

ABSTRACTS

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ORAL PRESENTATIONS AT THE 32ND ANNUAL SCIENTIFIC MEETING OF THE CANADIAN GERIATRICS SOCIETY

STUDENT ORAL PRESENTATIONS DISCIPLINES OTHER THAN MEDICINE COWDRY AWARD

A Prospective 1-year Study of Care Process and Functional Recovery Following Hip Fractures

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Language of the presentation: Eng

Objectives: To identify current practices and care gaps for elderly patients admitted following a hip fracture, and to characterize patients' patterns of functional recovery over 1-year. Relevance Increased awareness of existing gaps and improving our understanding of patients' recovery can help optimize patients' outcomes.

Methods: Forty community-dwelling participants with an osteoporotic hip fracture (≥ 65 years) were recruited and followed over 1 year. Patients were divided according to their pre-fracture mobility: low, medium, and high. Recovery was defined in two ways: "traditional definition" based on return to pre-fracture mobility, and "acceptable" based on ability to do stairs. Statistical analysis: Single-subject design approach for analyzing small samples was used to identify sources of variability in recovery over time.

Results: Some gaps in services received during hospitalization and at the time of discharge were: (i) 63% had a surgical delay > 48 hours; (ii) $> 75\%$ had inadequate osteoporosis management; and (iii) only 35% had a home visit within 1 week of

returning home. Using the traditional definition for recovery: 80%, 52%, 33% recovered from the low, medium, and high baseline groups, respectively; 40%, 43%, 33% maintained this recovery up to 1 year. Using the definition for acceptable recovery, 20%, 43%, 71% recovered, respectively, and 10%, 38%, 57% maintained the recovery. Patients generally lost functional improvement between 6–12 months, following waning of rehabilitation services.

Conclusion: Despite the plethora of guidelines specifically for osteoporosis management following hip fracture, gaps exist in care practices across the continuum. The extent of recovery depended on the definition however, after initial improvement, the majority of patients deteriorated after 6-months. A booster rehabilitation program is indicated.

Rising Tide, Grey Tsunami: Charting the History of a Dangerous Metaphor

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Language of the presentation: Eng

The language of aging is burdened with history. In this presentation, I consider "the grey tsunami": a charged metaphor that has been urgently deployed over the past decade

to describe the socio-economic threats posed by population aging. As a research associate in geriatric medicine and a PhD candidate in English Literature, I apply methods of literary analysis to interpret “the grey tsunami” as a timely example of interdisciplinarity’s darker side: specifically, how the overlapping language and textual practices of popular journalism, health policy, and literature co-operate to engender an ideologically-loaded, ageist metaphor masquerading as self-evident fact. My paper presents a concise and synthetic overview of the veiled meanings implied by “the grey tsunami” by conducting close readings of this term as recently employed by influential health agencies and organizations (e.g., CIHR, Alzheimer Society of Canada). I propose that the implications of this contemporary metaphor can be traced back to the mid-nineteenth century, when Western medical advances first made possible the reality of an aging population. I show that the deepest anxieties about population aging actually took shape in numerous poems and novels of that period—by esteemed authors including Matthew Arnold, Alfred Tennyson, Charles Dickens, and Anthony Trollope—which depicted society as morbidly “burdened” by an unprecedented, overwhelming, elderly mass. By charting the as-yet unexamined conceptual history of “the grey tsunami”, I aim to demonstrate how literature and the humanities—often viewed as a preventive measure against societal ageism—can also serve to legitimize prejudice toward older persons.

Frailty Identification in the Clinical Setting: Comparison of Two Models Among Community-Dwelling Seniors

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Language of the presentation: Eng

Background: Frailty is characterized by increased vulnerability for falls, fractures, institutionalization, and death. Several models for identifying frailty have been developed, including Fried’s widely accepted Frailty Phenotype Index (FPI). However, the FPI can be time-consuming and difficult to apply in clinical practice due to the requirement of hand grip and gait measurements. Alternatively, a nine-category Clinical Frailty Scale (CFS), ranging from 1 (“Very fit”) to 9 (“Severely Frail”), has been proposed based on clinical information and physical exam. The CFS, to date, has not been validated against the FPI. We aimed to test the agreement between the FPI and CFS in identifying seniors with frailty in the community.

Methods: 109 community-dwelling seniors, aged ≥ 75 , were classified as “not frail”, “pre-frail” or “frail” using the FPI. Subsequently, two clinicians, blinded from the first assessment, determined frailty status in each participant using the CFS and differences in scoring were resolved by consensus. Inter-rater reliability was assessed using kappa statistics. Gamma Correlation coefficients compared CFS frailty status to FPI components in individuals.

Results: Analysis of kappa statistics showed a substantial agreement among raters in applying the CFS ($\kappa = 0.76$, 95% CI = 0.68, 0.84). The CFS was positively correlated with an increasing number of FPI frailty components.

Care Gap in the Identification and Treatment of Fractures and Osteoporosis in Long-term Care: Baseline Data from the ViDOS Randomized Controlled Trial

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Objectives: The Vitamin D in Osteoporosis (ViDOS) study is a knowledge translation intervention to increase best practices for osteoporosis and fracture prevention in long-term care (LTC), particularly widespread use of vitamin D supplementation.

Methods: ViDOS is a cluster randomized controlled trial underway in 40 LTC homes (n = 19 intervention, n = 21 control) across Ontario, Canada. Using baseline data on demographic, medications, and disease conditions collected from the pharmacy database, we evaluated vitamin D and calcium use for all residents in the study, and bisphosphonate use in high-risk residents (documented osteoporosis and/or a prior hip fracture).

Results: 5,409 residents (71% women, mean age = 82.8 [SD 10.8]) were included. 87.5% of the homes are for-profit. The mean number of beds in the homes is 142 (range 43–378) with an average of six treating physicians per home. At baseline, 40% of all residents were taking Vitamin D (≥ 800 IU/day) and 33% were taking calcium (≥ 500 mg/day). Of 760 (14%)

residents with documented osteoporosis, 62% were taking vitamin D and 51% were on a bisphosphonate. Of 351 (6.5%) residents with documented hip fracture, 58% were taking vitamin D \geq 800 IU/day and 35% a bisphosphonate.

Conclusions: At baseline, 60% of residents were not taking adequate amounts of vitamin D. Vitamin D and bisphosphonate use was higher in high-risk residents but was still sub-optimal. Identification of osteoporosis and fractures is essential to initiating appropriate treatment and preventing future fractures. Our analysis revealed a care gap in the recognition of residents with osteoporosis and prevalent hip fracture.

Insulin Resistance Is Associated with Muscle Mass and Sources of Protein Intake in Elderly Participants of the Quebec Longitudinal Study on Nutrition and Aging (NuAge)

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Language of the presentation: Eng

Background: Aging is often associated with a gain in fat mass and loss of lean tissue, mainly muscle, which has been related to insulin resistance. Dietary protein intake is considered an easy approach to combat loss of muscle mass, but contrarily to plant source of proteins, animal proteins may increase the risk of insulin resistance.

Objective: To elucidate the complex interrelationships of dietary protein intake, muscle mass, and insulin resistance.

Methods: 441 non-diabetic, 68- to 82-year-old men and women of the Quebec Longitudinal Study NuAge with complete datasets. Muscle mass index (MMI; kg/height in m²) and percent body fat were derived from DXA and BIA. Insulin resistance was based on the HOMA-IR, physical activity on the PASE questionnaire, and protein intake and sources on three non-consecutive 24-h food recalls. Path analysis of a proposed model including age, sex, number of chronic diseases, and smoking served to identify if our theoretical causal pathway fitted with the data. Through several fit statistical indices, we attained a final model.

Results: Significant, direct positive associations were observed for HOMA-IR with MMI ($\beta = 0.42$; 95% CI: 0.24; 0.6) and % body fat ($\beta = 0.094$; 95% CI: 0.07; 0.11), and for physical activity with muscle mass ($\beta = 0.0028$; 95% CI: 0.001; 0.004), but not for animal protein intake with MMI ($\beta = 0.019$; 95% CI: -0.006; 0.044) or HOMA-IR ($\beta = 0.092$; 95% CI: -0.03; 0.048). Significant, direct negative associations were observed for plant protein intake with MMI only ($\beta = -0.068$; 95% CI: -0.13; -0.003), and for physical activity with fat mass ($\beta = -0.01$; 95% CI: -0.021; 0.0). Significant, indirect associations were observed negatively for plant protein (xb = -0.07; 95% CI: -0.1; 0.0), and positively for animal protein ($\beta = 0.0321$; 95% CI: 0.01; 0.05) with HOMA-IR mediated through MMI and fat mass. Our final model fitted with our data (Chi-Square = 4.83).

Conclusions: Interestingly and contrarily to expectations, muscle mass and HOMA-IR were positively associated in these elderly participants. Results suggest that plant protein is beneficial for reducing insulin resistance but at the expense of muscle mass loss, whereas the reverse stands for animal protein. Physical activity has significant beneficial effects in body composition. These findings can shed some light on the directions to promote healthy aging through optimization of protein diet and physical activity. (Supported by CIHR)

ORAL PRESENTATIONS – FELLOWS JACK MACDONELL AWARD COMPETITION

Vascular Risk Factors Predict Gait, Mood, and Executive Function Disturbances in People with Mild Cognitive Impairment. Results from the “Gait and Brain Study”

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Introduction: Mild cognitive impairment (MCI) is a heterogeneous condition affecting up to 40% of seniors. Almost a third with MCI will progress to dementia. Similarly, gait abnormalities, depressive symptoms, and executive dysfunction are commonly found in seniors, and this “triad” has been linked with brain ischemic lesions. To date, the presence of such a “triad” and its relationship with vascular risk factors (VRF) has not been described in MCI. We hypothesized that seniors with MCI who have high VRFs will be more

likely to exhibit the “triad” of gait abnormalities, depressive symptoms, and executive dysfunction.

Methods: Baseline data from 62 participants of the “Gait and Brain Study”, an ongoing prospective cohort of seniors with MCI at London, Ontario, was used for this project. Bi-annual assessments include executive function test (Clock Drawing and TMT B), quantitative gait analysis (velocity), and depression ratings (Geriatric Depression Scale), among other evaluations. VRFs were assessed at baseline using a modified Vascular Risk Factor Index which ranges from 1 to 7.

Results: Forty-four percent of the participants had at least one VRF. There was a significant association between the number of VRFs and the presence of the triad (MANOVA, $F(3,36) = 3.41, p = .025$, controlled for age and sex).

Conclusions: VRF were prevalent in our MCI cohort. VRFs were associated with the specified triad. A future prospective analysis of this cohort should elucidate causal mechanisms for this relationship. VRFs may play an important role in the development of cognitive, mobility, and mood dysfunction in people with MCI.

Characterizing Inappropriate Medications for Older Adults admitted to Acute Care for Elders (ACE) Units

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Language of the presentation: Eng

Background & Objectives: Various explicit criteria exist for determining potentially inappropriate medications in older adults such as the Beers criteria. Our objective was to determine the nature and frequency of potentially inappropriate medications for patients admitted to Acute Care for Elders (ACE) units using modified Beers criteria, and the association with adverse outcomes with respects to patient mortality, readmission within 30 days, and length of stay.

Methods: We prospectively studied consecutive patients 70 years or older admitted to the Acute Care for Elders (ACE) units at Vancouver General Hospital over two months. Detailed medication histories were obtained and outcomes data were tracked for each patient longitudinally.

Results: A total of 168 consecutive patients were screened and 67 provided informed consent. An average of 6.2 prescription medications was used per patient. Of the total number of

medications, 18 (7.4%) were deemed potentially inappropriate by modified Beers criteria, with 12 of 18 being considered to be of high severity for potential harm. For patients with Beers criteria medications, the median length of hospital stay was 15 days compared with 12 days in patients without Beers medications, despite similar frailty and co-morbidity indices. The mortality rate during hospitalization was 18.7% (3/16) among patients with Beer's medications versus 9.8% (11/51) among those without.

Conclusion: Inappropriate medications were used commonly in our cohort. Despite similar co-morbidity indices between groups, there was an association with a longer length of stay and increased mortality in patients with Beers criteria medications. Further outcomes-related studies are warranted to confirm the association we found.

Prevalence of Urinary Tract Infections in Elderly Delirious Patients

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Language of the presentation: Eng

Introduction: The management of delirium includes a search for underlying acute medical illnesses, which may include urinary cultures. However, guidelines recommend only treating bacteriuria in the elderly if accompanied by urinary symptoms. This is based on RCTs showing no benefit in morbidity, mortality, or chronic urinary incontinence with routine screening or treatment of asymptomatic bacteriuria, even in cognitively impaired individuals. The objectives of this study were to: (i) review the literature citing an association between urinary tract infections (UTIs) and delirium, and (ii) to look at the prevalence of treating asymptomatic UTI in a delirious medical in-patient population

Methods: A MEDLINE search was conducted using the MeSH terms ‘urinary tract infection’, ‘bacteriuria’ or ‘asymptomatic bacteriuria’ AND either ‘delirium’, ‘confusion’ or ‘altered mental status’. Inclusion criteria included English articles, age > 65, and not undergoing a urological procedure. Data were used from a previously conducted prospective observational study of CAM-diagnosed delirium in consecutive medical in-patients. Data on signs and symptoms of infection, urinary symptoms, and whether a UTI was treated were collected from participants’ medical charts.

