music activities, known as occupations. The researchers' aim was to examine how music occupation interventions lower risks of occupational deprivation (i.e., prolonged restriction from participation in necessary or meaningful activities) that could occur due to the COVID-19 pandemic. Eight adults participated who were 65 years or older, lived in the community, and enjoyed music. The researchers used narrative qualitative methodology to analyze pre- and post-intervention focus group data. The participants completed seven intervention sessions designed to increase and sustain music engagement outside of the sessions. The pre-intervention focus group data resulted in an occupational pattern analysis and a single occupational narrative. Triangulation of data post-intervention included the two focus groups and their pattern analyses and narratives, field notes from each intervention session, and documents produced through group completion. The final analysis produced an occupational change pattern analysis and narrative. The focus of the change narrative was on the participant's management or prevention of occupational deprivation. The researchers identified several common themes involving change in routines and habits to include regular engagement in meaningful music activities, skills for using occupational participation as an important method of coping with COVID-19, and developing new technological skills to access music to replace in-person participation of attending live concerts and shows when deemed unsafe because of potential for virus transmission.

Session 4335 (Paper)

Aging and Technology Interventions II

ACTIVITY SPACE AND FUNCTIONAL OUTCOMES IN FRAIL OLDER PERSONS USING GPS ANALYSIS

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With increasing age, walking becomes a main functional ability to participate in activities of daily living and supports independence and mobility. Frailty in older, multimorbid patients has a negative impact on physical activity and may reduce the personal activity space (AS). In this pilot study, GPS data were used to identify walking tracks to define individual AS and to compare functional performance in frail older persons. GPS data of 20 community-dwelling adults ($84.5(\pm5.2)$ years, 85% women, mean frailty phenotype 1.9 (70% ≥2) points) were analyzed using a customized software to assess individual AS over a ten-months period. A geriatric home assessment including Short Physical Performance Battery (SPPB), gait speed (GS) and Timed-up-and-Go (TUG) was conducted monthly. GPS analysis revealed three different walking types presenting AS similarities: Type A walkers prefer smaller short walks nearby the home while Type B can be characterized by taking larger regular walks. Type C presents the widest AS using different transportation modes, but only a moderate number of walks. Mean group difference

in functional performance of Type A walkers showed significantly reduced GS ($0.45(\pm0.1)$m/s), TUG ($23.4s(\pm4.9)$) and SPPB scores ($3.8(\pm0.8)$ points; $p<0.05$) compared to Type C ($0.82(\pm0.1)$m/s (GS); $13.2(\pm1.4)$s (TUG); $7.0(\pm1.3)$ points (SPPB)). Functional performance of Type B walkers ($0.63(\pm0.2)$m/s (GS); $17.1(\pm4.4)$s (TUG); $6.5(\pm2.4)$points (SPPB)) revealed significantly higher SPPB scores compared to Type A ($p<0.05$). Walks and individual AS can be mapped via GPS under everyday conditions. High heterogeneity within frail older people was observed. Persons with lower functional performance showed a reduced AS and physical activity.

DEVELOPING, TESTING, AND IMPLEMENTING A FALLS PREVENTION AND HEALTHY AGING APP (KEEP-ON-KEEP-UP) FOR OLDER ADULTS

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Falls are a common and costly concern for older adults. Digital technologies can offer new, inexpensive approaches to increase access and engagement with falls prevention programmes. Keep-On-Keep-Up is a personalised, falls prevention App with strength and balance exercises plus health literacy games. This study reports on the user-centred design, usability testing and implementation of the KOKU App. Older adults aged 55 years and older in the UK were invited to take part in the study. Data collection included focus groups; baseline and 6 week questionnaires and assessments; semi-structured interviews and one focus group with falls prevention therapists to explore App usability. Thirty older adults were invited to use KOKU unsupervised, 3 times a week for 6 weeks. Data were analysed using thematic content analysis. Focus groups (n=11) with 66 older users and 11 therapists informed development. Thirty older adults (mean age = 75) were recruited for the in-depth testing. Mean SUS score was 71 indicating high usability. Qualitative themes included: ease of use (app usability; iPad properties; exercise presentation), usefulness (physical/psychological benefits; falls education), attitude towards the App and intention to use (technological barriers; flexibility of use; exercise class versus App). Therapists (n=6) viewed the KOKU platform positively and suggested extensions for further progression. No adverse events were reported during the study. This research demonstrates that KOKU is an acceptable and easy to use falls prevention intervention that facilitates older adults' ability to access falls prevention training at a time, and in a location, that suits them.

