oxycodone treatment and were switched to TER. HRQoL data were collected through the symptom bother subscale of the OAB-q questionnaire which was administered at three different time points: before (M0) and after 3 (M3) and 12 Months or more (M12) of TER treatment. Efficacy and tolerability of TER treatment were also investigated. RESULTS: A total of 168 patient questionnaires of M3 and 93 of M12 were compared to baseline questionnaires (M0). The average age (±SD) was 59 (±16.9), patients were mainly female (70%). The mean total score (±SD) of the OAB-q subscale decreased from 29.13 (±9.12) to 18.16 (±7.53) at M3 and to 17.14 (±7.01) at M12 (p < 0.001) compared to baseline oxycodone treatment, exceeding the “Minimally Important Difference” of 10 points. All individual OAB-q symptom bother items showed an improvement with the highest impact on micturition frequency (27% at M3, 30% at M12) and uncomfortable/sudden urge to urinate (28% at M3, 30% at M12) (p < 0.001). The % of patients reporting improvement in the treatment related adverse events such as memory, vertigo, constipation and dry mouth further increased from M3 to M12 compared to baseline oxycodone treatment, with the most pronounced improvement for dry mouth: 58% at M3, 61% at M12 (p < 0.001). CONCLUSION: The data presented in this real life study show that TER improved the Health Related Quality of Life of patients with a neurogenic OAB. Based upon these results the reimbursement of TER was maintained in Belgium.

ILLNESS REPRESENTATIONS IN RENAL TRANSPLANT RECIPIENTS
Valdés C, Moreno D, Ortega T, Ortega F
Hospital Universitario Central de Asturias, Oviedo, Spain
OBJECTIVES: Renal replacement therapy gives rise to range of beliefs and problems. In order to make sense of and respond to the illness, patients create their own representations of their illness. These can include doubts or false beliefs about the illness, treatment benefits, and compliance. Different representations have different effects on clinical outcomes, since they are modulating the relationship between the patient and the illness. The aims of this study were, 1) to explore the illness representations and the relationship with the Health Related Quality of Life (HRQoL), anxiety and depression; 2) to identify patient characteristics and factors can influence them. METHODS: This is a cross-sectional study with 200 randomized transplant recipients with different time since transplant. Illness representations were evaluated using The Revised Illness Perception Questionnaire, the HRQoL using the SF-36 Health Survey and patients also answered Hospital Anxiety and Depression scale (HADS). A comorbidity index, sociodemographic and clinical data were also collected. RESULTS: There are previous results of the first 30 patients with at least six months since transplant and the maximum eighteen months. Higher hospital admissions, higher comorbidity, and lower hemoglobin and haematocrit levels have negative influence on their representations (p < 0.05). On the other hand illness representations were correlated with the mental aspects of the HRQoL (p < 0.05), but not with the physical. To have hereditary renal disease, not to assume the illness as a chronic, to report higher negative consequences in the diary life by it, and to perceive lower personal control about the illness, were correlated with higher anxiety and depression (p < 0.05). CONCLUSION: Patients’ beliefs are likely to have an important impact on their adjustment to their illness. To identify those patients with false or negative beliefs is necessary in order to avoid lower HRQoL, anxiety, depression, and behaviours such as noncompliance with immunosuppressants, major cause of renal transplant failure in younger people.

