Results: Results show that LS was severely limited in NH residents. Daytime activity was mainly restricted to the living-units and private rooms and most residents neither left their living-unit nor the facility. Overall, life-space use and movement patterns during the day showed low day-to-day variability. Measures of LS were associated with cognitive status and living-unit specific conditions, and not related to age, motor performance and gender. The technical assessment was very unobtrusive and showed high compliance on the part of the participants. Loss or damage of technical equipment was more likely in participants with severe cognitive impairment than in cognitively healthy subjects. **Conclusions:** Opportunities and limitations of the technical measurement considering technical properties of the system, compliance as well as feasibility in a sample of NH residents will be discussed. Determinants of LS use and population- as well as setting-specific implications, e.g., the effect of cognitive impairment and code-secured living-units on movement patterns in the facility, will be pointed out.

P36- HOW DO YOUNG DOCTORS' CLINICAL EXPERIENCES FROM NURSING HOMES PROVIDE ACCESS TO SITUATED LEARNING ABOUT DEATH AND DYING? A FOCUS GROUP STUDY. A.Fosse[1,2], S. Ruths[1,2], K. Malterud[1,2,3], M. Aase Schaufel[1,4] *((1) Research Unit for General Practice, Uni Research Health, Bergen, Norway; (2) Department of Global Public Health and Primary Care, University of Bergen,Norway; (3) Research Unit for General Practice in Copenhagen, Denmark .4 Department of Thoracic Medicine, Haukeland University Hospital, Bergen, Norway)*

Background: In Norway, 48% of deaths take place in nursing homes. Health care professionals often find dialogues about death difficult. Recently qualified medical doctors serve in nursing homes during internship. We need knowledge about how nursing homes can become useful sites for learning about end-of-life care. We aimed at exploring recently qualified doctors' learning experiences with end-of-life care in nursing homes, with a special focus on dialogues about death. **Methods:** Recently qualified doctors serving as community general practitioner assistants in nursing homes (n=16) participated in three focus group interviews. The participants were invited to share experiences with end-of-life care in nursing homes, to tell about preparatory dialogues with patients and relatives, and how their experiences made an impact on their thoughts about death and their role as a doctor. The interviews were audiotaped and transcribed verbatim. Data were analyzed with systematic text condensation. We used Lave & Wenger's theory about situated learning to support our interpretations, focusing how the recently qualified doctors experienced end-of-life care through participation in the nursing home's community of practice. **Results:** Preliminary analysis revealed issues related to the doctor's role concerning end-of-life care, the importance of dialogues with patient and family about death and dying, and the impact of interdisciplinary team work on recently qualified doctors' development of professional identity. These matters will be further elaborated for presentation at the conference. **Conclusions:** Participating in end-of-life care in nursing homes can provide recently qualified doctors with valuable insight into the needs of patient and family, and training in interdisciplinary team work. **Keywords:** Death, nursing home, recently qualified medical doctors, learning experiences

P37- DETERMINANTS OF PRESCRIPTION OF VITAMIN D SUPPLEMENTATION IN NURSING HOMES: A SURVEY AMONG GENERAL PRACTITIONERS. F. Buckinx[1,2], J.Y. Reginster[1,2], E. Cavalier[3], J. Petermans[4], C. Ricour[4], C. Dardenne[6], O. Bruyère[1,2,5] *((1) Department of Public health, Epidemiology and Health Economics, University of Liège, Liège, Belgium; (2) Support Unit in Epidemiology and Biostatistics, University of) Liège, Liège, Belgium; (3) Department of Medical Chemistry, CHU of Liège, Belgium; (4) Geriatric Department, CHU of Liège, Liège, Belgium; (5) Department of Motricity Sciences, University of Liège, Liège, Belgium; (6) "Medical Center Oxygène", Seraing, Belgium)*