Results: Studies (n = 65) relaying an association between delirium and UTIs were observational and lacked control

groups. Preliminary results showed out of 315 delirious patients, 44% were treated for UTI but only 26% of treated patients had symptoms of a UTI or signs of an infection.

Conclusions: Asymptomatic UTIs are often treated in delirious in-patients, despite a lack of good studies. This warrants further study.

Peri-operative Geriatric Outcomes in a Cohort of Older Adults Undergoing Transcatheter Aortic Valve Implantation (TAVI): a Retrospective Case-series Analysis

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Language of the presentation: Eng

Introduction: TAVI decreases mortality and morbidity in older patients who are deemed inoperable or at high risk for surgical aortic valve replacement. Premorbid functional status and rates of geriatric-specific postoperative complications have not been well described. This study aimed to clarify these issues.

Methods: Data collection occurred through the Division of Cardiology at St. Paul's Hospital in Vancouver, Canada. Information on activities of daily living (ADLs), instrumental activities of daily living (IADLs), clinical frailty score (CFS), timed up and go (TUG), and a mini-mental state examination were collected prospectively by a study nurse. Patient charts were reviewed for medical co-morbidities, cardiac-specific metrics, pre-specified delirium criteria, complications, and discharge disposition.

Results: Twenty-six cases were reviewed. The average patient age was 80 years and average Charlson Comorbidity Index score was 3.5. Despite the advanced age and presence of significant co-morbidities, the incidence of delirium was low at 8% (2/26), with only 15.5% (4/26) receiving psychotropic medications during the hospitalization. All patients with available functional data were independent for ADLs at baseline (18/18), with 89%

(16/18) requiring assistance with 2 IADLs or less. The mean scores on the CFS, TUG, and MMSE were 4, 12.8 seconds, and 27.9, respectively. Ninety-two percent (16/18) of patients were discharged home, with two patients going to a rehabilitation institution and eventually being discharged home.

Conclusion: Appropriately selected older adults, with the functional and cognitive attributes noted above, appear to tolerate this procedure very well from a geriatrics point of view. Studies involving larger patient populations are warranted.

Is Frailty Related to National Economic Indicators?

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Introduction: Socio-economic status is related to health both at the individual and country level. The health status of the older population of each country can be monitored by measuring its frailty status.

Objectives: To examine the relationship between the Frailty Index (FI) and national economic indicators.

Methods: 30,025 participants aged 50+ years (13,700 men, 16,325 women) from 12 countries (Austria, Belgium, Denmark, France, Germany, Greece, Israel, Italy, Netherlands, Spain, Sweden, Switzerland) which participated in the Survey of Health, Ageing and Retirement in Europe comprised the study sample. Following a standard procedure, an FI was constructed from 71 items. The economic indicators used for cross-country comparison were: gross domestic product (GDP), gross national income (GNI), health expenditure, and an inequality measure.

Results: Across countries, the mean FI increased with age and was higher in women. Between countries, the mean FI ranged from 0.11 (Switzerland) to 0.21 (Israel). GDP, GNI, and health expenditure were negatively correlated with both the mean ($r = \text{GDP } -0.85; \text{GNI } -0.86; \text{health expenditure } -0.86$).

ORAL PRESENTATIONS – MEDICAL STUDENTS
WILLARD & PHEBE THOMPSON AWARD COMPETITION

Impact of Cognitive Status on Quality of Care in Short-term Geriatric Care Units in Quebec

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Language of the presentation: Fr

Introduction : Des travaux réalisés dans différents milieux de soins suggèrent que les personnes âgées qui sont atteintes de troubles cognitifs reçoivent des soins de moins bonne qualité. À partir d'une étude primaire évaluant la qualité des processus de soins offerts dans les UCDG du Québec, nous avons voulu vérifier si celle-ci était influencée par le statut cognitif.

Matériel et méthode : Les dossiers médicaux de patients (n = 765) admis en UCDG (n = 44) pour une chute avec traumatisme ont été étudiés. Le statut cognitif des patients (sans atteinte, n = 276; atteint, n = 489) a été déterminé par un gériatre. Deux dimensions de la qualité des soins, soit la globalité et la continuité informationnelle, ont été évaluées en mesurant l'écart entre les activités retrouvées au dossier et celles incluses dans deux grilles standardisées reflétant une prise en charge de qualité selon des données probantes et le jugement clinique multidisciplinaire consensuel. Des analyses de régression multiniveaux ont été effectuées afin de déterminer l'impact du statut cognitif sur la qualité des soins.

Résultats : Les résultats pour la globalité des soins et la continuité informationnelle sont plus élevés chez les patients atteints (respectivement 4% (p < .001) et 2% (p = .054)). Ces dimensions de la qualité étant corrélées (Pearson, r = 0,391; p = .01), l'effet indépendant du statut cognitif sur la continuité n'est pas significatif.

Conclusion : Les professionnels de la santé œuvrant dans les UCDG dispensent un processus de soins de qualité égale ou même supérieure aux patients présentant des troubles cognitifs.

Barriers and Facilitators to Driving Research Participation in Persons with Mild Cognitive Impairment

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Background: In response to challenges to recruiting older adults with Mild Cognitive Impairment (MCI) into a longitudinal study of on-road driving performance, we explored barriers and facilitators to their participation in driving studies.

Methods: We conducted two focus group discussions with eight individuals with MCI. All participants held valid driver licenses and identified themselves as current drivers. The focus group discussions were audio recorded, transcribed, and analyzed according to standard qualitative coding techniques. Predominant themes were identified.

Results: Primary barriers to driving research participation included the potential for punitive outcomes associated with poor performance on study on-road driving tests (e.g., mandatory reporting to participants' physicians potentially leading to driver license removal), inherent biases associated with the on-road driving evaluation (e.g., inclusion of driving situations that the participant avoids), and a perceived lack of direct personal benefits. Research designs that offer participants with MCI the opportunity to receive training to improve their cognition, detailed feedback about their driving ability, and remediation for poor driving skills with an opportunity for an on-road re-test post-remediation were described as being facilitators of driving research participation.

Conclusions: Driving study research designs that include on-road driving assessments that can result in negative outcomes such as potential license loss will likely fail in terms of recruitment of participants if they do not incorporate important elements that facilitate participation. These include offering driving remediation and follow-up on-road assessments to monitor progress. Participant recruitment can be maximized when the possibility of perceived biased and/or punitive outcomes are removed altogether.

Assessing the Needs of Medical Students for the Development of an Undergraduate Geriatrics Selective at the University of Toronto (U of T)

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Background: The aging population challenges medical schools to improve geriatrics education to better prepare medical students for future practice. A fourth-year geriatrics selective was planned as part of developing a comprehensive four-year undergraduate geriatric curriculum based on the Canadian Geriatric Society (CGS) competencies.

Objectives: This survey aimed to identify medical students' preferred methods of learning and content, in order to design an optimum geriatrics selective.

Methods: All U of T medical students were invited to participate in an online survey consisting of 10 questions exploring preferred methods of teaching and content based on CGS competencies.

Results: The response rate was 14.2% (n = 134). Most responders were female (73%), and were first, second, and third year students (33.3%, 31.1%, 24.2%); 46.7% were interested in geriatric medicine; 66% expressed interest in taking this selective due to demographic imperative; 56.6% preferred a two-week selective. Students showed interest in learning from staff physicians (93%), residents (87%), and interdisciplinary teams (76%). Preference was for bedside clinical education (94%), while less interest was shown in seminars (44%) or a manual (52%); in contrast, students favoured online resources (76%). Content areas preferred by students were biology of aging (97.1%), cognitive impairment (94.3%), health-care planning (93.4%), and medication management (88.7%). Least interest was shown in urinary incontinence (72.8%), adverse events of medications (76%), and transitions of care (80.2%).

Conclusions: This survey provided insight into students' preferences regarding a geriatrics selective. Students preferred clinical bedside experiences, taught by experienced clinicians, supported by online resources, with identified preferences for certain key content areas.

Cognition and Functional Ability in Older Adults with Schizophrenia

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Objective: Cognitive deficits are among the strongest predictors of function in younger adults with schizophrenia. The objective of this study is to assess the extent to which cognition also predicts functional abilities in older adults with schizophrenia.

Methods: Community-dwelling individuals over the age of 50 who met DSM-IV TR criteria for a current diagnosis of schizophrenia (n = 76) and controls who did not meet criteria for a mental disorder (n = 34) were assessed with clinical interviews, neuropsychological tests, and functional measures. Cognitive ability was assessed using the MATRICS Consensus Cognitive Battery (MCCB). Functional competence was measured using the University of San Diego Performance Skills Assessment (UPSA), the Medication Management Ability Assessment (MMAA), the Performance Assessment of Self-Care Skills (PASS), and the Function and Disability Instrument (FDI). The schizophrenia and control groups were compared.

Results: Demographic and baseline clinical, cognitive, and functional characteristics are reported for participants with schizophrenia and controls. The mean number of years of education was lower in the schizophrenia group than the control group. Participants with schizophrenia scored higher than controls on all clinical measures: the Positive and Negative Symptoms Scale (PANSS), Abnormal Involuntary Movement Scale (AIMS), Cumulative Illness Rating Scale for Geriatrics (CIRS-G), Simpson Angus Scale (SAS), and Subjective Well-Being on Neuroleptic Medications (SWN). Participants with schizophrenia also scored lower on all cognitive and functional measures.

Conclusion: In future, analyses will be conducted to investigate relationships between cognitive and functional measures. Clinical measures will be controlled for as confounders to isolate the effect of cognition on real-life functional ability.

Does the Summer Institute in Geriatrics Influence the Career Choice of Future Physicians?

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Language of the presentation: Eng

Background: Since 1991, the Canadian Geriatrics Society has sponsored the biennial Summer Institute in Geriatrics (SIG) for Canadian medical students with the aim to improve awareness and encourage careers in geriatric medicine. However, the effectiveness of this program has not been evaluated. With recent fiscal constraints, it has been questioned whether there is ongoing merit in continuing the SIG. The objective of this study was to determine whether the SIG influences medical students to pursue careers in geriatric medicine, geriatric psychiatry, or care of the elderly and, if so, to what extent?

Method: Past SIG participants were contacted by mail and invited to complete a survey containing questions about participant demographics, motivation for attending the Institute, residency training, influence of the SIG on career choice, ultimate career choice, and its perceived overall value.

Results: Eighty-one physicians (54.4%) responded. Nineteen percent had current or planned careers in geriatrics disciplines, while 48% spent more than 50% of their time with adults over the age of 65. Seven participants are currently working as geriatricians, two as geriatric psychiatrists, and two as family doctors with care of the elderly training. Fifty-three percent were motivated to enroll in electives following the Institute, while 43% believed that the Institute influenced their career choice. All participants felt that the SIG improved their knowledge of geriatrics.

Conclusions: Participants of the SIG do go on to have careers in geriatric disciplines. Those that do not still gain valuable knowledge that may be applied to the care of older adults in other disciplines. Participants provided several suggestions for how the Institute could be more effective at influencing career choice.

Medication Regimen Reconciliation, Consolidation, and Simplification: New Approaches to Medication Management in the Elderly

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Language of the presentation: Eng

There are urgent calls for care models that address the unique needs of geriatric patients, who are typically managed with several medications. Multiple-medication treatment regimens present many challenges for health professionals and patients.

For health professionals, these challenges include those of reconciling the list of medications generated by multiple prescribers with the patient and often their caregiver(s) to ensure accuracy and completeness. For older patients, the challenges of understanding how to take multiple medications and the treatment burden imposed by complex medication regimens may result in poor adherence and poor health outcomes. Our objectives are to develop and assess new approaches to medication regimen reconciliation, consolidation, and simplification. Here, we present an interprofessional approach to medication reconciliation piloted in Project IMPACT (Interprofessional Model of Practice for Aging and Complex Treatments) for community-dwelling patients 65 years of age or older, with three or more chronic diseases and five or more long-term medications. A measure of medication regimen complexity (MRC), as the number of rules in the consolidated medication script, was also developed and validated in this study population. We present the protocol we developed for consolidating a medication list and reducing MRC, along with novel findings regarding the characteristics of medication regimens and associated issues for these older patients with multiple chronic conditions. These new approaches to medication management may be particularly useful in the person-centered care of the elderly.

