through item completion, internal validity was evaluated using factorial structure and internal consistency. RESULTS: Face validity suggested that the H-CSRI had satisfactory psychometric properties (missing data up to 20%). There were floor effects for 6 items and no item with ceiling effect. Factor analysis explained 84% of the total variance and demonstrated acceptable construct validity for the motor subscale (CFI > 0.94, RMSEA < 0.05). Acceptable split-half reliability coefficients were higher than 0.80. The items internal consistency scores were higher than 0.40 and the correlations between items and their respective rest-scores in one dimension was 0.65, and correlations within the other dimension was 0.76. CONCLUSIONS: These data support the validity of the motor and functional scales of the H-CSRI to assess the health status for patients with HD in US. A limitation of this study is that the subscale score was not assessed because items related to patients were not linked with those related to caregivers. Further analyses should be conducted to assess the validity of the behavioral subscale.

PRSS5
THE DISEASE BURDEN ASSOCIATED WITH INFANT HOSPITALIZATION FOR A LOWER RESPIRATORY TRACT INFECTION (LRTI) IN CANADA

Mohamed M.1, Hareendran A.1, Jen HTH.1, Zaiser P.2, Make B.1
1Forest Research Institute, Jersey City, NJ, USA; 2Eidera, London, UK, 3National Jewish Health, Denver, CO, USA

OBJECTIVES: Infant hospitalizations for lower respiratory tract infections (LRTIs) are common in children under one year of age, of which respiratory syncytial virus (RSV) is the major cause. The economic impact of infant hospitalizations for respiratory infections has proven to be substantial, however the socioeconomic burden it has on parents and caregivers is not well understood. METHODS: The HEPAiRx® study was a multinational retrospective study to determine the humanistic and economic burden of infant LRTI hospitalizations. Canadian data was collected over two consecutive RSV seasons (2010/2011 and 2011/2012). Direct hospital and insurance care resource utilization data (e.g. length of hospitalization stay (LOS) and intensive care unit (ICU) admission) were obtained from medical chart reviews. Lost work productivity was assessed by surveys administered to the parents and the child at the time of infant discharge using the Work Productivity and Activity Impairment questionnaire specific to caregivers of infants hospitalized with respiratory illness. RESULTS: 67 infants (54 term, 13 preterm), <1 year of age were included. 100% of infants had a confirmed RSV diagnosis. The mean LOS was 5.68 days (5.65 days term, 5.81 days preterm). 13% of infants (13 term and 15.4% preterm) required ICU admission and 95.5% had supplemental oxygen (96.3% term, 92.3% preterm). Among fathers who completed the survey 37 (84%) reported that they were currently employed. Of working mothers, absenteeism was 27.78%, presenteeism was 21.43% and 19.92% for employed fathers. Fathers reported 74.19 daily activity impairment and mothers reported 88.04 due to their child’s hospitalization. CONCLUSIONS: This study shows that infant hospitalizations due to severe RSV are costly. Economic burden borne by the health care system, employers and parents in Canada.

PRSS7
PEDIATRIC ASTHMA SYMPTOMS: ASSESSMENTS BY SUBJECTS AND CAREGIVERS

Nelson L1, Currie B3, Horpiszti E2, Peter S1, Vernon MK1
1beck A & Dohme Corp, North Wales, PA, USA; 2Eidera, Bethesda, MD, USA; 3Eidera, London, UK

OBJECTIVES: Asthma is the most common chronic disease in children. To date, there is no asthma symptom diary suitable for use in pediatric clinical trials of asthma that is based on claims in clinical trials. The aims of this study were: to collect data on symptom experiences in children with asthma and their parents/caregivers (parents, to elicit concepts and language surrounding children’s asthma experiences directly from children (ages 4-11 years) and parents, to understand the age at which children can comprehend and report asthma symptoms. METHODS: Concept elicitation interviews were conducted, consistent with the FDA Guidance for Industry on Patient-Reported Outcomes. Child and parental perceptions of the asthma symptom experiences were elicited from child-parent dyads. Data from interviews were analyzed, using a content analysis approach with ATLAS.ti qualitative data analysis software. RESULTS: A total of 27 child-parent dyads from sites in the US were interviewed. Children and parents were generally consistent in their report of the timing of daytime asthma symptoms; including coughing, wheezing, chest tightness/discomfort, and shortness of breath. Both children and parents reported that these symptoms may also occur at night and lead to nighttime awakenings. Children were more aware of chest tightness and discomfort; parents were more aware of wheezing, which may be easier to detect by an observer. Younger children were less able to accurately describe their symptoms over longer timeframes/recall periods than older children. Children and their parents described symptom severity in terms of intensity and frequency. Results supported a daily recall of symptoms as most appropriate. CONCLUSIONS: The qualitative data support the development of an asthma symptom diary for parents of children 4 years and older with a daily recall period. In addition, children 8 years of age and older may also be able to accurately report their symptoms on a daily basis.

