communication with physiotherapists, and for empathic communication skills of the physiotherapists. Preferences included physiotherapy to be enjoyable, accessible and tailored to the needs of the resident. **Conclusion:** Physiotherapists need to involve informal caregivers in the physiotherapy care of their relatives. Implementing shared decision-making will help to get informal caregivers more involved, but has yet to be studied in this setting.

P23- GERONTOLOGY OUTREACH SERVICE: IS AN INTENSIVE MDT CONSULTATION AND EDUCATION INTERVENTION SUCCESSFUL AT IDENTIFYING AND REDUCING RISK OF ADVERSE EVENTS IN PRIVATE NURSING HOMES. Helen O'Keeffe, Blanaid McCabe, Mary Keogh, Alan Martin (*Gerontology Outreach Service, Beaumont Hospital, Dublin, Ireland*)

Backgrounds: The Gerontology Outreach team consists of a Consultant Geriatrician, Clinical Nurse Specialist and a Senior Occupational Therapist. The current capacity of the Gerontology Outreach service is a reactive service responding to acute presentations with limited scope for a proactive intervention. Our aim was to analyse if an MDT approach ultimately leads to improved care for Nursing Home residents by reducing the risk of adverse events. **Objectives:** 1. Promote a reduction in unnecessary admissions to the Emergency Department; 2. Prevent functional decline and reduce adverse events; 3. Promote and maintain resident well-being and quality of life; 5. Support staff to self-identify resident deterioration. **Methods:** A weekly multidisciplinary quality improvement initiative was evaluated in two private Nursing Homes over a 12 week period. This involved case discussion of "at-risk" residents using mutually agreed criteria, tailored staff education and Gerontology Outreach review as warranted. Trends were analysed 6 months pre and post intervention outcomes included; • Emergency Department presentations, • Falls, • Pressure injuries, • Weight loss. Results: Categories of Intervention Percentage reviewed. Responsive Behaviours 30%. Falls 19%. Advanced Care Planning 19%. Delirium 20%. Pressure Injuries 20%. • 15% of residents required further Gerontology Outreach input. • 85% of residents would not have received specialist geriatric input had this intervention not been pursued. • 63% of residents discussed were referred on for further medical review for the following input; Medication Review 28%; Delirium Screen 16%; Bone Protection 18%; Psychiatry Referral 10%; Education was provided to 61 staff in the following areas; Falls, Frailty, Catherisation, IV Antibiotics. Hospital presentations – 22% increase in ED presentations from Nursing home residents when analysing pre and post data. **Conclusion:** Specialist Geriatric Outreach Services encompass multiple areas of geriatric care. Nursing Homes continue to require support in the area of Dementia and Responsive Behaviours. The results of this 12 week intervention demonstrated an unrecognised need for specialised MDT input and diagnostic support in 2 Nursing Homes within the Beaumont

catchment area. Although this audit failed to demonstrate a reduction in ED presentations, it was a small scale 12 week intervention which did not account for patient dependency levels and staff turnover.

P24- RETHINK, ADJUST AND ADAPT: LIVED EXPERIENCE OF NURSE EDUCATORS WITH MENTAL STRESS IN HIGHER EDUCATION INSTITUTIONS AMIDST THE NEW NORMAL. Monalisa Nicole M. Mariano, Jan Czarina D. Macatangay, Mikaela A. Piao, Raphael T. Ortega, Michael John V. Flores (*Manila Central University College of Nursing, Edsa, Caloocan City, Philippines*)