Background: The aim of this study was to assess the prescription profile of vitamin D supplementation in nursing homes and its potential determinants. Methods: General practitioners (GPs) having at least one patient in a nursing home in Liège, Belgium, were asked to complete the survey. Two possibilities were given to complete the survey: either through an online survey sent to GPs via associations of GPs, or through a paper version of the questionnaire that was placed in nursing homes who have accepted to collaborate in this particular study. **Results:** A total of 103 GPs participated to the survey: 19 (18.4%) responded to the paper version and 84 (81.6%) responded to the online version. Among these GPs, 57 (55.3%) systematically prescribe vitamin D to their institutionalized patients and the 46 (44.7%) others prescribe only sometimes. The main reasons for prescribing vitamin D cited by GPs who do so systematically are as follows: because they believe nursing home residents are mostly deficient in vitamin D status (92.7%), because they believe vitamin D supplementation prevents osteoporotic fractures (78.2%), and because vitamin D supplementation is recommended by various scientific societies (41.8%). GPs who only prescribe vitamin D supplementation in some patients mainly do that on the basis of results of a blood test (86.4%), following a diagnosis of osteoporosis (86.4%), in case of history (51.2%) or recent fracture (39.5%). Surprisingly, 14 physicians (32.6%) only prescribe vitamin D when they think about it. Interestingly, 41.8% of GPs always prescribe the same dose of vitamin D. For the remaining 58.2%, the dose prescribed mainly depends on the results of the blood test (94.8%), the patient's bone health (49.1%) or the history of fracture (42.1%). At last, 51.6% of GPs always prescribe calcium in combination with vitamin D, 45.4% sometimes prescribe calcium with vitamin D and 3% never prescribe this supplementation. **Conclusion:** More than half of GPs systematically prescribe vitamin D to their patients living in nursing homes. The other GPs usually prescribe vitamin D following the result of the blood test or after a diagnosis of osteoporosis.

P38- ENERGY AND NUTRIENT CONTENTS OF FOOD SERVED AND CONSUMED BY NURSING HOME RESIDENTS. F. Buckinx[1,2], N. Paquot[3], S. Allepaerts[4], J.Y. Reginster[1,2], J. Petermans[4], C. Backes[5], O. Bruyère[1,2,6] *((1) Department of Public health, Epidemiology and Health Economics, University of Liège, Belgium; (2) Support Unit in Epidemiology and Biostatistics, University of Liège, Belgium; (3) Diabetology, nutrition, metabolic (diseases, CHU of Liège, Belgium; (4) Geriatric Department, CHU of Liège, Liège, Belgium; (5) Dietetics and Nutrition section, haute Ecole de la Province de Liège, Belgium; (6) Department of Motricity Sciences, University of Liège, Liège, Belgium)*

Background: The aim of this study was to compare the amount of energy and protein of served food in Belgian nursing homes with that actually consumed by the residents. Methods: Nutrient content of the served and actually consumed food was calculated for all meals during 5 consecutive days by a precise weighting method. Difference between consumed and served dietary intake was evaluated by the Chi. test. **Results:** Fifty-six subjects (86.6 ± 7.01 years on average, 71.4% of women) from two nursing homes in Liège, Belgium were included in this study. These subjects had a mean body mass index of 24.8 ± 4.85 kg/m.; a mean Tinetti score of 21.6 ± 6.05 points; a MMSE average score of 22.3 ± 6.61 points and a mean SF-36 score of 71.2 ± 17.3%. Out of the 56 subjects, 36 (64.3%) had a normal nutritional status according to the MNA, 18 (32.2%) were at risk of malnutrition and 2 (3.57%) were malnourished. The mean energy content of the served food was 1748.2 ± 126.6 kcal per day. However, residents did not eat whole of (all) the meals. Indeed, the mean actual energy intake was 1570.4 ± 314.9 kcal. The difference between the energy content of the served and consumed food was significant (p<.001). The average protein amount of the food served was equal to 0.91 ± 0.19 g/kg/day and the average actual protein intake was 0.89 ± 0.23 g/kg/day. The difference between protein served and consumed was not significant (p=.63). Although there was no significant difference in gender (p=.88), age (p=.83) and BMI (p=.88), energy content of the served and consumed food were significantly different between the two nursing homes studied (p-values were respectively <.001 and =.02). On the contrary, protein amounts served and actually consumed were not significantly different between the two nursing homes. In addition, subjects who had a normal nutritional status, according to the MNA, ate significantly more calories (1631.3 ± 261.8 kcal) than subjects at risk of malnutrition or malnourished (1454.9 ± 377.5 kcal) (p=.05). Surprisingly, no significant difference in protein intake was observed according to the nutritional status (p=.07). **Conclusion:** Meals served in nursing homes are not entirely consumed by residents. Indeed, the amount of energy intake is significantly less than that provided. However, residents consume almost all of the served proteins. The adequacy of the food consumed in nursing homes for the residents' health needs to be better investigated.

