OBJECTIVES: Of the many routes of drug administration, some are more acceptable to patients than others, for example when a choice is presented, patients usually prefer an oral over an injectable medication, all else being equal. Patient preference may be expressed in terms of health and non-health related measures, which include: health technology-related attributes (including ergonomics, ease of use, convenience and appropriateness for e.g. needle phobia or patients’ perceptions of embarrassment), and adverse reactions attributable to the route of administration. Preferences may result in process-related (dis)utility, and be revealed as (non)adherence. This review aims to examine the role of subcutaneous medications in adherence, and in particular to consider whether subcutaneous administration, compared with other routes of administration for the same medicines. METHODS: Ten electronic databases were searched for publications published between 2002 and 2012 using terms pertinent to methods of administration, preferences and adherence. For inclusion was determined through reference to specific criteria by two independent reviewers. RESULTS: Of the 1,146 papers screened, 70 met the inclusion criteria. Of these, 30 studies described different methods of administration for insulin and treatments of paediatric growth disorders and multiple sclerosis. Pen devices were significantly preferred to needle & syringe administration in 11 out of 12 studies – particularly with respect to ergonomics, convenience and portability; however, preference may be expressed in terms of health and non-health-related measures, which revealed important differences in patient preference between methods and routes of drug delivery. Further evidence is required to support the notion that preference translates to better adherence.

PH35
THE EFFECT OF MEDICAL DEVICES WITH DOSE-MEMORY AND REMINDER FUNCTIONS ON TREATMENT ADHERENCE, CONFIDENCE AND DISEASE SELF-MANAGEMENT
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OBJECTIVES: Adherence to treatment is an important issue in the management of chronic diseases and an indicator of patients’ ability to self-manage their condition. Some medical devices have been designed to help support patients’ self-management and adherence by including dose-memory and reminder functions. This literature review explored the role and impact of these devices on patients’ adherence to treatment, confidence and disease self-management. METHODS: A search of Medline, Embase and PsycInfo was performed to identify articles published in English from 2003-2013, which studied the effect of devices with memory and/or reminder functions on treatment adherence, confidence and self-management. The main attributes of the abstracts selected for inclusion and full-text review, were summarized. RESULTS: The database search yielded 940 abstracts. Of the 47 met the inclusion criteria, 32 were retained. The articles explored the impact of memory and/or reminder devices on treatment adherence, device usability and users’ (patients, health care professionals (HCPs) and caregivers) relationship and attitudes towards the devices. Devices with memory and/or reminder functions were found to improve self-reported and electronically-monitored treatment adherence in prophylactic medication use (e.g. contraceptives) and a range of chronic diseases including HIV, diabetes and asthma. Memory functions were considered more important in long-term management by patients. Of particular value was that memory and/or reminder functions provided dose-history information, enhanced patients’ confidence with, and ability to manage their medication and condition, and helped reduce forgotten or incorrect medication dosing. CONCLUSIONS: The incorporation of memory functions alone and in combination with reminder features in medical devices can improve patient’s adherence, confidence and self-management. This can lead to improved control over chronic diseases and improve clinical outcomes, thereby offering clinical and economic value. This review highlights the importance of conducting further qualitative and quantitative research in this area to fully understand the value of these types of devices to patients and HCPs.

PH36
COMPARISON OF ELDERLY ADULTS BY NUMBER OF RX MEDICATIONS USED:
RESULTS FROM THE NATIONAL HEALTH AND WELLNESS SURVEY ACROSS SEVEN COUNTRIES
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OBJECTIVES: Compliance with medications among elderly patients is particularly important, as the consequences may be quite serious. Results suggest that use of three or more medications may put a considerable burden on elderly patients and may affect their compliance. This analysis profiles elderly patients across SEU by the number of medications currently used and their compliance related behaviors. Combination products were considered as one prescription medication. RESULTS: Results are drawn from the 2011 SEU Health and Wellness Survey, a nationally representative, self-administered survey. Respondents were adults aged 65 and over from France, Germany, Italy, Spain and UK. This analysis focuses on adults age >=65. Physical and mental quality of life was measured using the SF12v2 scale. Physical and mental component summaries were measured with the SF12v2 scale. Activity impairment was measured using the Work Productivity and Outcomes Research impairment scale. RESULTS: Out of the total sample of age >=65 (n=10,612), 37% of elderly adults across SEU currently use four or more prescription (Rx) medications. Activity impairments, 44% use 3-4 Rx medications, are the principal cost in terms of adherence. Activity impairment is greater among those using 4+ medications (38.8 vs. 22.7 vs. 16.0). Emergency room visits and hospitalizations are also higher. This group appears to be more proactive in engaging in cost-saving behaviors to alleviate their health conditions, and more conscious in terms of their preferences and adherence. CONCLUSIONS: Considerably higher health care costs and greater activity impairment can be seen among elderly patients using more prescription medications. Given the financial burden of using multiple medications, and the lower incomes of these patients, cost-saving methods are more frequently utilized by these patients.

PH37
PRELIMINARY ITALIAN ARCHIVE OF EQ-5D DATA ON INDIVIDUALS FROM THE GENERAL POPULATION AND WITH DIFFERENT DISEASE CONDITIONS
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OBJECTIVES: In the last 15 years our research activity collected several HRQoL data, through the EQ-5D-3L and other generic (SF-36) or condition-specific questionnaires. For this purpose, we assessed and compared HRQoL among different population subgroups. METHODS: We reviewed all the HRQoL studies conducted by our research group between 1998 and 2012. We identified several conditions to be compared between HRQoL based on a base sample of 7,754 subjects. RESULTS: The archive included QoL data from 7,754 subjects (51.5% male), grouped in 29 different subgroups: type 1 and 2 diabetes mellitus, moderate to severe haemophilia, major depression, dementia, Parkinson’s disease, multiple sclerosis and chronic obstructive pulmonary disease (COPD). RESULTS: The most prevalent condition was type 2 diabetes mellitus, with 3,026 subjects (38.9%), followed by COPD (1,135), major depression (782) and chronic obstructive pulmonary disease (COPD) (718). The mean EQ-5D index ranged from 0.67 ± 0.23 among subjects suffering from type 2 diabetes mellitus, to 0.97 ± 0.12 among subjects suffering from major depression. CONCLUSIONS: The EQ-5D index allows for a comparative evaluation of the HRQoL of the different subgroups of our sample, in terms of QoL, and with the EQ-5D data collected in the last 15 years. Overall, the values are lower in Italy compared to other European countries. Further studies are required to confirm these preliminary results.