the prediction of these events challenging for primary care management and NHS community provision. This could potentially result in increased hospital admissions, irrespective of morbidity in the population. Alternatively, the discrepancy may be influenced by patient proximity to accident and emergency (A&E).

HS4

INFORMATION USED IN THE DECISION-MAKING PROCESS REGARDING INFLUENZA VACCINATION POLICY: PERCEPTIONS OF STAKEHOLDERS IN FRANCE AND THE NETHERLANDS

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OBJECTIVES: To minimize the medical and societal impact of influenza, most WHO countries recommend seasonal vaccination in targeted populations; however, little is known about the decision-making procedures at a country-level. In Europe, the Netherlands has the highest rate of influenza vaccination and France is not far behind. Our purpose was to analyze differences and similarities in the information used in the decision-making process between these two countries, according to the stakeholders involved. **METHODS:** A preliminary documentary analysis identified all stakeholders, at national level in both countries, as decision-makers (governmental authorities), advisors and information providers (research institutions, groups of experts), and vaccine manufacturers. We undertook a qualitative study including at least one actor from each stakeholder group involved in the process. Thirty-three face-to-face or telephone semi-structured interviews were conducted during summer 2013 in France (n=16), and autumn 2013 in the Netherlands (n=17). Every interview was recorded and transcribed. NVivo10® was used for the qualitative analysis. **RESULTS:** Stakeholders in France and the Netherlands follow international recommendations. The most relevant information is clinical trials and epidemiological studies. Economic models gained importance after the 2009 influenza pandemic, especially in the Netherlands. In both countries, the advice of experts is crucial. All types of studies are assessed through a standard checklist for public health vaccinations in the Netherlands. In France, the assessment is not standardized, but based on general checklists. Decision-makers are increasingly worried about the quality of studies, due to the lack of standardized methods and influenza uncertainty. When published studies are not generalizable, local studies are required. **CONCLUSIONS:** Information used in the decision-making process is similar in both countries, although economic models have greater importance in the Netherlands. The excellence of the process is challenged by the poor quality of influenza data. Efforts should be made on standardization of study methods, together with harmonization of European policy.

MEDICATION ADHERENCE STUDIES

MA1

COST-EFFECTIVENESS OF REAL-TIME MEDICATION MONITORING IN CHILDREN WITH ASTHMA

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OBJECTIVES: Poor asthma control in children is partly caused by poor adherence to medication. The aim of this study was to investigate the effectiveness and cost-effectiveness of a Real-Time Medication Monitoring system (RTMM) to improve adherence to inhalation corticosteroids. **METHODS:** We performed a multi-center, randomized controlled trial. Included were 209 children (<12 years) with moderate to severe asthma, who had used inhaled corticosteroids (ICS) for at least 3 months. Patients were followed for 12 months. All children received an RTMM device, but only in the intervention group text messages were sent to the parents whose child appeared to forget an inhalation. The effectiveness measures were adherence (percentage of inhalations taken within the correct timeframe), clinically relevant improvement in asthma control score (ACT, ≥3) and asthma-related quality of life (PAQLQ, ≥0.5) at the end of the study. Costs were calculated from a health care perspective (including GP, hospital, medication and RTMM device costs) and from a societal perspective (additionally including costs of parents' absence from work). Uncertainty around the point estimates was assessed using bootstrapping. **RESULTS:** Adherence was 73% in the treatment group and 58% in the control group (difference 15%-pt, 95%-CIL 8.6%-22.0%). Of the RTMM patients, 33% showed clinically relevant improvement in ACT and 22% in PAQLQ. In the control group, these numbers were 37% and 38% respectively (differences not statistically significant). Costs were higher in the intervention group: €825 versus €713, a difference of €112 (95%-CI:-€139- €338) from the health care perspective and €1084 versus €845 from a societal perspective (difference 239, 95%-CI: -€84 – €565).The incremental costs per 10% improvement from each perspective were €74 and €157 respectively. **CONCLUSIONS:** RTMM increases inhalation adherence, but there is no evidence of better health outcomes in this patient population within the first year. In these circumstances, this is not a cost-effective intervention.