FEASIBILITY AND ACCEPTABILITY OF AN MHEALTH ACP TOOL IN PRIMARY CARE

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With only 7% of Medicare beneficiaries having completed Advance Care Planning with their physicians, engagement in Advance Care Planning in the clinical setting has been historically low. This study investigated the feasibility of introducing the Koda Health Advance Care Planning software platform in

the primary care setting, and whether patients would engage in advance care planning through this medium. The Koda platform is a video-driven, web application that guides patients through advance care planning concepts, including values and quality of life exploration, surrogate decision maker selection, life-support treatments, and advance directive completion. The study was completed over a six-month period in two primary care clinics in the Houston, Texas area. Inclusion criteria were age 55 or older, English-speaking, and capacity for medical decision making. 339 patients met eligibility criteria and had a median age of 73 (range 59-89). All participants were offered the platform, and 262 (77%) created an account and began planning for their care. Of the patients that created an account, 87% completed all ACP steps on the platform and 72% identified a surrogate decision maker. The median time spent on the platform was 18 minutes. The Koda platform appears to be a useful tool for patients and providers to improve engagement in advance care planning and improve surrogate decision maker identification. Further research is needed to understand whether the Koda platform aids in providing goal-concordant care.

IMPROVING STAFF-FAMILY END-OF-LIFE COMMUNICATION AT ISRAELI GERIATRIC FACILITIES BY USING A MOBILE APP

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Family caregivers (FCs) of persons institutionalized at geriatric facilities present significant unmet communication needs regarding receiving regular updates about their loved one's condition and having available healthcare professionals (HPs) to approach when needed. We developed and tested a mobile-app for staff-family communication with both parties having active roles in app planning to tailor it to their needs and abilities. The app includes a daily-update module for FCs and a chat option for FCs and HPs. App use was piloted at one geriatric-medical-center for 15 months (unit-level randomization resulted in one complex-care and one assisted-ventilation unit in each group- intervention and control) and one single-unit nursing-home for three months. Personal interviews were conducted with 55 FCs (28 from intervention-group and 27 FCs from control-group) before-and-after app use (with mean duration of use 1.6[S.D.=.6] months. Most participants were women and the children of the patients; their mean age was 55.9 years (S.D.=12.4). Repeated-measures Analysis-of-Variance for the end-of-life communication sub-scale on the Quality-of-communication questionnaire yielded a main effect for time (F(1,53)=8.31, p=.006) with both groups' ratings increasing over time and an interaction effect (F(1,53)=4.78, p=.033) with a greater increase for intervention-group compared to control-group. Intervention-group participants rated the app as convenient to use. Qualitative data revealed that FCs perceived app use as improving quality of communication with the HPs who used it and improving their own well-being. The app offers a feasible and an effective mode of communication that incorporates technology in daily communication between FCs and HPs while addressing FCs' unmet needs.

TEXT-MINING IN LONG-TERM CARE: EXPLORING THE USEFULNESS OF COMPUTER-AIDED ANALYZING METHODS

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In nursing homes, narrative data are collected to evaluate quality of care as perceived by residents or their family members. This results in a large amount of textual data which exceeds the capability of humans to analyse it. This study aims to explore the usefulness of text-mining approaches regarding narrative data gathered in a nursing home setting. Data has been collected as part of the project 'Connecting Conversations': assessing experienced quality of care by conducting individual interviews (n=125) with residents of nursing homes, family members and care professionals. Several pre-processing steps were applied to the textual data. Finally, a variety of text-mining analyses were conducted: individual and bigram word frequencies, correlation analysis and sentiment analysis. A survey was conducted to establish a sentiment analysis model tailored to text collected in long-term care for older adults. Residents, family members and care professionals uttered respectively 285, 362 and 549 words per interview. Word frequency analysis showed that words that occurred most frequently in the interviews are often positive. Although there are some differences in wording such as the use of 'mother' and 'breakfast', correlation analysis displayed that similar words are used by all three groups to describe quality of care. The majority of interviews displayed a neutral sentiment. Care professionals are more diverse in their sentiment than residents and family members: while some express a more positive sentiment, others express more negativity. This study demonstrates the usefulness of text-mining to extend our knowledge regarding quality of care in a nursing home setting.

Session 4340 (Paper)

Black Caregivers' Health

MASTERY GOALS FOR BLACK AMERICAN DEMENTIA CAREGIVERS

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About 5.8 million older American adults live with Alzheimer's disease and related dementias; Black American older adults' prevalence is more than twice that of non-Hispanic white older adults. The Black American dementia caregiving experience can be pictured within the Black Family Social-Ecological Context Model, which provides a conceptual basis for examining social determinants of health at individual, family, community, and societal levels with careful consideration for how the intersecting identities of race, gender, and class of Black American caregivers influence the multiple dimensions of their caregiving experiences.