for hospitalizations). **CONCLUSIONS:** Kidney transplantation substantially changes the composition of costs associated to patients affected by end stage renal disease, dramatically reducing the costs of diagnostic/therapeutic procedures and increasing drug expenditure. When evaluating the increase in hospitalization costs, the incidence of transplantation expenditure should be considered. Speculatively, it should be expected that in the following years the treatment cost would decrease thanks to savings following the reduction in dialysis costs.

**PUE34**

**CROSS-SECTIONAL DESCRIPTIVE STUDY OF THE IMPACT OF ANAEMIA IN PATIENTS WITH CHRONIC KIDNEY DISEASE ON HEALTHCARE RESOURCE UTILISATION AND WORK PRODUCTIVITY ACROSS EUROPE**

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**OBJECTIVES:** To determine the impact of anaemia, haemodialysis and work productivity in patients with chronic kidney disease (CKD) stages 3 and 4, and patients on dialysis.

**METHODS:** A descriptive, cross-sectional analysis was performed using data from the Adelphi CKD Disease Specific Programme in France, Germany, Italy, Spain, and UK between June and September 2012. Healthcare resource utilisation data was extracted from patient self-completion questionnaires and physician-completed patient record forms. Absenteeism and work-related activity impairment data were obtained from the Work Productivity and Activity Impairment questionnaire.

**RESULTS:** A total of 1336 patient self-completed questionnaires were received from an evaluable population of 2898 CKD patients (stage 3, 4, and on dialysis). Across all patient sub-groups, anaemic patients accrued more nephrologist visits over 12 months, compared to non-anaemic patients (2.7 vs. 1.3). Anaemic patients also experienced a higher number of visits to a general practitioner (3.5 vs. 2.9). Stratification of the data, by haemoglobin (Hb) level and dialysis status revealed that the number of all-cause hospitalisations was consistently higher for patients with Hb levels of <10 g/dL, compared to those with Hb levels of ≥12 g/dL, irrespective of dialysis treatment (0.7 vs. 0.2 and 0.9 vs. 0.5 admissions for non-dialysis and dialysis patients, respectively). Among the economic CKD stage 4 and dialysis patients <65 years, had higher rates of work absenteeism compared with non-anaemic patients (3.6% vs. 2.4% stage 4 and 14.6% vs. 7.6% dialysis). Anaemia caused greater activity impairment (whilst working) among CKD stage 3 patients (23.6% anaemic vs. 14.7%) and stage 4 patients (66.4% anaemic vs. 20.0%), compared with dialysis patients (37.2% anaemic vs. 44.6%).

**CONCLUSIONS:** Anaemia may have a substantial impact on healthcare resource utilisation and work productivity in patients with CKD. Further studies are warranted to evaluate the humanitarian impact and direct economic burden of anaemia in CKD.

**PUE35**

**ECONOMIC EVALUATION OF HEALTH SPENDING AND HEALTH OUTCOMES IN THE MANAGEMENT OF HEMODIALYSIS FOR TWO INSURANCE COMPANIES IN COLOMBIA**

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**OBJECTIVES:** Determine the health impact through an economic evaluation in relation to expenditure and quality of care for patients with chronic kidney disease (CKD) undergoing dialysis and their network of providers between 2013 and 2014.

**METHODS:** The information system containing data tracking high-cost diseases in the Colombian health system, an economic tool was generated with the methodology used in the previously recommended strategy recommendation 8,21 as well as the one recommended by the economic CKD stage 5: 22926 patients (2013) and 23478 (2014), which were selected on hemodialysis treatment. The ICER was cost-saving scenarios in a difference range from US$ 3.272,28 to US$ 4.586,69 patient year (2013) and from US$ 10.93 to US$ 3.980,30 patient year (2014). The ICER was cost-saving scenarios in a difference range from US$ 3.272,28 to US$ 4.586,69 patient year (2013) and from US$ 10.93 to US$ 3.980,30 patient year (2014).