Backgrounds: The shift from physical to online learning as a new standard brought about by the pandemic has resulted in a sudden transition for nurse educators, leaving them unprepared. This leaves nurse educators vulnerable to mental stress. **Objectives:** This study aimed to explore and better understand the lived experience of Nurse educators guided by the central question: “How do Nurse educators with mental stress in higher education institutions describe their lived experience during the new normal of learning?” **Methods:** The study employed a descriptive phenomenology research design. Study participants were nurse educators in selected higher educational institutions in CAMANAVA. Sample and sampling design include snowballing technique and study participants must meet the following criteria, namely: Filipino Nurse educators belonging to adulthood aged 30-60 years old, low to moderate level of stress using the stress symptom checklist, residing in metro manila and physically and willing to participate via an online platform. A total of 6 participants participated in the study. Data collection was conducted through a face-to-face zoom interview and guided by an aide memoire. The data were analyzed using the Collaizi’s method. Verification procedures were conducted through member checking and to ensure the credibility of the study, reflexivity, bracketing, and resonance were observed. Throughout the research process, all ethical guidelines were followed. **Results:** The gathered data from the study regarding mental stress of nurse educators in the new normal formulated four (4) themes: Braving amidst transition, Setting the work environment, Fostering teamwork and support system, and lastly, Changing for the better. The results emphasize adjustment in educational matters, mental and emotional repercussions of modern learning modality, strong support system cultivation, and a positive outlook adaptation despite the ongoing systemic turmoil. **Conclusion:** The progress of nurse educators from their difficult experiences during the adjustment process provides advantages to educators because they feel more empowered in learning the technicalities of online classes; to students for the teacher or educator may focus on their learning abilities as a result of having a positive mindset; to the school administration for the good performance of both educators and students reflect on their image, and lastly for the future of education to thrive when educators train more and become well-adjusted and highly-competent in the utility of the online platform.

P25- FEASIBILITY OF INTEGRATING AN ARTIFICIAL INTELLIGENCE TOOL FOR MEDICAL DECISION SUPPORT IN OPTIMIZING THE CARE PATHWAY FOR RESIDENTS IN NURSING HOMES: RESULTS OF THE INTEL@MED-FAISA STUDY. C. Gayot¹, J. Trimouillas², L. Micallef¹, J. Ribet², C. Laubarie¹, D. Marchesseau¹, N. Cardinaud¹, A. Tchalla¹ (*1. Laboratoire VieSanté UR24134, Université, Limoges, France - Unité de Recherche Clinique et d’Innovation en Gériatologie, Pôle le HU Gériatologie Clinique, CHU de Limoges, France; 2. Unité de Recherche Clinique et d’Innovation en Gériatologie, Pôle HU Gériatologie Clinique, CHU de Limoges, France*)

Backgrounds: In area with low medical density, access to care is difficult for residents living in nursing homes (NH). This results in a care pathway disruption that can lead to a loss of chance for residents who are transferred to emergency department with a risk of iatrogeny or inappropriate hospitalization. Artificial Intelligence (AI) is an opportunity to find new models for health management. **Objectives:** The study evaluates the number of severity diagnostics and pathology hypotheses of the AI in adequacy with those of the remote physician (RP). Finally, the acceptability of the user is measured by a self-questionnaire. **Methods:** Intel@Med-Faisa study is a non-interventional, prospective, multicenter feasibility study conducted for 6 months in 2020 in two NH near University hospital of Limoges (CHU), France. Resident aged 65 years and older with a functional complaint requiring the attending physician (AP) are included. The nurse calls AP who will manage the pathology. Simultaneously she performs the AI interrogation through a tablet with the resident and sends the report to RP of the CHU of Limoges. **Results:** 18 residents were included into both NHs. Mean age was 88.72 years and 77.8% of the participants were women. 4 interrogations were not applicable: AI was unable to propose a diagnostic hypothesis. Concordance of severity: 66.7% of the IA severity diagnoses were concordant with those of the RP. Concordance of diagnostic hypotheses (at least one hypothesis found in both AI and RP reports) was confirmed for 71.4% of cases. Acceptability: physicians and nurses in NH believe that AI can optimize resident care. RP needs to have access to the resident medical record. Although participants are satisfied to properly express their complaints through AI but they still want to maintain a «human connection» with their own AP. **Conclusion:** At the end, the IA algorithm was enriched with 20 geriatric diagnoses to improve concordances. It is necessary to accompany the users of this technology so that they appropriate it. The next step is the Intel@Med-POC study (in course) which is evaluating the proof of concept of AI associated with telemedicine to find a new organization for health management in NH.