Facilitators and Barriers of Transitional Care for Older Patients with Hip Fracture

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Language of the presentation: Eng

Transitions between health care settings are a high-risk period for care quality and threatened patient safety. This is especially significant for older persons with complex care needs, such as those with hip fracture or other musculoskeletal (MSK) disorders, as they often require care from multiple health professionals within and between care settings. To gain a better understanding of transitional care, we recruited older hip fracture patients from acute care and followed them as they moved through the health-care system. Participants were purposively sampled. At each transition, semi-structured interviews were conducted with the patients (N = 6) and members of their care network (N = 22). Transitions between hospital-based acute care and inpatient rehabilitation, as well as community-based home care and retirement living, were captured. Data were gathered and analyzed using a focused ethnographic approach. Facilitators and barriers of transitional care were identified from the perspective of patients,

as well as their formal and informal caregivers. Important areas of interest that emerged included: continuity of care surrounding shift work and team-based care, insufficient time on behalf of the health-care providers to adequately communicate with their patients and each other, the impact of cultural competency on interactions within the care network, proactive strategies utilized by informal caregivers, and using health records to facilitate communication. A number of practical strategies for promoting successful transitions were also recommended by the participants.

The Unintended Consequences of Room Changes on Hospitalized Elderly Patients

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Delirium is an acute confusional state characterized by inattention, disorganized thinking, and perceptual disturbances. Previous research has shown that hospitalized elderly patients on a general medicine ward were more likely to develop incident delirium if they had baseline cognitive impairment, vision impairment, dehydration, and/or severe illness. Environmental factors likely play a role in delirium development. The primary study objective was to determine if room changes are associated with an increased incidence of delirium per patient days in elderly patients on a general medicine ward after controlling for baseline risk factors. Secondary objectives were (1) to determine if room changes increase the length of delirium in patients who had delirium at admission, (2) to determine if room changes increase length of hospital stay, and (3) to determine if bed-spacing and room characteristics affect these outcomes. Our study sample consists of patients 70 years of age or older who were admitted to the general medicine service at St. Michael's Hospital between October 2009 and September 2010. A total of 1,384 patients met these criteria. A validated chart abstract abstraction technique was used to identify patients with delirium, and Decision Support data was used to identify room changes and bed spacing. So far, 1,354 patient charts have been abstracted. A total of 388 patients (28.7%) had delirium at admission, and 140 (14.5%) of the remaining patients developed delirium during their first week of hospital stay. We are expecting to complete data abstraction and analysis by the end of February 2012.

Are There Differences in Home-care Quality Between Women and Men?

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Language of the presentation: Eng

Background: Women comprise the majority of the older population and have a greater burden of illness compared to men. This is evident in the home-care setting, where necessary services are provided to community-dwelling older adults. Whether the quality of these services differs between genders has not been examined.

Objective: To determine if there are gender differences in home-care quality received by older individuals in Ontario and whether variations exist across planning regions.

Methods: Retrospective cohort study using data from the Home Care Reporting System database using the RAI-HC Instrument. Study population: 119,795 Ontario home-care clients 65+ years receiving government-funded services from April 2009—March 2010. Home-care quality was assessed using validated indicators and risk-adjusted models developed by interRAI for decline in activities of daily living (ADL), cognitive decline, depressive symptoms, and pain control. For each indicator, unadjusted and risk-adjusted rates were calculated and stratified by gender.

Results: All unadjusted quality indicators suggested gender differences. After risk-adjustment, 45.7% of women and 44% of men reported decline in ADLs; 50.8% of women and 50.5% of men reported cognitive decline; 11.9% of women and 11% of men reported depressive symptoms; 21.2% of women and 21.6% of men reported inadequate pain control. Rates varied 1.3- to 3.0-fold across planning regions after risk-adjustment.

Conclusions: After risk-adjustment, no important gender differences exist in home-care quality. Differences in unadjusted rates between genders illustrate differences in health status and care needs. Regional variations in care quality across planning regions illustrate opportunities for improvement.

A Systematic Review of Home-based Primary Care Programs

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Language of the presentation: Eng

Background: In Canada, 93% of older adults live at home and a substantial proportion of this population has complex and inter-related health and social problems. This sometimes renders them frail and homebound and poorly-served by predominantly office-based primary care delivery models. Several comprehensive and ongoing home-based primary care models have emerged internationally in order to address access-to-care deficiencies, postpone adverse health trajectories, and reduce overall costs for homebound elders.

Objective: To identify the successful operational components of home-based primary care programs.

Methods: We completed a systematic review of studies investigating home-based primary care programs for community-dwelling older adults that measured at least one of: hospitalizations, emergency department visits or long-term care admissions as an outcome of their intervention. Using the Cochrane, PubMed, and MEDLINE databases, 322 articles were identified and seven met our criteria for review.

Results: The seven reviewed interventions were all based in the United States, with four emerging from the Veteran Affairs System. All seven programs demonstrated substantial effect on at least one of our inclusion outcomes, with four programs effecting two outcomes. All interventions were characterized by three common design principles: 1) house calls are made by the ongoing primary care provider, 2) the primary care provider leads an interprofessional care team, and 3) the program provides after-hours support.

Conclusion: Specifically designed home-based primary care programs can substantially affect patient, caregiver, and systems outcomes. Adherence to the core design principles identified in this review could help guide the development and spread of these programs in Canada.

RÉJEAN-HÉBERT AWARD – RESIDENTS

Analysis of the Health and Functional Status of Older Cancer Patients Referred to a Geriatric Oncology Clinic

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Language of the presentation: Eng

Introduction: In Canada, 42% of cancer incidence and 59% of cancer mortality occur in persons aged ≥ 70 years. It has been reported that cancer is often under-treated in older patients due to co-morbidities, impaired functional status, and treatment toxicity.

Objectives: The purpose of this ongoing study is to: 1) describe the health and functional status of the patient population referred to our Geriatric Oncology clinic, and 2) explore the reasons for referral and recommendations made.

Methods: A chart review was conducted of 107 randomly selected patients who were seen in our clinic between 2006 and 2011. Data pertaining to demographic information, health, and functional status from the first visit were collected in a SPSS database. Health and functional status were

assessed according to our Comprehensive Geriatric Oncology assessment consisting of co-morbidities, medications, functional status (ADLs, IADLs, ECOG), social support, cognition (MMSE Folstein, Montreal Cognitive Assessment test-MOCA), mood (Geriatric Depression Scale), mobility, nutritional status, and strength (grip strength by dynamometer). Descriptive techniques such as frequencies, means, and proportions were used for the statistical analysis.

Results: In our sample of patients, lung, breast, and gynecological malignancies were the most common tumour sites. Average age of patients seen was 79 years old, and the majority of patients were referred for cognitive impairment (50.5%) and opinion on treatment plan (34.6%). As a result of our evaluations, we have uncovered and addressed previously undetected problems, such as mild cognitive impairment, dementia, polypharmacy, and mood disorders.

Preventing Cognitive Decline: A Systematic Review

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Language of the presentation: Eng

Background: Given the growing proportion of older people, the prevention of cognitive decline is an important issue for patients, clinicians, and policy makers. There is significant interest in finding the “magic bullet” which will keep us cognitively intact for as long as possible.

Objective: To complete a systematic review of the literature to determine the effectiveness of pharmacological therapies for preventing cognitive decline in healthy older adults and in those older adults with mild cognitive impairment.

Methods: We searched Medline, EMBASE, and the Cochrane Central Register of Controlled Trials from date of onset to August 2011. No restrictions were placed on date of publication. Publications were excluded if they were not randomized control trials or systematic reviews, were not

examining older adults (age > 65) with normal cognition or mild cognitive impairment, if they did not list adverse outcomes of their interventions, or if they were published in a language other than English. Two investigators independently completed study selection, quality assessment, and data abstraction. Quality assessment of articles was conducted using Cochrane Risk of Bias. Our initial search yielded 3,882 potential articles. An abstract review by two independent reviewers narrowed search results to 226 articles that met inclusion criteria. Further assessment of full-text articles resulted in 45 articles for data abstraction and analysis. Data synthesis is underway and will be completed by April 2012.

Conclusions: While final results of the systematic review are currently pending, it is evident from our preliminary results that there are very few high-quality studies that demonstrate any successful interventions to prevent cognitive decline in older adults.

POSTER PRESENTATIONS AT THE 32ND ANNUAL SCIENTIFIC MEETING OF THE CANADIAN GERIATRICS SOCIETY

[01] Review of the Utilisation of Radiotherapy in Nonagenarian Patients

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Language of the presentation: Eng

Purpose: Few data are available regarding the utilisation of radiation therapy in patients aged 90 years and over. This study examines the utilisation of radiotherapy in this population.

Methods: The clinical records of every nonagenarian referred at the Department of Radiation Oncology, CHUQ - L'Hôtel-Dieu de Québec, between April 1, 2010 and March 31, were retrospectively reviewed.

Results: Twenty-five nonagenarian patients with median age of 92 were seen in consultation. The majority had skin or rectal cancer. The tumors were early stage in seven patients, locoregionally advanced in five, recurrent in two and systemic in eleven. Six patients received radiation at more than one sites. 92% had their cancer pathologically proven and most of them in the same year as their referral in radiation oncology. Nine patients had a previous oncological surgery and none received chemotherapy. The intent of radiation treatment was definitive in six patients. Five treatments were not completed as planned. Polypharmacy, comorbidities, and dependence level for ADL and IADL were usually mentioned in the consultation report. Other geriatrics syndroms such as history

of fall, cognitive impairments, depression or delirium were less frequently mentioned. Half of patients had a follow-up visit. Five patients had a complete response and nine had a partial response. Only five patients had toxicity; low grade dermatitis or diarrhea. Nine deaths occurred, at a median time of two months.

Conclusions: The current review showed that radiation therapy can be feasible and tolerable in nonagenarians. When applicable, definitive radiation therapy should also be considered.

[02] Exploring Geriatric Teaching on Internal Medicine Teaching Units: Are We Rationing Geriatrics Out of the Curriculum?

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Background: Despite a looming demographic imperative, clinical rotations in geriatrics are not mandatory in North American undergraduate medical training. This is based on

the rationing premise that, given curriculum time pressures, medical students can acquire geriatric competencies in clinical rotations with a significant number of older patients. We explored the clinical and teaching discussions regarding older patients on one such unit, the Internal Medicine Clinical Teaching Unit (CTU).

Methods: Focusing on the admission case review and discharge summary, we asked: 1) What medical issues are emphasized when the CTU team cares for older patients? and 2) What geriatric core competencies are addressed? Using a multiple case study approach, over two separate 8-week periods we collected 19 cases of patients admitted to one of three CTUs. Case materials included transcripts of audio-recorded case reviews and de-identified patient discharge summaries.

Results: 15 of the 19 patients were aged >65; these underwent inductive analysis for issues emphasized during review, and deductive analysis for geriatric content that could have been discussed according to Canadian undergraduate geriatric core competencies. Discussions focused narrowly on the patient's chief complaint and the interpretation/correction of abnormal lab values. References to geriatric core competencies were infrequent, as was teaching regarding geriatric issues.

Conclusion: While trainees regularly encounter patients with geriatric issues on CTU, these issues are rarely emphasized during case review. Similar findings are likely on other rotations where older patients are cared for, calling into question the suitability of current curricular rationing decisions pertaining to geriatrics teaching.

[03] The Rural Geriatric Glue

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Language of the presentation: Eng

Our health care system exists in “silos” of functions and services carefully marking out turfs. Patient safety, quality of experience, and consistent positive clinical outcomes will remain challenged in this fragmented system. Communication between the various system segments is often poor and creates confusion leading to mistakes and threatens consistency of care, especially for the most complex and vulnerable – our seniors. The North Perth Family Health Team, Listowel, Ontario serving a population of approximately 17,000 has created a model to support seniors and families with navigation and transition from sector to sector. A Nurse

Practitioner, with specialized geriatric education, works closely with primary care physicians, consulting geriatrician, hospital, community agencies, and retirement homes by providing assessments where the senior is located. Regular visits are made to the local retirement homes every two weeks, the hospital weekly, a geriatric clinic with the consulting geriatrician monthly, and office and home visits as needed. Education is provided concurrently with these services, as part of chronic disease management. The patients' electronic health record can be accessed in all of these settings to ensure that information is not duplicated and that documentation and communication can occur efficiently. This model of providing Complex Geriatric Care can be easily replicated in small Rural communities for enhanced efficiencies and concerted patient care.

[04] Gait Variability is an Independent Marker of Frailty in Community Dwelling Older Adults

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Background: Gait velocity is a strong identifier of physical frailty. However, it has been postulated that gait variability can be more sensitive to subtle impairments and may help in early frailty detection. Gait variability measures gait regulation, and high variability predicts falls, fractures, and cognitive decline even when gait velocity failed to do so. Thus, high gait variability may reflect an increased vulnerability in early stages before frailty is complete manifested. Associations of gait variability with frailty models which do not use gait velocity as a frailty component, have yet to be determined.

