were associated with slower rates of increase in EDS over time (both p<0.001). Modifiable predictors of EDS and clinical implications will be discussed.

### **SESSION 675 (SYMPOSIUM)**

# STRATEGIES TO PREVENT FRAILTY: THE POWER OF EARLY DETECTION AND TRAINING OF PROFESSIONALS

Chair: Nienke Bleijenberg, *University of Applied Sciences Utrecht*, *Utrecht*, *Netherlands* 

Discussant: Niek de Wit, Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Netherlands

Aging in place is an important goal for both older adults as well as many health policies worldwide, as it is in the Netherlands. Within an aging society, the number of frail older people with complex care needs living at home is increasing. Despite the various definitions of frailty, it is important to early identify who is at risk in clinical practice in order to prevent functional decline, enhance quality of life, and reduce health care costs. Furthermore, an important requirement is effective collaboration between primary care professionals. Various factors are associated with frailty. However, early detection of frailty and its risk factors such as oral health, nutrition and medication related problems is not part of routine care of professionals. To recognize frailty and its risk factors we started a large proactive integrated primary care program that successfully identified frail older people living at home based on routine care data in the Netherlands. After two-year follow-up, a reduction in acute visits at the emergency department was observed. Next, we performed additional studies focusing on early detection and prevention of risk factors of frailty such as oral health, nutrition, and medication related problems among older people living at home. During this symposium we will present the results of the program, followed by our studies that investigated frailty or frailty related risk factors. Additionally, we will show how we enhanced and evaluated the knowledge and skills of professionals working with frail older people in primary care.

### A PROACTIVE CARE PROGRAM FOR FRAIL OLDER PEOPLE LIVING AT HOME: A 2-YEAR EVALUATION

Nienke Bleijenberg¹ Jonna Rijksen² Marieke J. Schuurmans³ Niek J. de Wit⁴, 1. University of Applied Sciences Utrecht, Utrecht, Netherlands, 2. Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands, 3. Education Center, UMC Utrecht Academy, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands, 4. Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Overijssel, Netherlands

This study presents the long-term evaluation and impact of a proactive primary care program that aims to reduce acute healthcare consumption and preservation of daily functioning of frail older people living at home. For nine years the program has been adapted and evaluated. We present the results of our implementation study with two-year follow-up. 53 general practices (GP) participated.

They provided care to approximately 35000 people aged 65 years and older. Data was extracted from routine primary care data, hospital data and social care data from the municipality. Important outcomes were: number of GP visits, house visits by GP, out-of-hours primary care visits, emergency room (ER) visits, hospital admission, social support, self-sufficiency and wellbeing. After implementing the program, a significant reduction in acute visits (ER and out-of-hour visits) was observed. GP contacts and visits were also significantly increased. The program was well perceived by professionals.

# EXPLORING ASSOCIATIONS BETWEEN FRAILTY AND ORAL HEALTH IN COMMUNITY-DWELLING OLDER PEOPLE

Babette Everaars, <sup>1</sup> Katarina Jerković - Ćosić, <sup>1</sup> Nienke Bleijenberg <sup>1</sup> Niek J. de Wit <sup>2</sup> and Geert j. van der Heijden <sup>3</sup>, 1. University of Applied Sciences Utrecht, Utrecht, Utrecht, Netherlands, 2. Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands, 3. ACTA academisch Centrum Tandheelkunde Amsterdam, Amsterdam, Noord-Holland, Netherlands

This study explores associations between frailty and oral health in cross-sectional data of 1,202 community-dwelling older people. Two dichotomous outcomes were used: 1. Potential frailty, using routine primary care data; 2. Selfreported frailty, using a questionnaire. Oral health concerned dental record data and self-reported oral problems. Following exploration of univariate associations, age and sex adjusted multivariate logistic regressions were performed. For potential frailty and self-reported frailty associations were found with dental emergency visit (odds ratio (OR)= 2.0, 95% confidence Interval (CI)=1.33;3.02 respectively OR=1.58, 95% CI=1.00;2.49), experiencing oral problems (resp. OR=2.07, 95% CI=1.52;2.81 and OR=2.87, 95% CI= 2.07), making dietary adjustments (resp. OR=2.66, 95% CI= 1.31;5.41 and OR=5.49, 95% CI= 3.01;10.01). Additional associations were found for self-reported frailty with wearing dental prosthesis (OR=3.33, 95% CI=1.49;7.44) and missing periodontal information (OR=1.56, 95% CI=1.05;2.32). The cross-sectional data of this study show that in community dwelling older people oral health is associated with frailty.

#### POTENTIAL CLINICAL CONSEQUENCES OF ADMINISTRATIVE ISSUES REGARDING MEDICATION IN HOME CARE PATIENTS

Nienke E. Dijkstra¹ Carolien Sino² Marieke J. Schuurmans³ Marcel L. Bouvy,² Aline Bouwes,² and Rob R. Heerdink², 1. University of Applied Sciences Utrecht, Utrecht, Netherlands, 2. University of Applied Sciences Utrecht, Utrecht, Utrecht, Netherlands, 3. Education Center, UMC Utrecht Academy, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands

Home care professionals observe drug-related problems (DRPs) as administrative problems (e.g. inconsistent registration of (changes in) drug prescription) and side effects which may have clinical consequences for older patients. This study aims to determine the potential clinical impact of administrative problems. A retrospective descriptive study was performed, using reports of home care professionals of the

eHOME system (system that assist monitoring/reporting DRPs). Administrative problems of a one year period were assessed by three experts on potential discomfort/clinical deterioration using a 3-point scale. 309 DRPs of 120 out of 451 patients (age ≥65) were assessed. Problems involved undelivered medication administration record lists (n=103,33.3%), inconsistent registration of drug prescription (n=188,60.9%) and insufficient drug delivery (n=18,5.8%). 58.2% of the DRPs had the potential to cause moderate to severe discomfort or clinical deterioration. The results underlines the importance of the observation function of home care professionals and the need to improve pharmaceutical administration issues.