P26- CURRENT GERIATRICS TRAINING ON LONG-TERM CARE IN MEXICO: A CROSS-SECTIONAL STUDY. Mariana Gamboa-Esparza, Rocío Morales-Delgado, María-Fernanda Altamirano-Torres, Ricardo Salinas-Martínez (*Geriatrics Service, Hospital Universitario Dr. José Eleuterio González, Monterrey, Mexico*)

Backgrounds: There is an increasing number of geriatrics resident physicians (GRP) in Mexico who will work in long-term care (LTC) facilities treating older adults. **Objectives:** Describe current educational and research programs in the training of geriatricians in long-term care. **Methods:** Cross-sectional, descriptive, analytical study in which a digital survey was applied to 42 participants among geriatricians and GRP currently practicing on January 2022 in Nuevo León, Mexico about current educational and research programs in LTC. **Results:** Of the 42 participants, 16 were geriatricians and 26 were GRP. About geriatricians, 75% were men, 25% work in LTC,

44% work in Mexican Institute of Social Security (IMSS), 44% work in public hospitals, 44% work in private hospitals. Only 38% of geriatricians received training on how to manage LTC. However, 88% of geriatricians consider that GRP should have proper training on LTC. Only 62% of GRP report that their educational program considers training in LTC and only 42% have had these clinical rotations. On one hand, 38% would like to work in an LTC facility when they graduate, and 58% are uncertain of it. On the other hand, 42% would like to run their own LTC facility, and 50% are uncertain of it. Regarding LTC research: 31% of geriatricians and 8% of resident physicians have participated in research papers that include LTC residents as the study population. All geriatricians and 92% of GRP consider that clinical research in LTC should be mandatory for graduation. Among the limiting factors to conduct clinical research in LTC that were most frequently underscored among geriatricians and GRP were funding, ethical aspects, and LTC owners. **Conclusion:** Educational and research programs on LTC are cardinal in GRP to impact our aging community because geriatricians are the experts in this care setting. Collaborative work between faculties and government could enhance LTC research and improve outcomes in older adults.

P27- CHALLENGES POINTS FOR FOREIGN CARE WORKERS ACCEPTANCE POLICY IN JAPAN. Hisayuki Shimoyama, Atsushi Ushida, Akiyo Itoh (*Faculty of Social Welfare, DOHO University, Japan*)

Backgrounds: By 2025, the first baby boomers will 75 years old or over. It is estimated that there will be a shortage of about 380,000 care workers in Japan. To make up for the shortfall, the Japanese government has created some policies to promote the employment of foreign care workers (FCW). Some policies for accepting care workers from foreign countries are inconsistent. **Objectives:** The purpose of this study was to clarify the issues of the policies of accepting foreign care workers (PAFCW) in Japan. **Methods:** It outlines Japan's PAFCW, qualitatively analyzes the differences between the policies and clarifies issues. **Results:** Currently, Japan has four PAFCW. The first is the PAFCW based on Economic Partnership Agreement (EPA). They must take national examination for care workers four years after coming to Japan. If they pass the national examination, they can stay in Japan permanently as a care worker. The second is technical intern training programs for foreigners. The system is ambiguous as to whether it is training or work, and there are the problems that trainees have only low wages. The trainees must initially bear the cost of training and traveling. The duration of the programs is three to five years. The third is specified skilled workers residency status. This system has two grades. The first stage holders are allowed to stay in Japan for up five years. Those who have completed the technical intern training programs for three years will be able to become holder of this first stage. The first stage holders might pass the examination within five years, then they become the second stage holders and have a permanent stay. The fourth is status of residents of nursing care. FCW can get this status if they graduate from Japanese care workers training school and pass the Japanese national examination to be qualified. Within this status, FCW can stay in Japan permanently as a care worker. **Conclusion:** At present, PAFCW in Japan can be said to be a convenient way to acquire workers in a short period of time. It will not be possible to get good human resources at low cost.