Methods: Our sample included 106 community-dwelling older adults, aged ≥75. Frailty status was assessed using the 9-category Clinical Frailty Scale (CFS), a validated model which does not include the gait velocity criterion in identifying frailty. Quantitative gait variables were assessed under “usual” and “fast” pace using an electronic walkway. Linear regression analysis evaluated association between CFS levels and gait variability.

Results: Frailty status ranged from 1 (“Very Fit”) through 6 (“Moderately Frail”). Increased frailty status was significantly associated with higher variability in stride length ($p=0.023$), stride width ($p=0.015$) at usual pace; and, higher variability in stride time ($p=0.001$), stride length ($p=0.017$) and stride width ($p=0.019$) at fast pace.

Conclusion: High gait variability in several gait parameters is associated with frailty, even at early stages. Our findings help to explain the high vulnerability and risk of falls and fractures in community seniors with pre-frail and frailty status.

[05] The Role of Support Services in Promoting Social Inclusion for the Disadvantaged Urban-dwelling Elderly

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Language of the presentation: Eng

Background: Disadvantaged seniors living in non-family situations in Toronto are more likely than seniors living in family situations to have less economic security, less social support, and less choice in housing. Seniors who live in poverty, and are precariously housed, are more likely to be chronically ill, to live with multiple illnesses, to have poor nutrition, high stress and loneliness, all of which are strongly associated with the determinant of health social exclusion.

Methods: To understand how support services for income, housing, food security, social support, and health care mitigate the effects of social exclusion, we interviewed 15 male seniors at the Good Neighbours Club in downtown Toronto. The semi-structured interview is designed to assess barriers to, utility of, and perceived impact of support services available to disadvantaged seniors living in the central core of Southeast Toronto.

Conclusion: Results suggest support services play a vital role in not only mitigating the effects of social exclusion, support services reduce the level of social isolation experienced by these seniors.

[06] A New Computerized Individualized Interdisciplinary Intervention Plan for Geriatric Assessment Units

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Language of the presentation: Fr

Background: Considering the psychosocial factors at play, the management of elderly patients requires an interdisciplinary

approach centered on the patient and his/her caregivers. An effective communication between the professionals is nevertheless an important asset in the client's management. The Individualized Interdisciplinary Intervention Plan (IIIP) is a tool aimed at documenting and communicating information discussed during team meetings. Optimization of the IIIP is necessary to facilitate access to its information, to respect confidentiality and to integrate with existing computerized system.

Objectives: To devise a computerized IIIP intent on optimizing quality of care and access to patient information.

Methods: Modification of the pre-existing IIIP was done based on literature review, integration of the geriatric vital signs (AINÉES), the OPTIMAH (OPTimisation des soins aux personnes Âgées à l'Hôpital) approach, and training in Project management using the Interprofessional Collaborative Approach. A demo session with team members of the two geriatric assessment units was organized prior to conducting a 6-month trial. A survey was created in order to gather feedback from users in both units.

Results: An updated version of the IIIP was developed. Analysis of the survey is underway and the tool will be modified accordingly.

Conclusions: The updated version of the computerized IIIP assures optimal management of elderly hospitalized patients and their caregivers. Not only is the IIIP accessible and easily integrated in existing computerized system, but it also respects the confidentiality code of conduct. It allows effective communication between interprofessional team members during current or future hospital stays, which is at the core of quality care.

[07] The Association Between Glucocorticoid Use and New Osteoporotic Fractures Over a 10-year Period: The Canadian Multicentre Osteoporosis Study (Camos)

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Objective: To study the long-term effects of glucocorticoids (GC) on fracture risk. Design: CaMos is an ongoing 10 year prospective cohort study. Population: Age and sex matched Canadian population who are non-institutionalized individuals and reside in nine CaMos study centers.

Methods: Data from 2819 men and 6444 women were classified as current GC users and non-users. New fractures

based on self-reports from an annually completed questionnaire included vertebral, hip, other (excluding hip, vertebral, toes, fingers, skull fractures) and any fracture (excluding toes, fingers, skull fractures). Multivariable survival analyses were conducted to examine the association between the time to new fracture and GC use. Hazard ratios and 95% confidence intervals (CI) were calculated.

Results: The mean age, femoral neck T-score (standard deviation) and GC use at baseline of the cohort was 62.0 (13.3), -1.07 (1.03), and 128 (1.4%), respectively. During the 10-year period, 130 (1.4%), 157 (1.7%), 869 (9.7%) and 1102 (11.9%) individuals developed a new osteoporotic vertebral, hip, other and any fracture. Ever taking GC for a minimum of one month in both men and women had a hazard ratio of 1.4 (95% CI: 1.0-1.8), 1.9 (95% CI: 1.0-3.6), 0.97 (95% CI: 0.4-2.2), 1.2 (95% CI: 0.9-1.6) for developing a new non-spine, hip, spine and any fracture as compared to those who never took GC, respectively.

Conclusions: CaMos is the first prospective long-term study with data over 10 years showing that GC use is associated with higher incident fragility fractures.

[08] Vitamin D Debate: Do the Guidelines 'Work' for Frail Older Adults?

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Introduction: Vitamin D is important in the management of osteoporosis and falls. Current Canadian guidelines recommend empiric supplementation (≥ 800 IU/day) for older adults. Before guideline publication, it was our practice to measure serum 25-hydroxyvitamin D levels (Vitamin D levels) on the first visit to our specialized falls clinic, serving adults aged ≥ 65 years. The extent to which this population would be undertreated by following the guidelines and delaying testing for 3-4 months after supplementation is currently not known.

Methods: In this retrospective cross-sectional study, we determined the clinical benefit of a strategy of pre-emptive measurement of vitamin D levels. Chart reviews were conducted for 121 patients seen in the St. Paul's Hospital Falls Clinic between January 2009 to November 2011. Baseline data, including fall risk, medications & supplements, laboratory testing and performance measures, were recorded.

Results: 43 patients (35.2%) were taking ≥ 800 IU of daily Vitamin D at their initial visit. Of the 94 patients who had Vitamin D levels measured, the average level was 80.4 nmol/L. Only 42 patients (44.7%) had sufficient Vitamin D levels (> 75 nmol/L). Testing led to recommendations for dose adjustment for insufficient levels among 13 patients (13.8%), 5 of whom were previously on guideline-based supplementation doses.

Conclusions: Many falls clinic patients are not taking adequate doses of Vitamin D and less than half of these patients have sufficient vitamin D levels. Preemptive testing led to correcting vitamin D insufficiency among a nearly 15% of patients in this high-risk population.

[09] Are Delirium and Dysphagia Associated? Is There an Effect on Swallowing? Two Case Studies

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Language of the presentation: Eng

Purpose: We present 2 case reports suggesting a possible association between delirium and swallowing deficits (or dysphagia) in older hospitalized adults.

Method(s): Patient 1, a 96-year-old man, was previously highly functional without cognitive problems. He was admitted with pneumonia and developed delirium and new-onset dysphagia. Despite treatment of the patient's pneumonia, the delirium was slow to recover, as was his dysphagia. Patient 2, a 78-year-old man with a history of dementia (likely alcohol related), was admitted with a fall and fractured humerus. The patient developed delirium and dysphagia while in hospital. Despite the patient's persistent cognitive problems due to dementia, both his delirium and dysphagia resolved.

Results: Both cases describe older adults with acute and chronic medical issues, delirium and dysphagia. In one case, persistence of delirium occurred concurrently with persistence of dysphagia, and, in the second case, improvement of dysphagia was associated with improved delirium symptoms.

Conclusion: Delirium is a frequent problem for older hospitalized adults and is associated with a number of adverse outcomes as well as rising health-care expenditures. A potential association between delirium and dysphagia may be a very important consideration in the assessment, treatment, and prognoses of dysphagia. Although prior studies have reported associations between impaired ability to do activities of daily living and persistent delirium,

a possible association between delirium and functional swallowing has not previously been reported. Further research into the relationship between delirium and swallowing deficits is necessary.

[10] The Somatic Substrate for Slower Gait Speed in Older Adults With MCI: a Brain Mapping Study

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Background: Slower gait is an early sign of cognitive decline in older adults. No studies have examined yet the brain morphometric substrate for slower gait in MCI. The purpose of this cross-sectional study was to determine whether gait speed was associated with lateral cerebral ventricle volume (LCVV), a measure of brain atrophy, and white matter lesions (WML) among older adults with MCI.

Methods: Twenty community-dwellers with MCI, free of hydrocephalus, aged 76years [69/80] (median[25th/75th percentile]) (35% female) from the 'Gait & Brain cohort study' were included in this analysis. Gait speed was measured at usual pace with a 6 m electronic portable walkway (GAITRite). LCVV was quantified using semi-automated software from three-dimensional T1-weighted Magnetic Resonance Images. WML were visually rated on a 10-point scale from 0 to 9 (worst), and coded severe if grade was ≥ 2 . LCVV, severe WML and age were used as covariables.

Results: Median gait speed was 118.7 cm/s [104.4/131.3], and LCVV 39.9 mL [30.0/46.6] with no difference between right and left ventricles ($p=0.052$). Thirteen subjects (65%) had severe WML. Severe WML was associated with decreased gait speed (adjusted $\beta=-17.94$ [95CI:-35.71;-0.16], $p=0.048$). LCVV was also inversely linearly associated with gait speed (adjusted $\beta=-0.62$ [95CI:-1.21;-0.03], $p=0.041$). More specifically, the enlargement of the left ventricle, unlike the right one, inversely correlated with decreased gait speed ($p=0.002$ and $p=0.068$, respectively).

Conclusions: This study shows for the first time slower gait speed is associated with severe WML burden and left lateral ventricle enlargement in MCI, suggesting involvement of impaired sequential thinking in slowing gait during the early stages of dementia.

[11] Age Related Variations in the Prevalence of Hip Fracture Risk Factors

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Language of the presentation: Eng

Background: The predictive significance of hip fracture risk factors has been variably reported. This may at least in part be due to the effects of age.

Objective: To determine the prevalence of validated risk factors for hip fracture in a relatively younger (60–80 years) and older (over 80 years) female age cohorts.

Methods: Consecutive admissions of Caucasian females aged over 60 years presenting with the 1st osteoporotic hip fracture during a 24-month period were prospectively assessed. A group comparison was undertaken for the clinical risk factors used in the FRAX calculator, falls within 12 months, use of gait aid, dementia, neuromuscular disorders, usual residence, serum 25 (OH) D, current use of benzodiazepine and other baseline descriptive characteristics.

Results: There were 83 and 90 patients in the 'younger' and 'older' age cohorts, respectively. Patients >80 yrs were more likely to have suffered a fall (57%, $p=0.001$), to use a gait aid (59%, $p=0.001$) and live in a hostel (28%, $p=0.01$). The prevalence of secondary causes of osteoporosis was greater (19%, $p=0.048$) in the younger age cohort. There were no group differences for other risk factors. However, over 50% in each age cohort had a prior history of fracture and the mean 25 (OH) D in the younger and older age cohorts were 38+16.6 nmols/l and 34+18.6 nmols/l, respectively.

Conclusion: The findings may have implications for the validity of fracture risk assessment tools that do not incorporate falls and/or other age associated hip fracture risk factors for stratifying hip fracture risk in the very old.

[12] An Extended Exercise Rehabilitation Program Post-hip Fracture Improves Patients' Physical Functioning: a Systematic Review and Meta-analysis

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Language of the presentation: Eng

Background: Although the principle goal of hip fracture management is a return to pre-event functional level, most survivors fail to regain their former autonomy. One of the most effective strategies to mitigate the fracture's consequences is exercise.

Purpose: To review the reported effect of an extended exercise rehabilitation program offered beyond the regular rehabilitation period on improving physical functioning for patients with hip fractures.

Methods: Sources: The Cochrane Bone, Joint and Muscle Trauma Group, the Cochrane Central, PubMed, CINAHL, PEDro, EMBASE, and reference lists of articles were searched from inception to October, 2010. Study Selection: Included were all randomized controlled trials comparing extended exercise programs to usual care for community dwelling after hip fracture. Data Extraction and Synthesis: Two reviewers conducted each step independently. The data from included studies were summarized and then pooled estimates were calculated for nine functional outcomes.

Results: Ten articles were included in the review and eight in the meta-analysis. The extended exercise program showed small-modest effect sizes which reached significance for knee-extension strength for affected and non-affected sides 0.46 (CI 95%: 0.2-0.6) and 0.45 (CI 95%: 0.16-0.74), respectively, balance 0.29 (CI 95%: 0.7-0.51), fast gait speed 0.52 (CI 95%: 0.18-0.85 $p=0.002$), and physical performance-based tests 0.53 (CI 95%: 0.27-0.78).

Conclusions: To our knowledge this is the first meta-analysis to provide evidence that an extended exercise rehabilitation program for patients with hip fractures has a significant impact on various functional abilities. The focus of future research should go beyond just effectiveness and study cost-effectiveness of extended programs.