POSTER SESSION II
HEALTH CARE DECISIONS USING OUTCOMES RESEARCH CASE STUDIES

 CASE 1

UTILIZING AN INTERNET-BASED SYSTEM TO DELIVER A PHARMACY-CENTRIC ALERT AND INTERVENTION IN A MANAGED CARE SETTING
Pazos J, Orr G, Singal R
WorldDoc, Las Vegas, NV, USA
ORGANIZATION: Medicare Advantage–Prescription Drug Program Provider. PROBLEM OR ISSUE ADDRESSED: Medicare beneficiaries with Part-D coverage were consistently reaching their gap in coverage early in the plan year resulting in poor medication adherence, persistence and treatment outcomes. GOALS: The organization hoped to improve the cost-effectiveness of the drug selection choices made by the member and physician. The organization encouraged its members to utilize lower cost generic medications to help lower costs and avoid their coverage gap. OUTCOMES ITEMS USED IN THE DECISION: Adherence and persistence data and evidence from other pharmacy-based programs extracted from the literature was used to determine that the main outcome measure objectives were to be improved generic utilization, no decrease in essential maintenance medications, and decreased gross costs per member per month. IMPLEMENTATION STRATEGY: An internet-based pharmacy therapy quality assurance system was built to identify members that were expected to reach their coverage gap within the plan year. The members’ profiles were reviewed by the staff pharmacist for lower cost therapeutic alternative generic medications. The members were sent a letter (and possibly their physician) about available drug alternatives. RESULTS: • 16.3% increased generic utilization vs. 6.8% increase in control group • 2.9% decreased essential medication PMPM vs. 3.8% decrease in control group • 4.5% decrease in gross cost PMPM vs. 5.0% increase in control group LESSONS LEARNED: That a pharmacist-driven, internet-based intervention can improve cost-effective drug therapy. However, the amount of efficient spending is dependent upon the efficiency in which the program is delivered. Greater efficiencies will need to be considered for broader population exposure.

 CASE 2

ISSUES WHEN COMPARING COSTS AND EFFECTS OF INHALED ASTHMA AND COPD MEDICATIONS
Engstrom A1, Hugosson K2
1LFN Pharmaceutical Benefits Board, Solna, Sweden; 2Pharmaceutical Benefits Board, Solna, Sweden
ORGANIZATION: The Pharmaceutical Benefits Board in Sweden (LFN) PROBLEM OR ISSUE ADDRESSED: The LFN is in the process of reviewing the reimbursement status of all pharmaceuticals. The reviews are done by therapeutic area (based primarily on ATC3-codes). This is done in order to ensure that all products used are cost-effective and fulfill the criteria for reimbursement. GOALS: To assess the cost-effectiveness of the drugs used to treat asthma and COPD and to reach a decision on the continued reimbursement status of these products. The inhaled medications used for treating asthma and COPD (steroids, beta-agonists and combinations) are a major part of this therapeutic area. OUTCOMES ITEMS USED IN THE DECISION: The
scientific literature was searched for systematic reviews and meta-analyses of effectiveness and efficacy data, as well as for health economic evaluations. **IMPLEMENTATION STRATEGY:** All currently reimbursed drugs with ATC-codes R03 and R05 were included in the review. A project team consisting of a pharmacist, a health economist and a legal advisor led the investigation. 3 external clinical experts were also attached to the project group. These experts were recruited based on nominations from stakeholders, both from the health care system and patient organizations. Companies marketing a product included in a review were asked to submit documentation about which studies best support the effectiveness and cost-effectiveness of their product. Before the report was published it was sent out for review by the stakeholders involved. **RESULTS:** A number of systematic reviews of a good quality were identified and were found to be relevant for the decision situation in Sweden. The quality of the evidence available to support the different types of inhaled medicines varied widely. Inhaled steroids, long action beta-agonists and combinations thereof have a large number of studies. The short acting beta agonists do not have as much evidence and the trials available are often small. There is also a shortage of head to head trials of relevant products at relevant doses. In this field there is also the added complication of different inhaler devices in addition to the different active substances. The value of having a wider range of substances and inhaler devices has not been studied and quantified. Based on the available evidence the products were compared at equivalent doses. Based on this comparison one product was considered too expensive compared to the alternatives and recommendations were made on which drugs should primarily be considered for new patients. The preferred measure of effect in health economic evaluations the QALY was rarely used within this field.

**CASE3**

**REVIEWING THE REIMBURSEMENT STATUS OF DRUGS AGAINST ASTHMA, COPD AND COUGHS**

Hugosson H1, Engstrom A2

1Pharmaceutical Benefits Board, Solna, Sweden; 2LFN Pharmaceutical Benefits Board, Solna, Sweden