**RESULTS:** In the one-year follow-up, 70% of patients were included in the group of non-anaemic patients, 30% in the anaemic group. The mean number of contacts with caregivers was 1 per month. The percentage of patients involved in dialysis with anaemia exposed to personal income and social inequalities. To better understand the factors of health care services are not a homogeneous group as they may be particularly affected by the needs of the elderly in the population. CoT answers the following questions: a) What is the percentage of patients involved in dialysis with anaemia who are elderly? b) What is the percentage of patients involved in dialysis with anaemia who have income below the poverty line?

**CONCLUSIONS:** Results show a high interest of the elderly people in services delivered with ICT technology and sensors for supporting their daily activities, improving safety and reducing the related healthcare resource consumption.

**PHP3**

**BUILDING INTENTIONS WITH THE THEORY OF PLANNED BEHAVIOUR: A QUALITATIVE ASSESSMENT OF SALIENT BELIEFS ABOUT PHARMACY VALUE**

**ADDED SERVICES IN MALAYSIA**

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**OBJECTIVE:** In order to improve pharmaceutical care delivery in Malaysia, Ministry of Health introduced the concept of ‘Added Services’ to enhance patient pharmaceutical care. Despite the reported convenience and advantages of VAS, it is noticed that the utilization rate of VAS is low in the country. The study aims to explore patients’ understanding, salient beliefs and expectations towards VAS in Malaysia using the Theory of Planned Behaviour (TPB) as a theoretical model.

**METHODS:** A qualitative methodology was used whereby face-to-face interviews were conducted with 12 patients who collected partial medicine supplies from government pharmacies. Participants were recruited using purposive and snowball sampling method in the State of Negeri Sembilan, Malaysia. Interviews were audio-recorded. Verbatim transcription and thematic content analysis were performed on the data.

**RESULTS:** Thematic content analysis yielded five major themes: (1) Attitudes towards using VAS, (2) subjective norms, (3) perceived behavioural control, (4) lack of knowledge and understanding of VAS and (5) expectations toward VAS.

**CONCLUSIONS:** The interviews explored and informed new information about salient beliefs towards pharmacy VAS in Negeri Sembilan, Malaysia. The findings suggest that VAS is still in its infancy and a more robust and effective advertising and marketing campaign is needed to boost the adoption rate. Behavioural attitudes, subjective norms and perceived control elements were discussed and serve as important variables of interest in future study. Expectations towards VAS serve as an important guideline to further improve patient-oriented services.

**PHP1**

**PATIENT INVOLVEMENT WITH PHARMACEUTICAL INDUSTRY DRUG DEVELOPMENT AND RESEARCH: A REVIEW OF THE LITERATURE**

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**OBJECTIVES:** To understand the views of various stakeholders on patient involvement in pharmaceutical industry research and to describe the current state of knowledge of best practices. **METHODS:** A targeted review of the literature on patient involvement with pharmaceutical drug development and research. Approximately 150 articles were reviewed, including academic journal articles; corporate, foundation and government reports; and existing literature on patient involvement and engagement. **RESULTS:** Preliminary results demonstrate a diversity of activities, within the industry of the value of understanding patient experiences and perspectives. Patient involvement in research varies tremendously, from superficial and tokenistic to highly substantive (e.g., patient involvement in every stage of the research process). Current barriers to patient involvement include lack of robust evidence on the outcomes of patient involvement is largely qualitative, making it difficult to arrive at generalizable conclusions. Positive results often are assumed without being rigorously demonstrated. The literature suggests methods to improve patient involvement can lead to benefits for all stakeholders, including increased legitimacy and transparency, better alignment of research agendas with outcomes that patients value, higher data quality and better communication of results to lay audiences. Other sources, however, highlight barriers to incorporating a patient-centered perspective, such as resistance to diverting research resources, defensiveness relating to researchers’ expertise and traditional practices and the time and effort necessary to include patient advocates.

**CONCLUSIONS:** While there is a growing literature on patient involvement in industry research, the current lack of robust evidence on the outcomes of patient involvement hinders effective inclusion of patients. Further development of a science of patient involvement is a necessary step for broadening and strengthening industry inclusion of patients in the drug development process.