PRSS8
EVALUATION OF THE PSYCHOMETRIC PROPERTIES OF THE EARLY MORNING SYMPTOMS OF COPD INSTRUMENT (EMSCI)

Mitchell RI1, Hareendran A.1, Jen HTH.1, Zaiser P.2, Make B.1
1Forest Research Institute, Jersey City, NJ, USA; 2Eidera, London, UK, 3National Jewish Health, Denver, CO, USA

OBJECTIVES: Early morning symptoms impact the quality of life of patients with chronic obstructive pulmonary disease (COPD). The Early Morning Symptoms of COPD Instrument (EMSCI) was designed to measure the occurrence and severity of morning symptoms, to assist in the diagnosis and treatment of COPD and the impact of those symptoms on activity limitation and rescue medication use. This abstract describes the psychometric analysis conducted to examine the EMSCI’s reliability and validity. METHODS: Psychometric properties were examined using data from a validated randomized controlled trial. Items with acceptable psychometric properties (CFI > 0.9, RMSEA < 0.05) were selected for the final instrument. 37 items were retained to the time of infant discharge using the Work Productivity and Activity Impairment questionnaire specific to caregivers of infants hospitalized with respiratory illness. RESULTS: Patients in the sample (n = 1663) were aged 40-93 years (mean 63.93 ± 8.89) and 53% male. About 31% of patients experienced early morning symptoms that were at least moderate in severity on Day 1. A one-factor structure was confirmed with factor analysis for symptom severity items. Test-retest reliability was confirmed with symptom severity (ICC = 0.84), activity limitation (ICC = 0.85) and rescue medication (ICC = 0.62). Concurrent validity was supported by the EMSCI’s significant positive correlation with both the SGRQ and EXACT-RA. CONCLUSIONS: Results suggest that the EMSCI is a reliable and valid instrument to evaluate morning symptoms in COPD and can potentially be used to collect data to support clinical study endpoints.

PRSS9
A PROSPECTIVE PILOT STUDY EVALUATING THE HRQOL IMPACT OF A NOVEL AIR PURIFICATION TECHNOLOGY FOR PEDIATRIC ASTHMA PATIENTS

Gupta G1, Lehman H.2, Hilde M.1
1AbbVie, North Chicago, IL, USA, 2University of Calgary, Calgary, AB, Canada

OBJECTIVES: Children aged 40-93 years (mean 63.93 ± 8.89) and 53% male. About 31% of patients experienced early morning symptoms that were at least moderate in severity on Day 1. A one-factor structure was confirmed with factor analysis for symptom severity items. Test-retest reliability was confirmed with symptom severity (ICC = 0.84), activity limitation (ICC = 0.85) and rescue medication (ICC = 0.62). Concurrent validity was supported by the EMSCI’s significant positive correlation with both the SGRQ and EXACT-RA. CONCLUSIONS: Results suggest that the EMSCI is a reliable and valid instrument to evaluate morning symptoms in COPD and can potentially be used to collect data to support clinical study endpoints.

RESPIRATORY-RELATED DISORDERS – Health Care Use & Policy Studies

PRSS60
THE IMPACT OF ORAL NUTRITIONAL SUPPLEMENTATION IN MEDICARE PATIENTS WITH COPD

Snyder PL, Litchcum MT, LaVallee C, Lakdawalla D
Precision Health Economics, Los Angeles, CA, USA

OBJECTIVES: Chronic obstructive pulmonary disease (COPD) is a leading cause of death and disability in the US. Due to its progressive nature and high prevalence, COPD imposes a considerable burden on Medicare and will be important to reimbursement under the Affordable Care Act. Evidence suggests that oral nutritional supplements (ONS) may be an effective means of improving COPD outcomes, though the extent of this effect among aged 65+ Medicare patients is unclear. METHODS: Analyses were conducted using the Premier Research Database on Medicare patients aged 65+ and carrying a primary diagnosis of COPD. Propensity score matching was employed to create a one-to-one matched comparison group. Because ONS may be given to patients with poor unobserved health status, instrumental variables (IV) regression analysis was performed to address selection bias. IV analyses quantified the effect of ONS use on length of stay (LOS) episodes and the probability of 30-day readmission. CONCLUSIONS: ONS use is associated with patient and provider characteristics and a time trend. RESULTS: Out of 10,322 ONS episodes and 368,079 non-ONS episodes, a one-to-one matched sample was created (N = 14,326). 0.036 regression analysis indicated that ONS can increase LOS by 1.87 days (t = 4.31, p < 0.01). Similar episode costs were reduced by $1,570 (12.5%), from $12,523 to $10,953 (p < 0.01). Among those episodes which could be tracked for follow-up, ONS use lowered the probability of 30-day readmission by 13%, from 0.335 to 0.291 (p < 0.01). CONCLUSIONS: ONS presents an inexpensive, effective means for