[13] The Relationship Between Accelerometer-based Measures of Sedentary Behavior and Cardiometabolic Risk Factors in Active Community-dwelling Older Adults

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Language of the presentation: Eng

Background: Sedentary behavior has been proposed as an independent cardiometabolic risk factor even in adults who are otherwise physically active through leisure-time recreational activities. Because little is known about the metabolic effects of sedentary behavior in seniors, we examined the relationship between sedentary behavior and cardiometabolic risk in physically active older adults.

Methods: Enrollment is underway with 19/50 projected subjects currently included (mean age 73.1 years). Subjects were in good health and free of known diabetes. Activity levels were recorded with accelerometers worn continuously for 7 days. Blood pressure, waist circumference, body mass index (BMI), fasting glucose, lipids, HgbA1C and 2hr glucose tolerance were measured.

Results: Time engaged in sedentary behavior was strongly positively correlated with triglycerides and BMI. Average amount of steps taken per day was strongly positively and negatively correlated to HDL and BMI respectively. All subjects met Canada Health guidelines for an active "fit" adult.

Conclusion: Sedentary behavior is associated with adverse metabolic parameters in older adults, even those who are otherwise physically active and meet Canada Health guidelines for an active "fit" adult. Emphasizing activities that accumulate steps (eg: walking, light housework) may be a practical recommendation to reduce sedentary behavior in older adults.

[14] Mild Cognitive Impairment in Older Heart Failure Patients at Hospital Discharge and its impact on Self-care

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Language of the presentation: Eng

Background: Despite the importance of self-care, evidence suggests that people with heart failure (HF) do not consistently engage in such behaviours. One possible reason for poor self-care may be the presence of underlying and undetected mild cognitive deficits (MCD)

Objective: This study is prospectively evaluating whether MCD measured with the MoCA in HF patients aged ≥ 60 years

at hospital discharge is associated with impaired ability to self-care (measured with the Self-Care Heart Failure Index (SCHFI – 3 subscales: self-maintenance, self-management, self-confidence).

Methods: Exclusion criteria: no caregiver, not English speaking, living in a long term care (LTC) facility, documented cognitive impairment, visual or hearing impairment, or life expectancy.

[15] Evaluation of Older Adults with a Diagnosis of Failure to Thrive

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Language of the presentation: Eng

Background: Failure to thrive (FTT) does not have an universally agreed definition in adults but is often used to describe a syndrome of global decline that occurs as an aggregate of frailty, cognitive impairment, and functional disability. The aim of this project was to better understand this population in an attempt to improve diagnosis and management.

Objective: To explore characteristics and medical investigations commonly conducted among older adults with a diagnosis of FTT.

Methods: Part 1: We searched Medline (Pubmed), Embase, and Cochrane databases from 1948 until 2011. Two investigators independently reviewed citations and then full-text articles. Inclusion criteria included published in English, population aged 65 or over, contained primary data, not a case report or case series. A summary of data was created and meta-analysis determined inappropriate. Part 2: Data from the local acute care electronic medical record for patients 65 years or older admitted with a diagnosis of FTT from January 2010 to January 2011 were reviewed. Several variables were analyzed that explored investigations in hospital.

Results: The systematic review identified 62 citations. 46 full text articles were reviewed. 6 articles met inclusion criteria. All the 6 articles were cohort studies of small size. The local data revealed a cohort of 603 patients ranging in age from 65 to 104 years. The length of hospital stay varied from 0 to 106 days. Extensive investigations were ordered including CT, Echo and Ultrasound. A variety of medical specialists and allied health professionals were consulted during the patients' hospitalizations.

[16] Frailty in Relation to the Risk of Falls, Fractures, and Mortality in Older Chinese Adults: Results from the Beijing Longitudinal Study of Aging

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Objectives: Falls are well recognized to be associated with adverse health outcomes, especially when complicated by fracture. Falls are also more common in people who are frail and readily related to several items in the frailty phenotype. Less is known about the relationship between falls and frailty defined as deficits accumulation. Our objective was to investigate the relationship between falls, fractures, and frailty based on deficit accumulation.

Methods: Design: Representative elderly cohort study with over 8 years of follow-up on mortality, recurrence falls and fractures. Setting: The Beijing Longitudinal Study of Aging (BLSA). Participants: 3257 Chinese people aged 55+ years at baseline. Measurements: A frailty index (FI) based on the accumulation of health deficits was constructed using 33 deficits, excluding falls and fractures. The rates of falls, fractures and death as a function of age and the level of FI were analyzed. Multivariable models evaluated the relationships between frailty and the risk of recurrent falls, fractures, and mortality adjusting for age, sex, and education. Self or informant reported fall and fracture data were verified against participants' health records.

Results: Of 3,257 participants at baseline (1992), 360 (11.1%) people reported a history of falls, and 238 (7.3%) people reported a history of fractures. 1155 people died over the eight-year follow-up. The FI was associated with an increased risk of recurrence falls (OR=1.54; 95% confidence interval (CI)=1.34-1.76), fractures (OR=1.07; 95% CI=0.94-1.22), and death (OR=1.50, 95% CI=1.41-1.60). The FI showed a significant effect on the proportional hazards in a multivariate Cox regression model (HR=1.29, 95% CI=1.25-1.33). When adjusted for the FI, neither falls nor fractures were associated with mortality.

Conclusion: Falls and fractures were common in older Chinese adults, and associated with frailty. Only frailty was independently associated with death.

[17] A Pilot Study of the Evaluation of QOL in Women Following Robotic Surgery for Endometrial Cancer

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Language of the presentation: Eng

Purpose: The primary purpose of this pilot study is to prospectively gather and evaluate patient characteristics, surgical outcomes and quality of life (QOL) outcomes of women with endometrial cancer undergoing robotic-assisted surgery.

Methods: An unselected cohort of endometrial cancer patients, medically competent from the Jewish General Hospital were approached and offered robotic surgery. The da Vinci® Surgical System was used for the surgery.

Results: From December 2007 to December 2009, 109 women underwent robotic-assisted surgery for their endometrial cancer. 68 women were under 70 years old and 41 were 70 years or older. 45 (69.2%) women under 70 experienced a post-operative pain level of 1 on a 7-point scale at one week post-surgery compared to 19 (48.7%) women 70 and older, $p=0.037$. At 3 weeks this trend persisted 47 (71.2%) compared to 20 (50.0%), $p=0.028$ respectively. 30 (46.2%) women under 70 experienced unusual urinary symptoms post-operatively compared to only 10 (25.6%) women 70 and older, $\chi^2(1)=4.33$, $p=0.037$. There was a significant effect of age on number of days required to resume typical activities. Older women resumed more rapidly to regular activities (8.4) than younger women (12.9), $F(1, 87)=4.78$, $p=0.031$.

Conclusions: Elderly women undergoing robotic-assisted surgery for endometrial cancer experience less post-operative pain, less urinary symptoms and resume to their typical activities faster than younger women.

[18] Framework of the Approach Adapted to the Elderly in a Hospital Setting

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Language of the presentation: Fr

Introduction : Les personnes âgées constituent une part toujours croissante de la population ayant recours aux hôpitaux. Haut lieu de technicité, le système hospitalier n'a pas été conçu en ayant en perspective les besoins spécifiques de cette clientèle. Les données s'accumulent pour démontrer que l'hôpital contribue souvent à une détérioration de leur état de santé par des modes de pratique mal adaptés. Les modèles de processus de soins efficaces existent mais ne sont pas appliqués.

Objectif : Présenter le contenu du document : Cadre de référence sur l'Approche adaptée à la personne âgée en milieu hospitalier. Cet ouvrage sensibilise, guide et outille le personnel clinique et administratif des centres hospitaliers dans une démarche rigoureuse visant à prévenir le déclin fonctionnel iatrogène par des actions de prévention systématiques, individualisées et hiérarchisées.

Méthodes : Une équipe de professionnels expérimentés s'est penchée sur cette problématique et propose des façons d'améliorer la qualité du séjour et des soins offerts aux personnes âgées en milieu hospitalier. Résultats : Le sujet est traité sous l'angle de la prévention et d'une meilleure gestion du delirium et du syndrome d'immobilisation. Un algorithme de soins cliniques est proposé dès l'arrivée, selon des interventions en paliers, déterminées par la condition physique initiale et la vulnérabilité face au système hospitalier. On propose des principes directeurs pour les organisations, des outils cliniques et d'implantation ainsi que des indicateurs de résultat.

Conclusion : Le réseau hospitalier doit revoir en profondeur son fonctionnement afin de répondre adéquatement et sans délai aux besoins diversifiés des personnes âgées.

[19] Clinical Tools of the Approach Adapted to the Elderly in a Hospital Setting

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Introduction : Le cadre de référence « Approche adaptée à la personne âgée en milieu hospitalier » est assorti d'outils cliniques pour faciliter son application. Ces fiches cliniques opérationnalisent la démarche clinique structurée et hiérarchisée de l'approche adaptée.

Objectif : Présenter le contenu des 10 fiches théoriques et pratiques organisées selon trois paliers d'évaluation et d'interventions : systématiques et préventives, spécifiques et spécialisées, et traité sous trois angles : physique, psycho-social, environnement.

Méthodes : Les fiches ont été rédigées par des cliniciens praticiens et enseignants d'expérience. Des experts de contenu ont été associés à la révision des fiches de même qu'une équipe d'infirmières œuvrant elles-mêmes auprès des personnes âgées hospitalisées.

Résultats : Chaque fiche théorique est organisée de la façon suivante: • présentation et définition de la dimension clinique ciblée; • éléments d'évaluation et d'intervention appropriés aux paliers systématique, spécifique et spécialisé; • bibliographie exhaustive suggérée; • annexes contenant des outils cliniques validés ou des suggestions du type trucs du métier. • fiche pratique-synthèse d'une page qui reprend avec concision les données stratégiques. Elle se présente sous forme de carnet et peut être gardée sur soi par l'intervenant et servir de ressourcement dans son travail au quotidien. Finalement, une fiche synthèse extrêmement concise résume les interventions essentielles systématiques pour les intervenants des urgences.

Conclusion : Ces outils s'avèrent précieux pour soutenir les intervenants dans leurs actions quotidiennes auprès de la personne âgée hospitalisée.

[20] Provincial Structure and Implementation of the Approach Adapted to the Elderly in a Hospital Setting

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Introduction : Les soins aux personnes âgées sont une priorité inscrit dans la planification stratégique du MSSS du Québec. Le MSSS considère essentiel d'implanter l'AAPA et a mis sur pied une structure provinciale afin de soutenir les établissements du réseau dans ce changement important de pratiques.

Objectif : Présenter la structure provinciale et les outils de reddition de compte qui accompagnent l'implantation de l'approche adaptée dans tous les établissements de courte durée du Québec.

Méthode : Une coordination provinciale et régionale a été mise en place pour veiller à l'implantation de l'approche

adaptée. Des éléments de l'approche sont intégrés dans les ententes de gestion des établissements qui doivent rendre compte de leurs progrès.

Résultats : La structure est organisée comme suit: - Coordination provinciale par le MSSS: travail étroit avec les instituts de gériatrie de Montréal et Sherbrooke; conférences téléphoniques mensuelles avec les répondants régionaux; suivi personnalisé à l'occasion. - Coordination régionale: Répondant régional désigné; soutien aux établissements de sa région via des rencontres ou des suivis personnalisés. - Répondant local: organisation du déploiement dans son hôpital; planification des sessions de formation (avec les coaches); Des outils de reddition de compte (ententes de gestion, préalables, composantes), sont suivis rigoureusement.

Conclusion : Cette structure et ces outils ont été mis en place dans toute la province afin de réussir l'adaptation du réseau hospitalier aux besoins de la personne âgée

[21] Training Program to Support the Implementation of the Approach Adapted to the Elderly in a Hospital Setting

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Introduction : Afin de se donner des conditions gagnantes pour implanter l'approche adaptée, dans tous les hôpitaux du Québec, un programme de formation a été mis sur pied pour les intervenants du réseau de la santé. Il soutiendra l'instauration de nouvelles pratiques pour mieux répondre aux besoins des personnes âgées hospitalisées.

Objectifs : Présenter le programme de formation qui s'adresse à tous les membres du personnel ainsi qu'aux gestionnaires des hôpitaux. Il comprend six modules de formation accompagnés d'activités de coaching qui permettent d'optimiser l'intégration des connaissances.

Méthodes : Le programme de formation, basé sur l'Approche adaptée, est offert en ligne. Il a été créé par des experts cliniques et techno pédagogiques. Un comité d'experts a ensuite révisé les contenus qui ont été validés par des professionnels des établissements de santé avant d'être rendus disponibles à l'ensemble du réseau.

Résultats : Les modules de formation touchent les thèmes suivants : introduction à l'approche adaptée à la personne âgée en milieu hospitalier, vieillissement normal et pathologique, adapter l'environnement, opérationnalisation de l'approche adaptée, le syndrome d'immobilisation, le delirium.