P28- COVID-19 SOCIAL ACTIVITIES OF THE ELDERLY IN EXPANDING JAPAN: A QUALITATIVE STUDY. Akira Teramura¹, Yumi Kimura¹, Kosuke Hamada¹, Tomoya Okayama², Yasuko Ishimoto³ (*1. Graduate School of Human Sciences, Osaka University, Osaka, Japan; 2. Graduate School of Rehabilitation, Kobe Gakuin University; 3. Department of Health and Sports Science, Faculty of Health Science and Technology, Kawasaki University of Medical Welfare, Kurashiki, Japan*)

Backgrounds: Social activities such as leisure time activities, volunteer activities, and interpersonal interactions have been attracting attention in the prevention of caregiving among the elderly. However, COVID-19 has been spreading since 2020, making it difficult for people to engage in social activities. The purpose of this study is to clarify the reality of social activities during the pandemic through narratives of the elderly. **Objectives:** The subjects were 12 elderly people (2 males and 10 females) aged 75 years or older living in Kyoto, Japan. Elderly persons with preserved cognitive and physical functions were selected, and those who required nursing care in daily life were excluded. **Methods:** Basic information included age, family structure, MMSE, and Timed Up Go Test (TUG). The interview guide was the change in social activities before and after COVID-19. Data analysis with collaborators specializing in occupational therapy, physical therapy, and public health, and a qualitative functional analysis of social activity changes and factors were conducted. **Results:** The age of the patients was 79.9 ± 3.1 years. Seven family members lived alone, three with their spouses, and two with their children. 27.6 ± 2.2 points on the MMSE and 13.3 ± 6.4 seconds on the TUG were obtained. Interview time ranged from 45 to 77 minutes per person. There were three categories of difficult post-pandemic experiences: family relations, face-to-face interactions with acquaintances, and volunteer activities. However, on the other hand, the three categories of experiences that could be tackled were «activities for family,» «ongoing interaction with acquaintances,» and «limited volunteer work,» which were either continued in an ingenious way or started anew. In addition, four categories of factors were identified as facilitating social activities: interest, past experience, human environment, and material environment. **Conclusion:** The prolonged period of self-restraint from going out has resulted in diverse changes in the social activities of the elderly. In order to maintain and promote social activities, it is important to understand the internal factors (interests and past experiences) of the elderly themselves and to focus on the external factors (human and physical environment) surrounding them in order to promote social activities.

P29- THE EXCHANGE COLLABORATION: A REALIST EVALUATION OF A COLLABORATIVE MODEL TO SUPPORT RESEARCH CO-PRODUCTION IN LONG-TERM CARE SETTINGS IN ENGLAND. C. Place¹, J. Day¹, I. Lang¹, K. Wilkinson¹, J. Thompson-Coon¹, V. Goodwin¹, K. Liabo¹, C. Marriott¹, C. Abel¹, G. Coxon², G. Cox² (*1. PenARC, Institute for Health Research, University of Exeter Medical School, Exeter, UK; 2. Devon Care Homes Collaboration, Newton Abbot, UK*)

Backgrounds: Across all areas of health and social care, there are many gaps between the activities of professional researchers and the needs of people working, living in and visiting care homes. We established the ExCHANGE Collaboration as a way of bringing together researchers and care home stakeholders to improve mutual understanding of research and evidence-use in care homes. **Objectives:** We conducted an internal, realist-informed evaluation of the collaboration to understand where and how the project had done well (and where it had struggled) in meeting its aims, as understood from the perspectives of all those involved.

Methods: Throughout 2020-2022 we gathered data using qualitative methods including observations of events and activities; documentary analysis of risk and issues logs, a knowledge broker journal, and other relevant project delivery paperwork; and semi-structured interviews with care home providers, family members, and researchers. We used the Framework Method to analyse these data strategically, focusing on areas that would allow us to develop a theory of how the collaboration could have or did achieve change. **Results:** We found the collaboration developed the capacity of care home providers and family members to engage with, understand, and use research by developing collaborative, equitable relationships between researchers and care home stakeholders; supporting stakeholder participation in the running and decision-making of the project; and co-design and co-delivery of training workshops. To reduce inequalities between collaborators, all participants were financially compensated. The collaboration has facilitated multi-directional knowledge flow with the support of a knowledge broker who acted as mediator between diverse stakeholders. It has also allowed identification of uncertainties on the part of care home stakeholders that can be turned into answerable research questions. The reach and embeddedness of this collaboration was however, restricted due to impacts of the Covid-19 pandemic. **Conclusion:** Our study suggests academic-practice collaborations can be effective in helping support care homes to develop capacity, mobilise knowledge, and identify research needs, to ultimately benefit the health and wellbeing of people working, living in and visiting care homes. Further research in this area would increase practical and theoretical understanding of academic-practice collaborations in this field.