P39- PHYSICAL ABILITIES OF ELDERLY NURSING HOME RESIDENTS: THE SENIOR COHORT. F. Buckinx[1,2], J.Y. Reginster[1,2], J.L. Croisier[3], J. Petermans[4], E. Goffart[1], O. Bruyère[1,2,3] *((1) Department of Public health, Epidemiology and Health Economics, University of Liège, Belgium; (2) Support Unit in Epidemiology and Biostatistics, University of Liège, Belgium; (3) Department of Motricity Sciences, University of Liège, Liège, Belgium; (4) Geriatric Department, CHU of Liège, Liège, Belgium)*

Background: The SENIOR (which stands for Sample of Elderly Nursing home Individuals: an Observational Research) cohort, is an ongoing longitudinal follow up of elderly subjects in nursing homes with the aim to assess the change in their physical abilities across time in order to identify people at risk of deterioration and in time to give some insight in the implementation of preventive interventions. In the present study, we present the baseline functional and motor abilities of these nursing home residents. **Methods:** Participants were volunteer residents in 21 nursing homes in the area of Liège, Belgium. Subjects disoriented (i.e. not able to give an informed consent) or unable to stand and walk, even with a technical support were excluded. A large number of demographic and clinical characteristics were collected at baseline: age, gender, body mass index (BMI), use of a walking support, attendance to physiotherapy sessions, cognitive status (MMSE test), quality of gait and balance (Tinetti test, SPPB test, Timed up and go test, walking speed), grip strength (hydraulic dynamometer), isometric strength of 8 muscle groups: knee flexors, knee extensors, hip abductors, hip extensors, ankle flexors, ankle (MicroFET2 dynamometer) and peak flow. We also compared these characteristics according to the walking speed of the residents (i.e. ≤ 0.8m/s or >0.8m/s). **Results:** Currently, 450 subjects are recruited in this ongoing study. Among them, 69.8% are women and the mean age is 83.1 ± 9.36 years. Out of the 450 subjects, 186 (41.3%) did not need technical assistance to walk whereas others used a cane (16.2%), a walking frame (32.9%) or another assistance (9.6%). About one third of the subjects attended physiotherapy sessions (35.6%). Subjects had an average MMSE score of 23.8 ± 4.72 points. Regarding motor skills, subjects had a mean Tinetti score of 22.0 ± 6.52 points, a mean SPPB score of 5.39 ± 3.29, a mean time to perform the TUG test of 26.6 ± 21.27 seconds and a mean walking speed of 8.13 ± 26.4 m/s. Muscle strength, measured/assessed with the MicroFET2, ranged between 58.2 ± 38.7 N (hip abductors) and 98.8 ± 62.3 N (knee extensors) whereas the grip strength measured with a hydraulic dynamometer was equal to 18.8 ± 11.8 kg. Finally, subjects had a mean peak flow of 144.7 ± 94.0 ml/min. Subjects who walked slower than 0.8 m /s were more often women and were older than those who walked faster than 0.8m /s. No difference in BMI was observed between these two groups. After adjustment for gender and age, 2 potential confounding variables, subjects who walked more slowly had a lower muscle strength, both in the upper limbs (p-value of 0.0004 for hand grip and 0.02 for elbow flexors and elbow extensors) and in the lower limbs, except for ankle flexors (p-value ranged from <0.001 for knee flexors, hip abductors and hip extensors, to 0.04 for ankle

extensors). **Conclusion:** This study shows the baseline functional characteristics of the current participants in the ongoing SENIOR cohort. Physical abilities, quality of life and major health outcomes of subjects will be evaluated annually with the objective to identify people at risk to deteriorate. This is indeed important from a public health perspective, at least in order to implement preventive interventions for people at risk of physical frailty.