Chaque module est accompagné d'un guide pour les coaches et de suggestions d'activités de coaching.

Conclusion : Les modules de formation sont des outils polyvalents et conviviaux. Ils favorisent l'intégration de nouvelles connaissances et leur application au quotidien.

[22] Impact of Systematic Body Mass Index (BMI) Measurement in Long-term Care

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Introduction : En centre de soins de longue durée, le maintien d'un état nutritionnel optimal peut s'avérer difficile. L'Hôpital Sainte-Anne (n=400 résidents et âge moyen=90 ans; Ste-Anne de Bellevue, Québec) est un des rares établissements canadiens ayant choisi la pesée mensuelle et le suivi de l'indice de masse corporelle (IMC=Poids/Taille²) pour en faire une évaluation systématique et pratiquer une approche préventive. Cette initiative a été reconnue comme une pratique exemplaire par Agrément Canada (2011). L'IMC permet d'estimer le risque associé à un poids inadéquat. Un taux de mortalité plus faible est associé à un IMC >25 kg/m² chez les résidents institutionnalisés. Un IMC de 24 kg/m² a été sélectionné comme norme optimale à l'Hôpital Sainte-Anne.

Objectifs : 1) Utiliser l'IMC moyen de l'ensemble des résidents et des résidents dysphagiques comme indicateur de performance des interventions nutritionnelles pour les divers programmes d'intervention clinique; 2) Évaluer systématiquement l'efficacité des interventions nutritionnelles selon un protocole de pesée pré-établi.

Méthodologie : Les résidents sont pesés mensuellement. Les changements de poids significatifs sont identifiés. Le résident et l'équipe de soins sont avisés de l'évolution de l'état nutritionnel, des problématiques associées et des changements au plan de soins nutritionnels. Les IMC individuels et moyens sont calculés. La conformité du protocole de pesée et la calibration de nos appareils sont évaluées régulièrement.

Résultats : L'IMC global moyen et l'IMC des résidents dysphagiques sont 24.5 kg/m² et 24.3 kg/m², respectivement.

Conclusion : Comme activité de dépistage, cette pratique permet de prendre rapidement en charge les états nutritionnels problématiques et aide à prévenir ou retarder l'apparition des conséquences fâcheuses de la dénutrition.

[23] Internal and External Responsiveness of Quality of Life Measures in Alzheimer's Disease: Results from the Canadian Alzheimer's Disease Quality of Life Study

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Language of the presentation: Eng

Purpose: To assess the responsiveness of a variety of quality of life (QOL) measures in patients with Alzheimer's disease (AD).

Methods: We recruited 272 community-living AD patients and their caregivers. Patients with MMSE scores greater than 10 rated their QOL using the EQ-5D, Quality of Well-Being scale, a visual analogue scale and the QOL in AD (QOL-AD) instrument. Caregivers rated patient's QOL using these measures as well as the Health Utilities Index (HUI) and Short-Form-36. QOL and patients' cognition, function and neuropsychiatric symptoms were assessed at baseline, 6, 12 and 24 months. We evaluated internal responsiveness using the standardized effect size and response mean and external responsiveness using ROC curves for the QOL measures based on a decline or no decline in a composite score based on the first principal component of the core dementia symptoms.

Results: At baseline, patients' mean age was 82.8, 50.2% were female and mean MMSE was 20.2. For patient self-ratings, the QOL measures did not exhibit meaningful responsiveness over time. For caregiver ratings of patient QOL: the internal responsiveness of the QOL measures at 12 and 24 months was small (0.12 to 0.28) and small to moderate (0.22 to 0.59), respectively; the external responsiveness at 12 and 24 months was greatest for the EQ-5D, QOL-AD and HUI, with areas under the ROC curves of 0.67 to 0.77.

Conclusions: Over 24 months of follow-up, patient self-ratings of QOL did not exhibit meaningful responsiveness, while caregiver ratings of patient QOL with the QOL-AD, HUI and EQ-5D exhibited moderate responsiveness.

[24] Improving the Diagnosis and Management of Dementia in Primary Care – an Innovative, Collaborative Approach for Use by the WestView Primary Care Network

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Increasing incidence and prevalence of dementia and staff time constraints have created the need for an improved and streamlined system of care for dementia patients in primary care. The objective of this study was to develop a collaborative model of dementia care in partnership with and endorsed by staff members and stakeholders at a Primary Care Network (PCN) in Alberta. Phase 1 involved a retrospective chart review with Phase 2 involving focus groups and structured questionnaires that were distributed to staff members to assess their perspectives on dementia care. Phase 3 involved the creation of a preliminary care model for patients with dementia, followed by feedback on the model from staff members using consensus based methodology. Phase 4 of the project will focus on the implementation of the model in the PCN, with process and formative evaluation of the model planned. In this presentation, we provide a comprehensive overview of our model, components of the model, and resources that are foundational to successful implementation.

[25] Impact of Falls Among the Chronically Ill Thai Elders on Their Own Lives: a Qualitative Study

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Background: Falls are a common condition that had important impacts in elderly patients. Previous study suggested that falls lead to limitation of activities due to fear.

Purpose: To report impacts of falls, expectations on Thai health-care system and fall events in falling elderly patients with chronic disease.

Designs & Methods: Qualitative in-depth interviews, using an interview guide, were conducted with 18 participants who were referred from primary care clinic, geriatrics clinic and home health care unit. Content analysis was performed for analysis.

Results: Falls were not found to be related to chronic disease in elderly patients. The most common reaction was fear, particularly fear of being dependent and burden to family members. Chronic pain was the most common illness developed after fall. Patients tended to be more careful, walking slowly, decrease activities, decrease traveling, and use gait aid more regularly. Most patients eventually told family member's about their falls. Family's reaction to patient's fall included concern of patient's condition, distrust, sarcastic comments. Doctors did not take falls into account by not asking patients about their falls. In addition, patient did not mention their falls events to doctors particularly, specialist doctors. Patients focused more on results of falls compared to causes of falls. Accident was the most common cause in fall event.

Conclusion: Falls affected patients not only physical aspect, but also psychological status, behavior and their families. Health care providers should pay more attention to elicit causes of falls in elders.

[26] How Active Are Respondents with Arthritis: an Explanation of the Association Between Physical Activity and Arthritis

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Background: Arthritis is largest contributor to disability in both Canada and the United States of America. Primary clinical features include pain and dysfunction. The effect of physical inactivity as a modifiable risk factor of arthritis is not clearly understood.

Purpose: To elucidate the association between physical activity and arthritis in the Canadian population.

Methods: Physical activity was evaluated in respondents with and without arthritis using a national health survey, the Canadian Community Health Survey 2007-2008 which

consists of over 108,000 community-dwelling respondents 18 years or older. Respondents were asked a series of questions pertaining to physical activity over the past 3 months. Estimates of physical activity are obtained in terms of metabolic equivalent of task (METs). Logistic regression model was developed using demographic (age, gender, education, marital status) and behavioural (smoking, drinking, obesity) characteristics along with physical activity as potential risk factors for arthritis.

Results: The prevalence of arthritis was 16.0%. The mean age for respondents with arthritis was 60.0 (SD=0.15) years with 40% being male. Mean Body Mass Index (BMI) was 27.0 (SD=0.06) Kg/m² for respondents arthritis and 26.0 (SD=0.03) Kg/m² for respondents without arthritis. The proportion of moderate and vigorous activities were significantly associated with having arthritis than those without arthritis (Moderate: OR 0.73, 95% CI 0.66-0.80; Vigorous: OR 0.80 95% CI 0.72-0.88).

Conclusion: People with active lifestyle had a reduced likelihood of having arthritis; however, factors such as age and smoking can reduce the significance of physical activity in explaining arthritis.

[27] Systematic Review of the Accuracy and Precision of Elder Abuse Screening Tools

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Language of the presentation: Eng

Background: Elder abuse is a growing problem in Canada that is underdiagnosed and overlooked by healthcare services with devastating consequences for older persons, such as increased morbidity and mortality, poor quality of life and loss of property and security.

Objective: Examine the accuracy and precision of existing elder abuse screening tools to facilitate the introduction of more valid detection strategies for healthcare practitioners. Data Sources: We searched MEDLINE (1960–July 15, 2011), EMBASE (1980–July 15, 2011), PsycINFO (1984–July 15, 2011) and CINAHL (1982–July 15, 2011), plus gray literature, reference lists and review articles. Study Selection: Studies that included original data focusing on the accuracy and precision of instruments for screening of elder abuse, in which instruments were compared with a reference standard that included assessment by at least one expert. The subject of the screening

assessment could be the patient, family member, caregiver, cohabitant and/or friend. Data Extraction: Study design, patient populations and settings, methods of assessment, and outcome measures were extracted, and a modified-QUADAS tool was applied to evaluate study quality. Two investigators independently completed each level of screening and data abstraction.

Results: The literature search identified 5769 citations. Review of abstracts led to the retrieval of 83 full-text articles for assessment; 24 articles met inclusion criteria. Data synthesis is underway.

Conclusion: Few studies provide data on screening tools that accurately and precisely identify elder abuse. Further research is needed to increase evidence-based knowledge on which healthcare practitioners may rely to improve identification of elder abuse.

[28] The Value of Patient Narratives in the Assessment of Falls

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Language of the presentation: Eng

While much knowledge is gained from quantitative health research, illness itself is subjective. By appreciating the experience of failing health and its impact on outcomes for individual patients, it is hoped that healthcare providers will be able to practice more humanely and effectively. Falls are a common and serious health problem experienced by older persons. How they perceive and interpret the experience of falling can influence the long-term consequences of the event. Other than work done with fear of falling, to date this has not been rigorously studied. Our primary objective in this pilot study was to explore whether there was additional value in obtaining a patient's narrative as part of the assessment of older persons who had fallen. We interviewed a convenience sample of 5 patients referred to the Calgary Fall Prevention Clinic (CFPC) using the Narrative Interview technique proposed by Jovchelovitch and Bauer. These narratives and the CFPC assessments underwent separate analyses for themes and patterns. Phenomena generated from narratives were determined through several readings of the transcript, using original audio recordings and field notes to help provide context. A comparison between phenomena found in the narrative analyses and the CFPC assessments was performed to highlight commonalities and gaps. Our findings will be presented to a focus group

consisting of members of the CFPC who will discuss the potential usefulness of narratives in care planning for these patients. These deliberations will inform further research on the use of narratives in the assessment of patients referred to the CFPC.

[29] The Prevalence of Cognitive Impairment in Older Cancer Patients Referred to a Geriatric Oncology Clinic

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Language of the presentation: Eng

Purpose: Determine the prevalence of cognitive impairment in older cancer patients referred to a Geriatric Oncology clinic. Identify the type of cognitive impairment (dementia, mild cognitive impairment (MCI), cognitive changes related to cancer or its treatment).

Methods: Ongoing study on data collected since 2006 for each patient visit in the Consultation service for senior oncology patient clinic at the Jewish general Hospital. A comprehensive assessment including data on demographics, comorbidities, functional status mood, mobility, nutritional status and level of energy is available. Cognition is evaluated with Mini Mental State Exam (MMSE), Montreal Cognitive Assessment test (MoCA) and neuropsychology in selected cases. Brain imaging is used when indicated. Descriptive techniques were used to analyze demographic data and diagnoses of cognitive impairment.

Results: Preliminary analysis from November 1, 2006 to November 30, 2010 reveals a mean age of 79 years old (range 46-104) for a total of 240 referrals. 35% of these referrals were for cognitive impairment, our evaluations uncovered and addressed nearly 60% of cognitive impairments (dementia, MCI, cancer or cancer treated related cognitive changes) revealing a growing number of older patients with this issue.

Conclusion: Findings from this study provide insight into the usefulness of having a formal cognitive screening evaluation pre and post cancer treatment of older cancer patients referred to an outpatient Geriatric Oncology clinic. Additional research is required to understand, prevent and treat cognitive impairment in older cancer patients, early recognition and identification is paramount.

[30] Rapidly Progressive Dementia: Developing Recommendations Based on a Systematic Evidence Review

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Language of the presentation: Eng

In preparation for the 2012 Canadian Consensus Conference on Dementia, background papers are being written on 8 topics in order to make recommendations for clinical practice. Rapidly Progressive Dementia (RPD) is an uncommon condition with numerous possible causes, for which there is no universally accepted definition. We conducted a systematic review to make recommendations about [1] definitions for RPD in (a) dementia developing in previously healthy individuals, and (b) individuals with an existing dementia who experience unusually rapid cognitive decline; [2] a logical diagnostic approach based upon the prevalence of conditions which cause RPD. The initial search identified over 900 articles. Each abstract was assessed for relevance (to [1] and [2] above) by two independent reviewers. If either reviewer deemed an article relevant or possibly relevant, it was fully reviewed for quality against pre-agreed criteria; if assessed of good quality, data were extracted. In the example of a report of a case series, a good article described patient population (and referral bias if any), diagnostic criteria for dementia, and definition of RPD. We describe the process of conducting the review, proposing criteria for standard definitions, and the iterative process leading to a recommended diagnostic approach.