P30- THIS STUDY CONSIDERS THE EFFECT OF GROUP REMINISCENCE ON THE ELDERLY PEOPLE WITH DEMENTIA IN NURSING HOME. Atsushi Ushida, Hisayuki Shimoyama (*DOHO University, Nagoya-shi, Aichi-prefecture, Japan*)

Backgrounds: The total population of Japan is 126.71 million as of September 15, 2020. The population aged 65 and over is 36.17 million, accounting for 28.7% of the total population (aging rate). The prevalence of dementia is estimated at 7.30 million in 2025. In this Status, Nursing Homes are playing an increasingly important role. Nursing Homes is important that the quality of life of the many elderly people with dementia in Japan. In that case, it is presumed that not only the quality of professional care but also intergenerational exchanges. In Japan, people of many occupations apply reminiscence based on their expertise. Reminiscence has begun to be used extensively, including by volunteers, students and families. Opportunities for the elderly people and young people to talk about memories are presumed to contribute to the quality of life. **Objectives:** The purpose of this study considers the effect of group reminiscence on the elderly people with dementia in Nursing Home. **Methods:** Period: May 1-October 1, 2019. Place: A Prefecture B City C Nursing Home. This study performed group reminiscence on 6 elderly people with dementia and 3 university students. The characteristics of this study is to examine how university students reminiscence. Analysis method: Video observation and qualitative analysis. Ethical considerations: Conducted with prior and consent. Concept Definition: Reminiscence is not the same as Life Review. The former is understood as a concept larger than the latter. **Results:** In this study, group reminiscence was performed once a week for 30 minutes. At the first, The students used tools to talking about their lunch box. The participants were looking and touching at the lunch boxes used by the students at Childhood, the conversation was comfortable between participants. The participants were an opportunity to talk to the about myself memories. **Conclusion:** As a result, mutual exchange between

the elderly people was promoted. In this group reminiscence, the effect of using things of nostalgic, common the student and of elderly people's memories became clear.

P31- PIANO COVID-19 STUDY: EFFECT OF ORGANIZATIONAL MEASURES TO PREVENT AND CONTROL COVID-19 INFECTION IN NURSING HOMES ON THE RISK OF DEATH OF RESIDENTS DURING AND AFTER THE EPIDEMIC PERIOD. D Pennetier, C Mathieu, C Balandier, H Blain, G Durel, G Gavazzi, O Guérin, O Hanon, C Jeandel, N Maubourguet, Y Passadori, G Orvoen, C Roubaud, N Salles, M Tabue-Teguou, S Andrieu, Y Rolland (*Hôpital La Grave, Toulouse, France*)

Backgrounds: SARS-COV-19 infection causes a very high mortality rate among the elderly, particularly among poly-morbid and dependent subjects. Faced with this threat, in addition to the usual practical recommendations (barrier gestures), strict instructions have also been sent to LTCFs to protect their residents from COVID. Beyond the immediate risks directly related to COVID-19, we hypothesize that the organizational measures (guidelines and recommendations) put in place may have, during and at a distance from the epidemic, beneficial effects but also deleterious effects depending on the severity of the epidemic in each geographical area. **Objectives:** The main objective is to compare the rate of global death of residents during a 1-year period (from January 2020 to December 2020) in LTCFs with a high level of implementation of the recommendation/guidance to prevent and control COVID-19 LTCFs residents' infection and LTCFs with a low level of implementation of the recommendation/guidance to prevent and control COVID-19 LTCFs. **Methods:** We plan to recruit 120 LTCFs corresponding to among 9 600 residents. In practice, the NH leading team will have to fill in a questionnaire about organizational measures applied during COVID crisis. Residents data from the 1st of January 2020 to 31st December 2021 will be collected on a specific PIANO COVID-19 excel file dedicated to this research. Data related to the recommendations/guidance of the 13 regions of France (general guidance such as barriers measures and specificity guidance such as rt-PCR COVID diagnostic and management strategy), the COVID infection rate in each NH department, the transfer capacities to hospitals and emergency department, will be collected by the PIANO COVID-19 research team in Toulouse. **Results:** 125 LTCFs were recruited in the study, and 110 NHs/LTCUs were active corresponding to 12 166 residents. 45 LTCF were affected by COVID in the first wave, and 65 LTCF were not affected. We have recruited LTCF located in different regions, including DOM/TOM. Results will be analysed soon. **Conclusion:** This study is an opportunity to describe the organization of NHs/LTCUs in the face of this unprecedented epidemic situation. It will identify critical points for improvement, opportunities to anticipate, as far as possible, future events of this magnitude.