P40- RELATIONSHIP BETWEEN ISOMETRIC STRENGTH OF 6 MUSCLE GROUPS OF THE LOWER LIMBS AND MOTOR SKILLS AMONG NURSING HOME RESIDENTS. F. Buckinx[1,2], J.Y. Reginster[1,2], J.L. Croisier[3], J. Petermans[4], E. Goffart[1], O. Bruyère[1,2,3] *((1) Department of Public health, Epidemiology and Health Economics, University of Liège, Belgium; (2) Support Unit in Epidemiology and Biostatistics, University of Liège, Belgium; (3) Department of Motricity Sciences, University of Liège, Liège, Belgium; (4) Geriatric Department, CHU of Liège, Liège, Belgium)*

Background: The role of lower limb muscle strength in motor abilities of the very elderly people is not clear. Therefore, this research aimed to assess the correlation between isometric muscle strength of the lower limbs and motor skills. **Method:** This is a cross sectional study performed among volunteer nursing home residents included in the SENIOR (Sample of Elderly Nursing home Individuals: an Observational Research) cohort. In this ongoing longitudinal cohort, a large number of demographic and clinical data are collected annually. The present analysis focused on isometric muscle strength of 6 lower limb muscle groups (i.e. knee extensors, knee flexors, hip abductors, hip extensors, ankle flexors and ankle extensors), assessed using an hand-held dynamometer (i.e. the MicroFET2 device), and motor skills evaluated using the Tinetti test, the Timed Up and Go (TUG) test, the Short Physical Performance Battery test (SPPB) and the walking speed. The relationship between lower limb muscle strength and motors skills was tested by means of a multiple correlation, adjusted on age, sex and BMI. A value above 0.5 was considered as a strong relationship. **Results:** Currently, a total of 450 nursing home residents have been included in the SENIOR cohort (69.8% of women, mean age of 83.1 ± 9.36 years). Our results have highlighted a significant inverse correlation between the time required to perform the TUG test and muscle strength of the lower limbs, except for ankle flexors and ankle extensors. However, this correlation was low, with Pearson's correlation values ranging from -0.19 ($p=0.014$) for knee extensors to -0.25 ($p<0.001$) for hip abductors and hip extensors. A low negative and significant correlation was also observed between walking speed and lower limb muscle strength, except for ankle flexors and ankle extensors, with correlation values ranging from -0.18 ($p=0.006$) for knee flexors to -0.26 ($p<0.001$) for hip abductors. The relationship between the Tinetti test and lower limbs muscle strength was significant, except for ankle flexors and ankle extensors, with correlation values ranging from 0.25 ($p<0.001$) for ankle flexors to 0.44 ($p<0.001$) for hip abductors. Correlation between SPPB score and muscle strength of the muscle groups tested was also positive and significant, excepted for ankle flexors and ankle extensors, with correlation values ranging from 0.29 ($p<0.001$) for ankle extensors to 0.56 ($p<0.001$) for hip abductors. **Conclusion:** A positive association between lower limb muscle strength and motor skills of the very elderly nursing home residents was found in this research. Strategies aiming to increase lower limb strength of different muscle groups among institutionalized subjects should be further investigated.