[31] Geriatric Skills Day: a Mandatory Component of the University of Saskatchewan Medical Curriculum

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Language of the presentation: Eng

Background: Various methods are being used to ensure geriatric core competencies are being taught throughout Canadian medical schools. In 2011, the University of Saskatchewan (U of S) became the first Canadian medical school to incorporate a geriatric skills day (GSD) into the curriculum. The GSDs were based on the successful program created by the U of S's Geriatric Interest Group.

Methods: A full day GSD was held twice in Saskatoon and once in Regina, Saskatchewan. Interdisciplinary team members from both health regions facilitated interactive sessions on various geriatric competencies. The GSDs, accounting for 25% of the overall course mark, coordinated with the didactic geriatric lectures. In addition, an OSCE station, worth 20%, examined one of the skills taught. Student evaluations included rating their satisfaction with each session on a 5-point scale as well as pre- and post-assessments of students' self-rated ability to perform 24 specific skills (on a 10-point scale).

Results: 84 (98%) of the third-year medical students participated. The session evaluations (n=403) rated very high with a median rating of 5.0 on all questions. Student's self-rated assessments of their ability to perform geriatric skills improved from median scores between 3-7/10 before to 8-9/10 after the GSD. Students also performed well on the OSCE station several weeks after the GSD.

Conclusions: The geriatric skills day was well received by the medical students. The synergy created by combining didactic lectures with a skills day improved medical students confidence with their ability to perform specific geriatric skills.

[32] Human Resource Planning in Canada: Predicting the Need for Specialist Geriatricians Over the Next 15 Years

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Introduction: The training of Specialist Geriatricians (SpGrtn) within Canada has not kept pace with the aging of the population over the last 15 years. The anticipated retirement of existing SpGrtns in Canada will exacerbate the shortfall for specialized geriatric services (SGS) across the country.

Objectives: 1. To document the existing number of SpGrtns and practicing Care of the Elderly (CofE) trained Family Physicians practicing in SGS. 2. To project the anticipated number of SpGrtns that will retire over the next 15 and 30 years. 3. To calculate the ideal number of Geriatricians in Canada, based on published ratios.^{1,2}

Methods: Using the ratio of 1.25 SpGrtns: 10,000 people 65+1 or 1 SpGrtns: 4,000 people 75+2 and 2006 Canadian

Census data (low, med. and high pop. projections 65+ or 75+) over the next 30 years, the need for SpGrtns was identified. The anticipated retirement of present Canadian SpGrtns 40 years beyond their medical degree (MD) was determined.

Results: In 2011, there were 256 SpGrtns in Canada and 93 CofE physicians. The calculated need in 2011 is 613 SpGrtns (1.25:10,000 65+) or 688 (1:4,000 75+). The calculated need for SpGrtns in 2026 is 969 (±27 (1.25:10,000 65+)). Across Canada, 10 SpGrtns are trained annually (150 in 15 years). Over the next 15 years, 105 of the existing SpGrtns will have practiced 40 years beyond the date of their MD.

Conclusions: In 2026 there will be 301 SpGrtns (256-105+150) resulting in a shortfall of 668 SpGrtns (969-301) in Canada.

[33] Sitters in Delirium: Where Are We At?

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Introduction: 'Sitters' have been used for some time for delirium. However, the specifics surrounding their use and involvement in patient care combined with their impact on delirium outcome is not known. Associated cost expenditure is considerable when compared to that for special care aides whom have considerably more training and experience, thus concerns have been raised about these sitters thus the reason for performing this chart review.

Objective: The two objectives for this chart review are to review the current use of sitters in one of the local acute care hospitals, and the second was to assess the impact sitter use has on delirium outcomes.

Method: A retrospective chart review was performed from the years April 1st 2009 to December 2010. 1252 charts in total were initially identified and reviewed, with 32 charts being included in the final analysis.

Results: 32 charts documented the use of sitters. Two charts had client attendant forms completed. Sitters were hired for delirious and agitated patients. No information was provided about shift number, duration, activities performed or number of patients sitters were responsible for. The clinical impact sitter use had on delirium was assessed by looking at the complication rate (i.e., number of falls) and requirement for certain interventions (i.e., intravenous fluid (IVF)). Complication rate revealed 11 patients fell and 14 had a reduction in functional capacity. The intervention rate revealed 12 patients

required IVF, three patients required artificial nutrition, 25 patients experienced sleep deprivation, 19 patient's required pharmacological therapy and 11 patients required restraints.

[34] Association between Cold Weather and Mortality in Nursing Homes

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Background: There is increased mortality in older people following cold. This has been attributed to cardiovascular disease but others argue that cold alone is responsible. The effect of environmental cold on mortality for those in a protected environment remains unknown. This study examined whether elderly nursing home (NH) residents are protected from excess cold related mortality.

Method: Weekly deaths of people >65 years old in Edmonton from 2000-2009 were obtained from Vital Statistics Canada. Corresponding weekly mean temperatures were obtained from the Weather Channel. Data were dichotomized into "NH" and "community" deaths.

Results: There were 72629 deaths, 54516 of those >65 years old. Deaths in NH increased annually. Excess death related to cold was observed only for NH residents.

Conclusions: The difference between deaths at the highest and lowest temperature deciles was statistically significant.

[35] Does this Patient with LUTS have Benign Prostatic Hypertrophy with Bladder Outlet Obstruction?

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Language of the presentation: Eng

Background: Benign prostatic hyperplasia (BPH) with bladder outlet obstruction (BOO) can result in lower urinary tract symptoms (LUTS). Early, accurate diagnosis may reduce pain and complications.

Objective: To systematically review the evidence on the diagnostic accuracy of office-based tests for BPH with BOO in males with LUTS.

Methods: Search of MEDLINE and EMBASE (1950 to August 12, 2010), Cochrane Central Register of Controlled Trials via Ovid, and references of retrieved articles. Data selection: Prospective studies comparing at least one diagnostic test, feasible in a clinical setting and readily available to non-specialist clinicians, to the gold standard reference test, invasive urodynamics.

Results: There were 6692 unique citations identified with 9 prospectively conducted studies (N=1217 patients) meeting inclusion criteria and describing use of 2 symptom questionnaires as well as individual symptom(s). The best constellation of symptoms suggesting BPH with BOO was 'poor stream and frequency and/or nocturia' (positive LR, 1.76; 95% CI, 1.17-2.64). The most useful symptom for which the absence made a diagnosis of BPH with BOO less likely, was nocturia (negative LR, 0.19, 95% CI, 0.05-0.79). The best symptom questionnaire to support or rule out a diagnosis of BPH with BOO was the International Prostatic Symptom Score (I-PSS) at a cut-off of 8 (summary positive LR, 1.34; 95% CI, 1.06-1.70; summary negative LR, 0.28, 95% CI, 0.12-0.70).

Conclusions: Although urodynamic testing is the gold standard for diagnosis of BPH with BOO, symptoms obtained through history may be useful. The best evidence supports asking about nocturia, stream and frequency.

[36] A Survey of the Application of National and European Nutritional Guidelines in an English District General Hospital and Their Effect on Patient Health and Outcomes in Hospital

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Language of the presentation: Eng

"An Exploration of the Care of Older Adults in Acute NHS Trusts", also focussed on nutrition, an area scrutinised by the media. The Council of Europe produced a "Resolution" – 10 characteristics of good nutritional care, from which the Nutritional Team of Southend Hospital created the Southend Universal Nutritional Screening (SUNS) Tool as a simple alternative to MUST (Malnutrition Universal Screening Tool), and introduced measures to improve patient nutrition. 3-part survey on inpatients (total = 83) across 4 wards:- two geriatric wards – one with a special interest in nutrition; an

acute medical ward; a surgical ward where measures were not in place. Using the European guidelines, ward facilities were assessed, patient notes were audited, and patients provided their perspective. All wards had multiple dietary options. Not all implemented protected mealtimes. All patients were screened within 24 hours in Medicine, but only 63% of surgical patients. Many had a nutritional plan, although often not comprehensive, and few were re-screened within 1 week. Patients were satisfied with meals and nutritional services, but did not feel they had 24-hour access to food, or informed enough about nutritional care. There was no standardised screening across departments, although back-up pathways allowed unscreened patients to access nutritional services. Some low-risk patients (as identified by SUNS) developed complications so the tool requires adaptation to better identify at-risk patients. Weekly re-assessments need improving. These results reflect that a simple pathway for all departments across all hospitals would provide better patient care by moving the NHS towards national standardisation.

[37] Adherence to the Guidelines on Heart Failure Treatment in the Elderly and Impact on Health Results: Cohort Description

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Introduction : Puisque la prévalence de l'insuffisance cardiaque (IC) augmente avec l'âge, le fardeau de l'IC augmentera considérablement dans les prochaines années. L'objectif de la présente étude est de décrire les caractéristiques socio-démographiques et d'utilisation de soins de santé et de médicaments selon les groupes d'âge chez les individus âgés de 65 ans ou plus ayant eu un premier diagnostic d'IC entre 2000 et 2009 au Québec.

Méthode : À partir des données de la Régie d'assurance médicaments du Québec (RAMQ), nous avons effectué une étude de cohorte incluant les individus âgés de 65 ans et plus recevant un diagnostic d'IC entre les années 2000 et 2009. Les caractéristiques étudiées sont celles se rapportant à l'utilisation des services de santé, de l'usage des médicaments et les caractéristiques socio-démographiques. Les analyses statistiques effectuées sont des moyennes, des médianes et des proportions.

Résultats : Cette étude permet de comprendre les caractéristiques des individus âgés de 65 ans et plus souffrant d'IC

afin de pouvoir appliquer les considérations soulevées par les lignes directrices.

[38] Assessing the Impact of a Geriatrics Clinical Skills Day on Preclerkship Medical Students' Attitudes toward Geriatric Care

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Language of the presentation: Eng

Background: By 2050, the proportion of seniors is estimated to increase to 27% from 14% currently. In 2011, there were only 238 Canadian specialists certified in Geriatric Medicine. Beyond the expansion of geriatric specialists, an improvement in physicians' attitudes, knowledge and skills in geriatrics is important regardless of the specialty.

Objectives: This study aimed to identify changes in attitudes of preclerkship University of Toronto (UofT) medical students towards geriatric care after participating in an interdisciplinary Geriatric Clinical Skills Day (GCSD) organized by UofT's Geriatrics Interest Group. Methods. This was a before and after study. First and second year UofT medical students registered for the GCSD participated in this study.

Method: A questionnaire, including the validated UCLA Geriatrics Attitudes Scale, was administered before and after the GCSD. Both a one-sample t-test and the signed rank non-parametric test were used to determine any changes in attitudes.

Results: Of 19 study participants, four students did not complete the post-test questionnaire. 42.1% indicated an interest in Geriatric Medicine, 26.3% in Geriatric Psychiatry, and 63.2% in working with elderly patients. Both pre- and postmean scores were greater than 3 (neutral), indicating a positive attitude before and after the intervention ($p < 0.0001$). However, there was no significant difference in the change in mean total scores (signed rank test $p \geq 0.12$, students t-test $p > 0.11$).

Conclusions: There is an overall positive attitude towards geriatrics among study participants. However, a one day GCSD did not alter attitudes towards geriatric care. This small study warrants further investigation in a larger multicentred trial.

[39] The Five Weekend Care of the Elderly Certificate Course: a Geriatrics Continuing Professional Development Activity for Family Physicians

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Canada's population is aging and research has shown that primary care physicians find it difficult to care for elderly patients. Canadian family physicians have appreciated need for geriatrics continuing medical education (CME) and based on the expert opinions of experienced care of the elderly family physicians, geriatric knowledge and skills felt necessary for a family physician caring for the elderly, were put into a curriculum based on the 5 weekend program style. The University of Toronto Department of Family & Community Medicine developed a 5 weekend leadership program in the mid 1990's and this format allowed community physicians to train without giving up regular clinical time. The Five Weekend Care of the Elderly Certificate Course used discussion in small groups of four as per Malcolm Knowles' theory of andragogy and adult learning. These discussions were directed carefully as per Dave Davis' research on effective CME. Donald Schon's theory of reflective practice shaped the course homework assignments. These homework assignments were created to allow immediate «reflection in action» with real life patient experiences and «reflection on action» later during presentation of their written essays to the entire class. Participants were asked to complete a survey regarding their self rated knowledge of curriculum topics before and after the course. The results showed improved family physician self-reported knowledge of the curriculum topics. Favourable response to small group discussion and debriefing of assignments showed that there is interest amongst family physicians to these types of interactive learning.