P32- PIANO STUDY: PREVENTION OF PNEUMONIA IN NURSING HOME. C Mathieu, F Paris, H Blain, G Gavazzi, C Roubaud, N Salles, B De Wazieres, Y Rolland (*Hôpital La Grave, Toulouse, France*)

Backgrounds: Pneumonia is the first cause of infectious mortality in nursing homes (NH). In half cases, it leads to hospitalization, mainly after a transfer to the emergency department, and is frequently associated with a rapid and high risk of functional decline. Preventing pneumonia in NH is an important issue for the prevention of disability, the quality of life of NH residents, the healthcare system and costs. In this vulnerable population, preventive action appears particularly

relevant. We hypothesize that a multi-domain intervention of prevention of pneumonia delivered to healthcare teams in NH can reduce the incidence of pneumonia. **Objectives:** The main objective of PIANO is to assess the interest of an e-learning training for NH healthcare teams on the prevention and management of pneumonia. The effectiveness of the intervention will be judged on the reduction in the incidence of pneumonia at one year. The impact on the healthcare costs, the incidence of hospitalizations, in particular emergency transfers, as well as the evolution of the degree of dependence will also be assessed. **Methods:** PIANO is a prospective, multicenter, randomized study. The participating NH are randomized into 2 arms with a stratification according to the number of beds, the mean level of disability and the territorial region. NH in the intervention arm will benefit from e-learning training (6 modules of 10 to 20 minutes with a multidisciplinary approach). NH in the control arm will maintain their usual practice (routine care) without access to training during the study period. Within each Ehpac, 25 residents will be included in the study and monitored for one year with monthly data collection of pneumonia events and all-cause hospitalizations. **Results:** Started at the end of 2020, 137 NH located in 3 regions in France (Occitanie, Aquitaine and Auvergne Rhône Alpes) are taking part in the PIANO study, 72 of which are randomized to the intervention group with access to e-learning training. A total of 3,405 residents were included between October 2020 and December 2021 and the end of the follow-up of residents is scheduled for the end of 2022. **Conclusion:** As the proposed intervention is easily exportable (video training modules), we believe that the intervention of PIANO could be easily diffused during international communication.

P33- ENABLING RESEARCH IN CARE HOMES (ENRICH) SCOTLAND. Diane Frew, Maria Drummond (*NHS GGC, Glasgow Lanarkshire, UK*)

Backgrounds: Improving the lives of people living in care homes is a major priority. It is estimated that 80 percent of individuals living in care homes have a diagnosis of dementia. The COVID-19 pandemic highlighted that people who live and work in care homes have been historically overlooked by researchers. Enabling Research in Care Homes (ENRICH) Scotland is a research initiative that aims to improve the infrastructure and research potential within care homes in Scotland, ensuring what is done about them is not done without them. **Objectives:** ENRICH Scotland brings together care home staff, residents and their families with researchers to encourage more co-produced, care home-related research in Scotland. **Methods:** Funded in 2021 by the Chief Scientist Office, this enabled provision of: Four clinical studies officers, in NHS Tayside, Greater Glasgow & Clyde, Lothian, and Grampian who act as a direct contact to staff in care homes that have an interest in learning more about research involvement and participation. These care homes are referred to as "Research Ready". Development of a Steering Group that has representation from organisations such as SSSC, Care Inspectorate, Iriss and Scottish Care. The Care Home Innovative Partnership (CHIP), which develops tests of change based on issues identified by a group of care home staff in Lothian. A Research Forum with representation from most Universities in Scotland. A Patient and Public Involvement (PPI) Group. **Results:** We currently have 40 members of the Research forum, 123 care homes that are considered "Research Ready", and have supported 25 research teams primarily with recruitment into studies that use a variety of methodologies. **Conclusion:** With funding secured for 2022-2023 from the Chief Scientist Office, we will continue to improve the framework within the care home sector that will enable more research related to Scottish care home staff, residents and their families.