MA2

THE BURDEN ASSOCIATED WITH NON-ADHERENCE IN EUROPEAN PATIENTS WITH DEPRESSION

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OBJECTIVES: Adherence to medication is regarded as an important factor for predicting clinical outcomes in mental disorders such as depression, bipolar disorder or schizophrenia. The current study investigates the relation between adherence and the burden of depression on society and individuals. **METHODS:** Data were from the 2013 EU National Health and Wellness Survey (NHWS), an internet-based survey from a representative sample of adults from France, Germany, Italy, Spain and UK stratified by age and gender. Out of 62,000 respondents, 8,462 (11%) reported a diagnosis of depression and 3,937 (6%) having a prescription medication for depression (Rx). Respondents classified as adherent according to the Morisky Medication Adherence Scale (MMAS) were compared to the non-adherent on severity (PHQ-9), sociodemographics, health characteristics, health-related quality of life (SF-36), work productivity and activity impairment (WPAI) and health care resource use (physician, hospital and emergency visits). **RESULTS:** Compared to adherent respondents (54%), the non-adherent (46%) were more severe (37% vs. 31% with PHQ-9 score ≥ 15); had lower Mental Component Summary (MCS: 32 vs. 33); higher Absenteeism (18 vs. 16); more emergency visits in the previous 6 months (0.49 vs. 0.42); and their satisfaction with medication was lower (4.97 vs. 5.27) (All $p<0.05$). About 75% of both groups were participating in psychotherapy at the time of survey and showed no significant difference in Physical Component Summary (PCS); Presenteeism; and number of hospitalizations. **CONCLUSIONS:** While efficacy measured during clinical trials is one of the most influential measures in treatment assessment, its ecological validity may be jeopardized by non-adherence to medication in real life. The current study shows that low adherence is associated with more severe depression, lower treatment satisfaction and lower mental quality of life (MCS) in respondents taking antidepressants. These results point at the importance of combining adherence and efficacy in the assessment of treatments for depression.

MA3

ASSESSING THE RELATIONSHIP BETWEEN PATIENT COMPLIANCE TO BLOOD GLUCOSE MONITORING AND HEALTH RELATED QUALITY OF LIFE

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OBJECTIVES: The objective of our research was to evaluate whether there is a relationship between patient compliance to blood glucose monitoring (BGM) and HRQoL. Moreover we wanted to understand what drives patients not to be compliant to BGM. **METHODS:** Data were taken from the ROPER Diabetes program which captures information direct from diabetes patients across 27 countries on a regular basis. For this specific study data from a sample of 1480 diabetes patients living in the USA were collected from June to August 2013. Each patient completed a questionnaire comprising some 2000+ variables, which included the EQ-5D-5L instrument and accompanying VAS. Patients were asked to state their recommended frequency of BGM and what their actual BGM frequency was during the past month. Moreover patients were asked to explain why they were not compliant to the recommended BGM frequency. **RESULTS:** Not being compliant explained 52% (R^2 = 0,52) of the variations in HRQoL. The main reasons for not being compliant to the recommended BGM frequency were: no coverage of strips by the insurance, pain and discomfort related to blood testing, not willing to know the test result. Other less important drivers of non-compliance were: inconvenience, issues with food intake and meter malfunction. **CONCLUSIONS:** Meter manufacturers are right when they reckon that BGM is crucial to diabetes patients' disease management. Manufacturers have been innovating to make the blood testing as convenient as possible. Yet an important driver for not complying to the recommended BGM frequency remains to be pain and discomfort during blood testing. Manufacturers should also continue their efforts to ensure coverage of strips by the different insurance providers in the USA.

MA4

ADHERENCE TO ANTIRETROVIRAL THERAPY (ART) AMONG ADULT HIV POSITIVE PATIENTS IN VOLTA REGIONAL HOSPITAL, GHANA

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OBJECTIVES: Adherence to antiretroviral therapy (ART) is a critical element towards reducing the emergence and spread of drug resistant strains of the virus. To achieve a sustained virological suppression, at least a 95% optimal adherence is necessary. This study sought to explore the level of adherence and also identify the factors contributing to non adherence to therapy among people living with the HIV/AIDS. **METHODS:** The study was a descriptive cross sectional type. A systematic sampling method was used to recruit 146 adult ARV users who have been on therapy for at least 3 months and attended the ART clinic between March to May, 2014. Using a structured and pretested questionnaire, data on medication adherence were collected by adopting a one month visual analogue scale (VAS) recall, a 4 days self reported adherence, and a pill identification test technique (PIT). A multivariate logistic regression was then used to determine key factors that were associated with adherence. **RESULTS:** Of the three methods used, the optimal adherence (≥ 95%) for the pill identification test (PIT) was 76%, followed by the visual analogue scale (71.2%). The 4 days self report recorded the least adherence rate (65.1%). The overall rate of high optimal adherence was found to be 51.4%. Respondents aged 46years or more were highly adherent (61%) than their counterparts who are less than 25years (60.0%). Those between 25 to 45years of age were the least adherent (45.0%). However, the association between the level of adherence and the sociodemographic variables (sex, age, employment, and marital status) were not statistically significant. **CONCLUSIONS:** The overall optimal adherence was found to be relatively low and fell below the minimum expected adherence of ≥ 95%. Adherence to ART should aim at improving the pre treatment counselling and ensure the availability of ARV'S at all times.

STUDIES ON NICE ASSESSMENTS

NI1

EXPLORING THE FLAWS IN CLINICAL DATA THAT LEAD TO REJECTION OF NICE SUBMISSIONS

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