[40] Aerobic Training and Carotid Sinus Sensitivity in Older Adults with Diabetes

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Background: Carotid sinus hypersensitivity (CSH) is a common cause of fainting and falls in older adults and is diagnosed by carotid sinus massage (CSM). Previous work has suggested that age-related stiffening of blood vessels reduces afferent input from the carotid sinus leading to central upregulation of

the overall arterial baroreflex response. A potential intervention to reduce carotid sinus hypersensitivity is aerobic training.

Objective: We examined whether aerobic exercise could reverse carotid sinus hypersensitivity in older adults with Type 2 diabetes complicated by co-morbid hypertension and hyperlipidemia.

Methods: 15 older adults (mean age 72.2±0.7) with diet-controlled or oral hypoglycemic-controlled Type 2 diabetes, hypertension, and hypercholesterolemia were recruited. Subjects were randomized to each of 2 groups: an aerobic group (AT, 3 months vigorous aerobic exercise), and a nonaerobic (NA, no aerobic exercise) group. Exercise sessions were supervised by a certified exercise trainer 3 times per week, and utilized a combination of cycle ergometers and treadmills. Arterial stiffness was measured using the Complior device.

Results: Although aerobic exercise significantly increased arterial compliance as measured by both radial ($p=0.005$) and femoral ($p=0.015$) pulse wave velocity, there was no training effect on either the bradycardic ($p=0.251$) or vasodepressive ($p=0.523$) response to CSM.

Conclusions: Although aerobic training can reverse arterial stiffness, there is no evidence for a corresponding reduction in carotid sinus hypersensitivity in older adults with diabetes.

[41] Geriatric Interest Group Initiated Geriatric Skills Day

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Background: Providing geriatric education to health science students becomes increasingly important as Canada's population ages. The University of Saskatchewan's Geriatric Interest Group (GIG) developed Geriatric Skills Days (GSD) to provide students additional opportunities to improve skills and knowledge in geriatric core competencies (GCCs).

Methods: The GSDs, facilitated by the Geriatric Evaluation and Management Program's interdisciplinary team, covered GCCs including comprehensive geriatric assessment, falls, polypharmacy, cognitive assessment, and functional assessment. Students rated satisfaction with each session (on a 5-point scale). In 2011, students also completed pre-post ratings (on a 10-point scale) of perceived ability to perform 11 skills.

Results: Eighty health science students from seven different colleges attended GSDs. In the 2010 cohort, students felt the sessions had clear objectives, met those objectives, met their objectives as learners, provided enough time for discussion, and were well organized (all Mdn=5.0, N=151). We received 148 session evaluations from the 2011 cohort. Students agreed the sessions had clear objectives (Mdn=4.0) and met those objectives (Mdn=5.0); met their own objectives as learners (Mdn=5.0), provided enough time for discussion (Mdn=4.0), and were well organized (Mdn=5.0). Also in 2011, students' (N=18) median self-rated ability to perform each skill ranged between 2 and 6 before the GSD (eight skills received scores of 2 or 3). Post-participation ratings increased markedly, with medians ranging between 7 and 9 (N=24).

Conclusions: Participant responses were very positive to the GIG initiated GSD. This positive experience influenced the decision to incorporate a GSD into the College of Medicine's 2011-2012 third-year curriculum.

[42] 2012 Canadian Consensus Conference on Dementia

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The Canadian Consensus Conference on Diagnosis and Treatment of Dementia in 2006 dealt with a wide range of topics in considerable depth. Many of those recommendations retain their relevance today. Since that time remarkable advances have occurred in the diagnosis of Alzheimer's disease, including cerebral amyloid imaging and CSF studies of Aβ₄₂, and phosphorylated tau. Recent publications have attempted to redefine Alzheimer's disease as a pathological entity which can now, perhaps, be identified by biomarkers ahead of any cognitive changes. However serious ethical dilemmas surround findings such as abnormal accumulations of cerebral amyloid, in normal or minimally symptomatic people. Should these promising but as yet unproven technologies be restricted to the research arena? How can we prevent premature "bleeding" into clinical practice before their benefits and risks can be adequately assessed? These and other dilemmas constitute the reasons for a new CCCD. The steering committee members are listed above. Background papers will be produced and posted to a website, where CCCD members can comment. Recommendations will be submitted for consensus prior to the Conference in Montreal in May. Dissemination will be actively managed through the Dementia Knowledge Translation Network. The

CCCD will address the following topics: • Definitions (critique of recently published revised U.S. definitions) • Fluid biomarkers • Neuroimaging • Diagnostic approach to rapidly progressive dementia • Management of early onset dementia • Update on pharmacological treatment.

[43] Life Satisfaction of Frail Older Adults

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Language of the presentation: Eng

Objectives: 1. To determine if frailty is associated with lower life satisfaction (LS); 2. To determine which domains of LS are influenced by frailty.

Methods: Analysis of 1751 community-dwelling older adults (65+ years) from the Manitoba Study of Health and Aging. Measures: LS was measured using the Terrible-Delightful Scale. One item measures overall LS and was scored on a 7 point Likert-type scale. Satisfaction was also measured with individual domains: health, finances, family relations, friendships, housing, recreation activity, religion, self-esteem, and transportation. Satisfaction with employment and living partner were not considered because there were many missing responses. Frailty was determined by the Canadian Study of Health and Aging definition of frailty, and was categorized as no frailty; incontinence only; mild frailty; and moderate/severe frailty. Age, gender, education, marital status, and living arrangement were self-reported. Depressive symptoms were measured using the Centre for Epidemiologic Studies – Depression scale. Bivariate and multivariate linear regression models were conducted.

Results and Conclusions: Most older adults, including frail older adults, were satisfied with life overall, and with most aspects of their lives. In bivariate analyses, frailty was associated with lower levels of LS overall (5.3 versus 4.9).

[44] Case Report of a 103-Year-Old Woman with Locally Advanced Breast Cancer

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Purpose: To present the inspiring case of Ms. P who is a 103 year old lady we followed in our Geriatric Oncology clinic.

Description: Ms. P. was 100 years old when she first walked into the clinic using her cane. She lived at home with her 105 year old sister, had a private caregiver for assistance with ADLs and IADLs and was not demented. She was diagnosed with left breast cancer in 1993, treated by local excision and hormonal therapy only. She was also known for bilateral hip surgery, one episode of pulmonary edema, osteoporosis and hypothyroidism. She presented in 2008 with local progression of disease over the left breast (painless red nodules and infiltration of the skin with minimal exudate). Investigations revealed no evidence of distant metastasis. In May 2009, she received radiotherapy for ulcerated skin nodules covering 70% of the breast and purulent discharge. She responded very well to treatment with complete resolution of the open wounds. However, the skin lesions recurred a few months later. In an attempt to control the disease while minimizing toxicity, she received a total of 4 monthly doses of Faslodex intramuscularly; this was discontinued because of side effects of anorexia and fatigue with arthralgias. In January 2011, she received a second course of palliative radiotherapy with good response. She passed away at home in October 2011. Our comprehensive evaluation and personalized interventions proved beneficial for this patient, who otherwise would not have received further treatment because of her advanced age.

[45] Smoking in Relation to Frailty, and the Risk of Death in Older Chinese Adults: Results from the Beijing Longitudinal Study of Aging

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Language of the presentation: Eng

Background: Smoking is common in China, where the population is aging rapidly. This study evaluates the relationship between smoking and frailty and their joint impact on survival in older Chinese adults.

Methods: Data come from the Beijing Longitudinal Study of Aging. Community-dwelling people (n=3257) aged 55+ years at baseline were followed between 1992-2007, during

which time 51% died. A frailty index (FI) was constructed from 27 self-reported health deficits.

Results and Conclusions: Nearly half (45.6%) of the participants reported smoking (66.8% men, 25.3% women). On average, male smokers were frailer (FI=0.18±0.15) than male nonsmokers (FI=0.14±0.10; *p*=0.030) and had an increased risk of death (risk ratio=1.66 age and education adjusted, 95% CI=1.46-1.88).

[46] Geriatrics Committee of the Montreal Integrated University Network: a Constructive Partnership

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Introduction : En 2003, quatre Réseaux Universitaire Intégrés de Santé (RUIS), établis autour des facultés de médecine et de leurs établissements de santé affiliés, ont été institués. Ils doivent mieux répondre aux enjeux socio-sanitaires actuels et futurs. À l'initiative de l'Institut universitaire de gériatrie de Montréal (IUGM), le RUIS de l'Université de Montréal a créé (2009), un comité de gériatrie.

Objectifs : Favoriser les meilleures pratiques cliniques; proposer la mise en place de corridors de services pour les soins plus spécialisés; favoriser la concertation et complémentarité en recherche, enseignement, évaluation des technologies et prévention /promotion de la santé; être un leader auprès des instances universitaires et gouvernementales sur l'organisation des services de santé aux personnes âgées.

Méthodologie : Processus de révision des services gériatriques spécialisés; inventaire du temps de formation universitaire consacré aux soins aux personnes âgées; inventaire des activités de prévention/promotion de la santé; élaboration d'un projet pilote de télépsychogériatrie auprès des partenaires de l'IUGM.

Résultats : Une typologie des services gériatriques spécialisés a été définie. Le temps de formation obligatoire varie par discipline entre 0 % (service social) et 17% (médecine - psychiatrie), tandis que le travail auprès de la clientèle varie de 12% (orthophonie) à 61% (physiothérapie). Le répertoire en prévention/promotion a été complété ainsi que le projet pilote de télépsychogériatrie.

Conclusion : Pour une meilleure coordination et intégration de ses composantes avec le réseau de première instance,

le MSSS a instauré une table de gériatrie dans chacun des RUIS, fédérées au niveau national

[47] Integration of Short-term Geriatric Units and Hospital Geriatric Departments in Quebec

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Language of the presentation: Fr

Introduction : Le rôle des unités de courte durée gériatriques (UCDG) est d'offrir des soins spécialisés dans le continuum des soins et services de santé offerts à la personne âgée. Les professionnels de ces programmes doivent maintenir leurs compétences cliniques, et les gestionnaires mettre en place des processus organisationnels efficaces. Un besoin d'échange et d'actions spécifiques au niveau national a été exprimé par la majorité des responsables d'UCDG.

Objectifs : Améliorer de façon continue la qualité des soins dans les services hospitaliers de gériatrie, généraliser de hauts standards de pratique afin d'y traiter des patients aux situations cliniques complexes et agir comme milieu de référence. Méthodes : 1) Création d'un comité exécutif composé de médecins et gestionnaires provenant des diverses régions du Québec; 2) Embauche d'une coordonnatrice; 3) Développement d'un site internet (www.rushgq.org) pour dépôt de documents et d'échanges via un forum de discussion.

Résultats : 60% des centres hospitaliers ont adhéré au RUSGHQ. Les activités en cours sont : 1) Circonscrire la population cible des UCDG; 2) Harmoniser les mécanismes d'évaluation et d'intervention cliniques sur la base des meilleures pratiques; 3) Mettre à la disposition des membres une « boîte à outils » clinique et de gestion pertinente; 4) Établir les ratios de ressources professionnelles nécessaires à un fonctionnement optimal; 5) Offrir des activités de développement professionnel continu.

Conclusion : Une communauté de pratique en gériatrie a été mise sur pied facilitant réflexions et apprentissages collectifs des professionnels de la santé et des gestionnaires travaillant en milieu hospitalier.

[48] Results of the EMBRACE Canadian Study Evaluating Rivastigmine Patch in Patients with Alzheimer Disease During an 18-month Follow-up

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Introduction: The Effective Management of Alzheimer's disease (AD) By Treating patients and relieving Caregivers with Exelon* Patch (EMBRACE) is a prospective, observational, single-cohort, open-label, multicentre study with an 18-month treatment period. Study objectives were to evaluate the effectiveness of rivastigmine patch in patients with mild to moderate AD as measured by changes in cognition, daily function and behavior from baseline. Secondary outcome measure included the evaluation of the caregiver-reported compliance and treatment satisfaction.

Results: A cohort of 1204 Canadian AD patients participated in this trial. Following results are for all evaluable patients (n=969) at the end of the study. The majority of patients were outpatients (80.5%) and treatment-naïve or "de novo" (69.4%). Mean baseline MMSE was 21.8 (95% CI: 21.5, 22.1). Mean change in MMSE from baseline to 18 months was -0.4 (95% CI: -0.7, -0.1). For subjects previously treated with oral cholinesterase inhibitor therapies, approximately 88% (122/139) of their caregivers preferred rivastigmine patch, citing ease of use and patient preference over previous medication as the two most common reasons. The most commonly reported category of adverse event in the safety population n=1204) was "Skin and subcutaneous tissue disorders" (9.3%) the most reported event being pruritus (4%).

Conclusion: Final results of this registry demonstrate the effectiveness and good tolerability of rivastigmine patch in patients with AD. Cognitive function, as measured by MMSE, showed a relative stabilization over an 18 month time period. The benefit of rivastigmine patch treatment is further supported by the caregiver preference results.