P34- DEVELOPING A DATA & INNOVATION PLATFORM FOR CARE HOMES IN SCOTLAND: AN AUDIT OF DATA ITEMS, AND INTERVIEWS WITH CARE HOME MANAGERS.

Susan D Shenkin¹, Lucy Johnston², David Henderson², Jo Hockley³ (*1. Department of Geriatric Medicine, Usher Institute, University of Edinburgh, Scotland; 2. Edinburgh Napier University, Scotland; 3. Department of Primary Palliative Care, Usher Institute, University of Edinburgh, Scotland*)

Backgrounds: The COVID-19 pandemic has increased the need for reliable, real time data on the care of older people. **Objectives:** We aimed to identify current data availability, challenges, and priorities for future research and innovations in Care Homes. **Methods:** Scoping fieldwork in six Lothian (Scotland) Care Homes included (a) 'audit' of all data items currently collected through paper or electronic care planning and (b) interviews with care home managers to discuss (i) availability /use of data; (ii) gaps; (iii) digital capabilities; and (iv) priorities for future research. **Results:** All homes collected data routinely on dependency, nutrition, weight, falls, pressure sores and infections, and as required on wounds, frailty, bowels or fluid intake. Other data items are also recorded (e.g. pain, sleep, observations) that can identify changes in residents' condition in real time. There was significant variation between homes in recording processes and assessment tools. Data are often used as 'standalone' pieces of information rather than creating a holistic/longitudinal view of each resident. Priorities for future research included standardising documentation, recording non-care tasks, identifying change in residents' condition, and supporting staff. **Conclusion:** Care homes collect large amounts of data heavy, but there is significant heterogeneity, and it is mostly used to direct immediate resident care. There is an opportunity for a National Care Home Data Platform, with strong foundations. This is essential to: provide a robust data source for policy and planning; enable real time digital connectivity between care homes and health & social care providers; and inform future innovative technologies.

P35- CARE PROVIDERS' USE OF PHYSICAL RESTRAINT OF INSTITUTIONALIZED OLDER PERSONS: A QUALITATIVE SCOPING REVIEW. Lisa PL Low, Alice NL Kwong (*School of Health Sciences, Caritas Institute of Higher Education, Hong Kong*)

Backgrounds: Despite extensive efforts to reduce restraint use in recent decades, physical restraint continues to be a common practice in the care of older persons across health care settings. **Objectives:** This scoping review aims to examine and summarize the existing qualitative literature on care providers' experiences of using physical restraints for institutionalized older people. **Methods:** A literature search was performed using several electronic databases including CINAHL, ClinicalKey for Nursing, Wiley Online Library, PubMed and ProQuest. Of 1579 articles that were selected after screening the titles of all articles retrieved from the electronic database search, a total of 14 papers met the inclusion and exclusion criteria. Qualitative content analysis was performed to elucidate care providers' experiences regarding their use of physical restraint for older people. **Results:** The three key themes that emerged across the literature were: practice of restraint use, patterns of decision-making based on ethical reasoning, and views and feelings of using restraints. Practices of restraint use referred to situations where physical restraints were applied, often as a last resort, to protect the physical safety of older people when no better option was available. This practice was often characterized as part of routine-based care to maintain the continuity of lifesaving treatments. While the decision-making process was dynamic and could be identified across different phases, patterns of decision-making could be categorized as justified, uncertain and

reversible. For uncertain decisions surrounding the use of restraints, mixed and conflicting emotions were generated when the restraint produced negative consequences. While it is acknowledged among care providers that restraint use should be prevented but there seems to be no better alternatives available to them, especially when using restraints can be regarded as protecting older people from harm and thereby implying favourable care has been delivered. **Conclusion:** This review demonstrated the complexity and inconsistency of restraint use for older people. As there are a limited number of qualitative studies, further research is needed to explore the attitudes, views and experiences of care providers involved in the use of physical restraints for institutionalized older people.