P41- HOSPICE CARE USE AND LOCATION OF DEATH AMONG PATIENTS WITH FIVE MAJOR CANCERS IN SOUTH KOREA. Y.J. Rhee[1,2], Y.-H. Tae[3], Y.-S.Choi[3] *((1) Department of Health Science, College of Natural Science, Dongduk Women's University, Sungbuk-gu, Seoul, Korea; (2) Department of Psychiatry & Behavioral Sciences, Mental Health Services & Policy Program, Affiliate with Buehler Center on Aging, Health & Society, Northwestern University - Feinberg School of Medicine, Chicago Illinois, USA; (3) Research Fellow, National Health Insurance Corporation, Mapo-gu, Seoul, Korea)*

Backgrounds: The place of death has been regarded as an important outcome to support "dying with dignity". South Korea has expanded comprehensive care for patients with terminal cancer supported by Cancer Control Act. Finally, South Korea launched hospice care in hospital for cancer patients through the National Health Insurance in 2013. This study aims to examine the hospice care use among patients with five major cancers (stomach, colon, liver, pancreatic, and lung) and the factors associated with location of death and effect of hospice use on location of death. **Methods:** We selected the claims data for the decedents with five cancers in National Health Insurance from 2009 to 2013 and examined the health care services and location of death. We used logistic regressions to identify factors associated with home death. Among decedents with five major cancers who received any hospice, total 55,107 patients (lung 16,632, liver 15,872, stomach 10,092, colon 7,654, pancreatic cancer 4,857) were identified. **Results:** Among decedents with five major cancers (total sample =55,107), 68.5 % of decedents were male. The average age was 64.0 years and mostly lived in urban area (87. 5%). Over half of them were covered by any employer's insurance. The most frequent comorbid diseases were diabetes (13.3%), hypertension (6.4%) and Chronic Obstructive Pulmonary Disease (COPD) (4.5%). Only 3.2% of patients pursued hospice care and stayed in hospice care on average 16.6 days. The most frequently received health services were pain management (9.0%), chemotherapy (6.3%), emergency room visit (5.0%) and intensive care use (4.6%). Pancreatic cancer patients (10.76%) and stomach cancer patients (9.48%) used more pain management medication. Less than half (46.7%) died in hospital (inpatient) that reported death on discharge date whereas only 8.8% died at home. We found that persons stomach cancer decedents were significantly more likely to die at home if they lived in metropolitan area (OR =1.50, $p<0.05$), or visited ER (OR=1.19, $p<0.05$), or had stayed longer in hospice unit in hospital (OR =0.67, $p<0.01$).Colon cancer patients with comorbid coronary artery disease condition (OR = 2.53, $p<0.05$) or living in metropolitan area (OR=1.43, $p<0.05$) were significantly associated with home death. Liver cancer patients with COPD (OR=2.21, $p<0.05$) or having lower income (OR =1.02, $p<0.05$) were significantly likely to die at home. Being female with pancreatic cancer (OR=1.33, $p<0.05$) or those living in urban area (OR=1.65, $p<0.05$) were significantly more likely to die at home. Among lung cancer patients, being female (OR=1.23, $p<0.05$) or those aged between 41 and 55 (OR=1.53, $p<0.05$) or living in urban area (OR=1.32 $p<0.05$) were significantly associated with home death. **Conclusion:** Patients with five major cancers in South Korea were more likely to die at home if they lived in urban area or had lower income or visited ER prior to death. Among stomach cancer patients, longer stay in hospice unit was significantly associated with home death. Given rising issues in providing better end-of-life care in South Korea, these findings will help policymakers understand hospice users' profiles and help develop hospice models.