**ORGANIZATION:** The Pharmaceutical Benefits Board in Sweden (LFN)** PROBLEM OR ISSUE ADDRESSED:** In Sweden, the Pharmaceutical Benefits Board (LFN) was instituted in 2002 with the purpose of contributing to a rational and cost-effective use of pharmaceuticals. The Board’s assignment is to systematically and in accordance with national prioritization guidelines decide which pharmaceuticals should be reimbursed. Societal cost-effectiveness is a key decision parameter. One task of the LFN is to review the subsidy status of all products (~3 000 products) that were already in the pharmaceutical benefits when the Board was instituted. All the drugs used for treating asthma, COPD and coughs (43 products in total) were assessed to see whether they still merited reimbursement. **GOALS:** The primary purpose of the review of these products is to inform the Board’s decisions on subsidy status for the pharmaceuticals used within the therapeutic area of asthma, COPD and coughs. The secondary purpose is to help other decision makers in Swedish health care to rationally and cost-effectively use pharmaceuticals in the treatment of these diseases. **OUTCOMES ITEMS USED IN THE DECISION:** The scientific literature was searched for systematic reviews and meta-analyses of effectiveness and efficacy data, evidence on the humanistic burden of disease, as well as for health economic evaluations. **IMPLEMENTATION STRATEGY:** All currently reimbursed drugs with ATC-codes R03 and R05 were included in the review. A project team consisting of a pharmacist, a health economist and a legal advisor led the investigation. 3 external clinical experts were also attached to the project group. These experts were recruited based on nominations from stakeholders, both from the health care system and patient organizations. Companies marketing a product included in a review were asked to submit documentation about which studies best support the effectiveness and cost-effectiveness of their product. Before the report was published it was sent out for review by the stakeholders involved. **RESULTS:** Of the 43 products reviewed, 34 retained their reimbursement status. Eight products were removed from reimbursement while limited reimbursement was granted for one medicine. Of these nine medicines, five are cough medicines and four are medicines against asthma and/or COPD. The four asthma/COPD products were removed primarily because they were not judged to be cost-effective. The medicines against cough were removed from reimbursement due to the severity of the disease being low.

**CASE4**

**DEVELOPMENT AND VALIDATION OF A CAREGIVER GASTROENTERORITIS KNOWLEDGE QUESTIONNAIRE**

Deiratany S

The Hospital for Sick Children, Toronto, ON, Canada

**ORGANIZATION:** Authors: S, B, Freedman (MD), S, Deiratany (MD), S, Bensler (MD), R Goldman (MD) (The Department of Paediatrics, Division of Paediatric Emergency Medicine (S.B., S.D.) and the Division of Rheumatology (S.B.) The Hospital for Sick Children, The University of Toronto, Toronto, ON, Canada and the Division of Pediatric Emergency Medicine (R.D.G.), BC Children’s Hospital and the Child & Family Research Institute (CFRI), Department of Pediatrics, University of British Columbia, British Columbia. **GOALS:** Title: Development and Validation of a Caregiver Gastroenteritis Knowledge Questionnaire. **OUTCOMES ITEMS USED IN THE DECISION:** Background: Gastroenteritis remains a leading cause of childhood morbidity and mortality and results in many non-urgent emergency department (ED) visits due to caregiver knowledge deficiencies. Children of caregivers who are less knowledgeable are at increased risk of presenting to a hospital secondary to dehydration. **IMPLEMENTATION STRATEGY:** Purpose: The primary aim of this study was to describe the reliability and validity of a Caregiver Gastroenteritis Knowledge Questionnaire (CGKQ). **METHODS:** The CGKQ design incorporated 38 true/false questions covering signs of dehydration, indications to see a physician, oral re-hydration therapy, solid intake and re-feeding, medication use and disease transmission. Following validation procedures, 80 caregivers, 25 nurses and 18 pediatric emergency medicine physicians and 4 general pediatricians completed the questionnaire. One month later all participants completed the questionnaire a second time. **RESULTS:** Findings: Content validity was confirmed qualitatively. Construct validity was demonstrated by incremental increases (P < 0.001) in mean total scores from caregivers to nurses to physicians at both time points. A wide range of scores were recorded, from 12 to 38. Multiple regression analysis revealed the number of prior visits for gastroenteritis was inversely associated with overall caregiver score (P = 0.02). Internal test-retest data gave a single measure intraclass correlation coefficient of 0.74 (95% CI: 0.62, 0.83) and domain coefficients >0.50 for all domains except for signs of dehydration. The Pearson correlation coefficient for the test-retest score was 0.75. Internal consistency was demonstrated with a Cronbach’s alpha of 0.67 at time 0 and 0.80 at time 1 month. **LESSONS LEARNED:** The CGKQ is a reliable, valid tool suitable for identifying knowledge gaps amongst caregivers and measuring improvement following educational intervention.