P36- EVALUATING THE INTERRATER RELIABILITY OF THE GERMAN ENVIRONMENTAL AUDIT TOOL – AN EXAMPLE OF THE IMPORTANCE TO ASSESS POTENTIAL BIAS IN INSTRUMENT TESTING. Anne Fahsold^{1,2}, Kathrin Schmüdderich^{1,2}, Rebecca Palm², Bernhard Holle^{1,2} (1. *Deutsches Zentrum für Neurodegenerative Erkrankungen e.V., Witten, Germany*; 2. *Witten/Herdecke University, Faculty of Health, Department of Nursing Science, Witten, Germany*)

Backgrounds: Testing assessment instruments for health care research in nursing homes is crucial before actual research can start. Based on these results, researchers decide whether instruments will be applied in studies. However, when testing complex constructs such as the built environment, looking to the context of psychometric test results help to identify causes for poor test results and possible bias. **Objectives:** We evaluated the interrater reliability study of an environmental assessment tool - the German Environmental Audit Tool (G-EAT) to identify potential for bias in data collection and searched for methods to avoid these in future application of the instrument. **Methods:** To identify which items of the G-EAT were biased during data collection, we conducted a secondary data analysis. Cohens Kappa for all 74 items collected from 42 living units by two raters were examined regarding raters' increasing or decreasing agreement over the course of data collection (August - December 2019). **Results:** Raters' agreement increased in four items and decreased in three items. By comparing these results with the raters' field notes, we found that exchanging information about environmental features that were difficult to assess led to a common definition over time. Possible reasons for decreased Cohen's Kappa could be found in strongly changing weather conditions during the assessment. **Conclusion:** Although using a rater guide to provide a common frame of reference, raters adjusted to practical knowledge growth and seasonal changes in the built environment. Context information such as this should be reported when publishing instrument test results to better address bias in future instrument application.

P37- SUPPORTING THE RESILIENCE AND RETENTION OF FRONTLINE CARE WORKERS IN CARE HOMES FOR OLDER PEOPLE: A SCOPING REVIEW AND THEMATIC SYNTHESIS. Susan D Shenkin¹, Lucy Johnston², Cari Malcolm², Lekaashree Rambabu³, Jo Hockley⁴ (1. *Department of Geriatric Medicine, Usher Institute, University of Edinburgh, Scotland*; 2. *Edinburgh Napier University, Scotland*; 3 *Edinburgh Medical School, University of Edinburgh*; *Edinburgh Medical School, University of Edinburgh and NHS Tayside, Scotland*; 4. *Primary Palliative Care Group, Usher Institute, University of Edinburgh, Scotland*)

Backgrounds: The COVID-19 pandemic has reinforced the need to ensure that strategic and operational approaches to retain high quality, resilient frontline care home workers (a term used to describe staff who are not registered nurses) are informed by context specific, high quality evidence. **Objectives:** We conducted this scoping review to address the question: What is the current evidence for best practice to support the resilience and retention of frontline care workers in care homes for older people? **Methods:** MEDLINE, PubMed, PsycINFO, Embase, MedRxiv, CINAHL, ASSIA, Social Science Premium were searched for literature published between 2010 and 2020. The search strategy employed combinations of search terms to target frontline care workers in care homes for older people and the key concepts relevant to resilience and retention were applied and adapted for each database. **Results:** Thirty studies were included. Evidence for best practice in supporting the resilience and retention specifically of frontline care workers in care homes is extremely limited, of variable quality and lacks generalisability. At present, it is dominated by cross-sectional studies mostly from out with the UK. The small number of intervention studies are inconclusive. The review found that multiple factors are suggested as being associated with best practice in supporting resilience and retention, but few have been tested robustly. The thematic synthesis of these identified the analytical themes of - Culture of Care; Content of Work; Connectedness with Colleagues; Characteristics and Competencies of Care Home Leaders and Caring during a Crisis. **Conclusion:** The evidence base must move from its current state of implicitness. Only then can it inform intervention development, implementation strategies and meaningful indicators of success. High quality, adequately powered, co-designed intervention studies, that address the fundamentally human and interpersonal nature of the resilience and retention of frontline care workers in care homes are required.