P42- FRAILTY : THE ELDERLY LIVING IN A NURSING HOME'S PERSPECTIVE. Z. Azeredo[1], A.P. Barbeiro[2], Ma. Guerra[3], C. Laranjeira[4] *((1) Family Doctor, RECI Coordinator (IPiaget), MSc on Social Gerontology, Portugal; (2) Primary Health Care Nurse, Portugal; (3) Nurse, Teacher at School of Health of Jean Piaget in Viseu, Portugal; (4) PHD of Nursing Sciences , RECI member, Professor at School of Health of Jean Piaget in Viseu, Portugal)*

Background: Ageing is a process that needs a permanent person adaptation, to the life cycle events and to the environment. Each person has her/him mechanisms to coop with changes, but when we become old or very old, our abilities to coop with adversities become less and less available. There is a great possibility to become frail. **Methods:** The aims of this research were: To know how the elderly define frailty. To know how themselves see as a frailty person. We inquiry 123 old persons (65 years or older), living in four nursing homes in Viseu , who agree to collaborate in the study, and have physical and psychological condition to answer the questions Our study was a qualitative research using the interview We respect the ethical principles **Results:** The majority was female. The majority don't feel a frail person, The main reasons why some feel a frail person are: age, fear of falling and the feelings of weakness (both physical and mental). As frailty definition they refer: weakness (both physical and mental) and several fears. **Conclusion:** Although the inquired persons were living and some were very old , the majority don't feel like. They know how to identify a frail person which is important to make prevention

P43- COMPARISON REGARDING QUALITY OF LIFE IN THE ASPECT OF SELF-EFFICACY BETWEEN NURSING-CARE FACILITY PATIENTS AND ELDERLY PEOPLE LIVING WITH FAMILIES. B. Penar –Zadarko, B. Gugała, M. Nagórska, D. Pięciak – Kotlarz *(University of Rzeszow, Medical Department, Institute of Nursing and Health Sciences, Chair of Nursing, Poland)*

Objective: Loss of health and changes in the organism related with ageing lead to the limitation of self-efficacy, loss of sense of security and in a result to inability to make one's decisions. Ill and elderly people cannot meet their needs, which in turn force them to live with the family or in a nursing-care facility. Self-efficacy should be comprehend as objectively satisfactory physical efficacy, and that is the ability to be independent from other people in the scope of basic existence and functioning. Therefore an attempt was made to analyze the impact of self-efficacy on quality of life. The aim of the paper is to compare the quality of life in the aspect of self-efficacy between nursing-care facility patients and elderly people living with families. **Material and methods:** The study was conducted among 184 respondents divided into two groups between November 2014 and April 2015. Respondents included 78 nursing-care facility patients and 106 elderly people living with families (control group). The exclusion criteria were: cognitive disorder (MMSE), and lack of signed a consent form. The diagnostic survey with the use of an author's questionnaire and standardized tools were implemented in the study. Self-efficacy was assessed using basic and complex actions of everyday life (ADL Katz Scale, IADL Lawton Scale). The quality of life was assessed using WHOQOL-BREF questionnaire. The statistical analysis was performer with a use of chi-square test Manna-Whitney test, and Spearman's rank correlation coefficient. The Commission for Bioethics at Medical Department of University of Rzeszow approved the study protocol. **Results:** The age of respondents ranged from 35 – 95 years old. Women constituted the majority in two study groups. People living with families more often were married than nursing-care facility patients ($p=0{,}0000$***). Subjective health state of nursing-care facility patients (49,3%) was assessed better than respondents living with their families (22,6%). As many as 39,6% of people living with the families, and only 9,3% of nursing-care facility patients assessed their health as bad. The are no statistical differences regarding self-efficacy of basic actions of everyday life using Katz Scale. In both study groups the rate of fully self-efficient respondents was comparable: nursing-care facility patients (85,9%), and people living with their families (83,0%). An assessment of the complex actions with the use of Lawton Scale showed comparable results in both groups. As many as 67,9% of nursing-care facility patients and 62,8% of people living with their families did not required assistance in everyday life actions. The quality of life was assessed using WHOQOL-BREF questionnaire (assessed on unified scale 0-100 points). There are statistical differences between study groups regarding the quality of life ($p=0{,}0000$***). There are no statistical differences only regarding social field. In general nursing-care facility patients better assessed the quality of life than people living with patients. The most difference considers the somatic field and equals 14.9 points, with higher results for nursing-care facility patients. To assess the relations between different measurements of self-efficacy and quality of life Spearman's rank correlation coefficient was used. The stronger relations