## THE EVALUATION OF INTERPROFESSIONAL EDUCATION IN PRIMARY CARE: A SOCIAL NETWORK ANALYSIS

Linda C. Smit¹ Jeroen Dikken² Nienke M. Moolenaar³ Marieke J. Schuurmans⁴ Niek J. De Wit⁵ Nienke Bleijenberg¹, 1. University of Applied Sciences Utrecht, Utrech, Netherlands, 2. The Hague University of Applied Sciences, Den Haag, Zuid-Holland, Netherlands, 3. Social and Behavioural Sciences Utrecht University, Utrecht, Utrecht, Netherlands, 4. Education Center, UMC Utrecht Academy, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands, 5. Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands

Effective, safe, person-centred care relies on skilled interprofessional collaboration (IPC) and practice. Little is known about interprofessional education (IPE) to increase IPC in the context of care for frail older people in the community. This study evaluates the effectiveness of IPE on IPC of primary health and social care providers providing care to frail older people in three districts in the Netherlands. A before-after study among 55 health care professionals using social network analysis was performed. The number of contacts increased on average with two contacts. The reciprocity in the districts increased with 15%, 2% and 13%. The diversity of contacts increased between 6% and 10% (p <.001; p.055; p.371). The IPE effectuated a larger, more collaborative, and diverse interprofessional network of health and social care professionals providing care to frail older people suggesting a ripple-effect of networked interventions.

#### CHANGING NURSES' BEHAVIOR TOWARD NUTRITIONAL CARE WITH A SNACK-SIZED LEARNING INTERVENTION

Debbie Ten Cate¹ Jeroen Dikken² Roelof Ettema³ Lisette Schoonhoven⁴ and Marieke J. Schuurmans⁵, 1. University of Applied Sciences Utrecht, Utrecht, Netherlands, 2. The Hague University of Applied Sciences, Den Haag, Zuid-Holland, Netherlands, 3. University of Applied Sciences Utrecht, Utrecht, Utrecht, Netherlands, 4. Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands, 5. Education Center, UMC Utrecht Academy, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands

Nurses play an important role in the prevention and treatment of malnutrition in older adults. However, research shows that nurses lack the motivation to give adequate nutritional

care. In order to change this motivation a learning intervention about nutrition in older adults targeted at nurses would be desirable. The aim of this study was to assess the development, validation, and reliability of a learning intervention about nutrition in older adults. The results show that this learning intervention has a good construct and content validity, and is psychometrically sound. Questions of the learning intervention can be presented at once or in a snack-sized way, where the questions are presented over a period of time. This learning intervention can be used for developers of similar interventions, and as part of educating programs for nursing professionals and nursing students about nutritional care for older adults.

#### **SESSION 680 (SYMPOSIUM)**

### THE ROLE OF EDUCATORS AND EMPLOYERS IN REDUCING (OR PERPETUATING) AGEISM

Chair: Tina M. Kruger, *Indiana State University*, *Terre Haute*, *Indiana*, *United States* 

As the population ages, increasing numbers of people are at risk of being harmed by ageism found in interpersonal interactions, medical settings, employment opportunities, and public policies. The way older people are talked to and about can facilitate the inclusion or exclusion/dismissal of the older population. Gerontology educators are well-positioned to combat ageism by discussing ageist beliefs with students and by teaching about stereotype development, aging stigma, and inclusive language and interactions. Aging services providers can address ageism by hiring the candidates most qualified to engage with older adults in a non-ageist manner. We explore these ideas in this symposium. First, information from the Gerontological Literacy Network's Sketches study regarding college students' (mis)perceptions of aging will be presented. Second, the Ageism First Aid online training modules, designed to reduce ageism, will be introduced. Third, the Disrupt Aging Classroom practice model, created by AARP CT, and Borrow My Glasses, used to transform attitudes about aging among college students, will be shared. Fourth, the disjoint between aging services job descriptions and how those who study aging/gerontology search for jobs will be reviewed. Finally, data from the GELS project, regarding where gerontology program graduates have gained employment, will be presented. Efforts to educate all college students and aging services providers about appropriate language and interaction styles, combined with modifying aging services employers' efforts to identify the most qualified candidates to hire, can ultimately reduce ageism and enhance quality of life for the fastest growing segment of the population.

### EXAMINING AGEISM IN UNDERGRADUATE STUDENTS THROUGH DRAWING

Katherina N. Terhune<sup>1</sup> Aaron Guest<sup>2</sup> Tina M. Kruger<sup>3</sup>, 1. Northern Kentucky University, Highland Heights, Kentucky, United States, 2. University of Kentucky, Lexington, Kentucky, United States, 3. Indiana State University, Terre Haute, Indiana, United States

Substantial demographic shifts in the U.S. will result in the growth of the aging population and the need for qualified professionals entering the field of aging. Yet, these emerging professionals have limited exposure to aging curricula. It is vital