

# Friday 7th March

## Exchange Hall

**11:00-12:30** Poster presentations Session 1 Groups 1-4

Eposter	Poster Session 1	Poster Session 2	Poster Session 3
Paulo Anciaes	Joseph McFarlane Nicole Russell Kate Blair Roisin Ryan Hamza Zafar	Matthew Jones Laura Summersell Joanna Marley Lonn Cheung Nicolas Rey de Castro Sepeedeh Saleh	Greta Millar Chuyan Yu Nisreen Khambati Hasan Shamsi Anika Rahim Nevena Tzacheva Shweta Appiah

## E-posters and Poster Session 1

### Ref: 580 ePoster

Walking in the automobile city - Two proposals for the measurement of health risks and opportunities

Presenting author: **Paulo Rui Anciaes**

University College London, London, United Kingdom.

Co-authors:

The empirical links between walking and urban health are well established. However, there is relatively little research quantifying the extent to which these links are affected by the transport system, especially by the presence of road infrastructure and traffic in the areas where people walk. This paper proposes two indicators for assessing the effects of the transport system on walking mobility and on associated health risks and opportunities in urban regions. Exposure to roadside air pollution and noise may increase the risk of several diseases. The proposed indicator looks at the levels to which people are exposed to these risks when they walk around their homes. The modelling of this effect uses a geographic information system (GIS) and a large set of data (such as land use maps, business locations and satellite images) to identify daily walking destinations for the residents of each census unit, including workplaces, schools, and bus stops. The optimal pedestrian routes used to access these destinations are estimated using network analysis. Information on employment status and work and study locations and starting time is then overlaid with pollution maps for different times of day, estimating the exposures of different segments of the population. Community severance (also known as the barrier effect) also has a potential negative impact on human health. This is because the presence of large infrastructure affects people's propensity for walking and for social interaction, two factors usually associated with good health. A sampling procedure is used to derive a set of destinations where the residents of the census unit walk to meet other people, assuming that the probability of travelling to each place is proportional to its population density. The indicator of severance in a census unit is defined as the population living in places that cannot be accessed by unless crossing a transport barrier. The effects of different barriers (limited-access motorways vs. other roads) are compared. The distribution of the two indicators can be mapped and overlaid with the distribution of different groups, assessing the potential role of road transport in generating health inequalities. This is illustrated in an application for the Lisbon Metropolitan Area. The maps show that exposure to traffic pollution is especially severe in the central parts of the metropolitan area, which have large proportions of elderly people. A set of 'hotspots', areas faring poorly in both pollution exposure and community severance, is also identified. These areas are located in some of the main commuting corridors, and are characterized by high proportions of populations with low socio-economic status and relatively high concentrations of slum areas.

**Ref: 721 Poster**

Investigating inappropriate use of Emergency Departments

Presenting author: **Joseph McFarlane**

University of Manchester medical school, United Kingdom.

Co-authors:

With 21,380,985 Accident and Emergency attendances recorded in England over just a 12 month period in 2010-11, the emergency services of the NHS are coming under increasing amounts of pressure to provide care for a greater volume of patients. This project aims to investigate the reasons that people use A&E services, both appropriately and inappropriately, as well as other potential causes for increased attendance. In addition, the consequences of these factors will be analysed, followed by suggestions as to what could be done to address the problem that emergency services are currently facing.

### Ref: 385 Poster

Combined Oral Contraceptive Prescribing: Is Guidance Enough?

Presenting author: **Roisin Ryan**

Manchester Medical School, University of Manchester, Education North, Manchester Royal Infirmary, Oxford Rd, Manchester, Greater Manchester. M13 9WL, United Kingdom.

Co-authors:

Background: Use of the combined oral contraceptive pill (COCP) is very common; however there are numerous contraindications and potentially life threatening adverse effects associated with its use. There is detailed guidance available to guide the safe prescribing of the COCP, the UK Medical Eligibility Criteria (UKMEC), which categorises patients' risk of complications compared to the benefit of contraception within categories 1-4. Safe prescribing within a primary care setting would almost exclusively be comprised of patients within category 1 and 2. These categories denote, respectively, patients for whom there is no restriction for COCP use, and patients for whom the advantages of using the COCP generally outweigh the theoretical or proven risks. Aims: To assess how closely the practice conformed to the UKMEC guidance and establish whether the mere existence of the UKMEC appears to be enough to ensure patient safety. Potential methods for the facilitation of UKMEC use and safe contraceptive prescribing were also explored in interviews with practice staff. Design: A retrospective audit was performed to determine the percentage of patients in a GP practice that were prescribed the COCP within the last 6 months that were a UKMEC 1 or 2. The standard was set at 95%. As a secondary measure it was expected that no patients would have been prescribed the COCP whose risk was categorised as level 4 by the UKMEC guidelines, denoting an absolute contraindication. Participants: A search was performed on the practice's database of electronic patient records to include any patients who had been prescribed the COCP within the last 6 months. There were no exclusion criteria and a total of 68 patients were identified. Results: Within the practice the actual percentage of patients prescribed the COCP with a risk category of 1 or 2 was 85%. This was found to be significantly different from the standard,  $\chi^2 (1, N=68) = 13.5, p < 0.05$ . The most common contraindication amongst those patients with a UKMEC risk category of 3 or 4 that were prescribed the COCP was elevated blood pressure readings, with obesity as the second most common. In addition to this it was found that 2 patients within the sample had been prescribed the COCP in spite of having an absolute contraindication it, a UKMEC risk score of 4. Conclusions: In spite of clear guidance being available it appears that they are not always referred to when prescribing the COCP. This highlights the need for measures to be taken towards simplifying the process of contraception counselling and improving access to the UKMEC guidelines. Recommendations for change were provided which included both staff and patient education, and development of a pro-forma for contraception prescribing. This latter measure could be easily implemented to not only facilitate the consultation but also to help ensure that at-risk patients were not prescribed a treatment that could cause them serious harm.

**Ref: 845 Poster**

A Review of Hand Washing Audits at Central Manchester University Hospital and South Manchester University Hospital

Presenting author: **Jawad Ul Haq**

The University of Manchester, The University of Manchester, Oxford Rd, Manchester M13 9PL, United Kingdom.

Co-authors: Hamza Zafar

Hospital acquired infections (HAIs) are a major challenge faced by the NHS. As well as damaging patients' health, they also prolong hospital stays and are a major drain of valuable healthcare resources. Correct hand hygiene has been proven to be an integral way of reducing transmission of pathogens, therefore reducing the incidence of HAIs. Our QE report aims to analyse the data collected from hand washing audits performed at Central Manchester University Hospital and South Manchester University Hospital. We will assess the results of individual professional groups, looking at which performed better. Another objective is to look at whether any hand hygiene training exists in the medical and nursing curricula, and if there is regular assessment of it. Finally, we will observe whether any actions were taken and assess how the Trusts aim to improve clinical quality following these audits.

**Poster Session 2**

**Ref: 669 Poster**

The Performance of the Minor Operations Clinic at Primrose Avenue Surgery: An Audit

Presenting author: **Matthew Jones**

University of Manchester, Manchester Medical School The University of Manchester  
Stopford Building Oxford Road Manchester M13 9PT, United Kingdom.

Co-authors:

Minor operations have been performed in General Practice routinely for more than 20 years. This audit was carried out in an attempt to improve the quality of care, wherever possible, at the Minor Operations Clinic at Primrose Avenue Surgery in Urmston, Greater Manchester. The results show that the practice is highly capable in performing these types of procedures and there was little room for improvement. Where potential hazards were found, recommendations were created with an action plan of how to achieve these goals.

### **Ref: 655 Poster**

Community acquired pneumonia in the elderly: what are the economic and clinical benefits of an earlier diagnosis and how can this be achieved in the developing world?

Presenting author: **Laura Summersell**

University of Manchester, Oxford road, United Kingdom.

Co-authors:

Background: community acquired pneumonia (CAP) is a common and often severe problem in the elderly which will become a bigger burden as population demographics change in the coming years. The NHS currently spends over £440 million a year treating pneumonia, with the majority of costs coming from inpatient treatment. Methods: a review of current literature was conducted to determine why the elderly are more susceptible to pneumonia and what can be done to ensure a correct diagnosis is reached promptly, with the aim of minimising admissions and therefore costs. Results: the elderly have fewer symptoms than younger patients, which delays diagnosis and increases time between symptom onset and antibiotic administration, increasing the mortality rate in this patient group. There is a natural decline in the function of the respiratory and immune systems with age and elderly people are more likely to be undernourished and have comorbid illnesses. Earlier detection of pneumonia would reduce the severity of illness at the time of diagnosis and ultimately save the NHS money. Conclusions: it is suggested that the benefits of using pulse oximetry alongside CRB65 in the community are further investigated as it could detect hypoxia which is asymptomatic its earlier stages. Subtle rises in respiratory rate from baseline values may also be of use. The potential benefits of an earlier diagnosis are important not only in the UK but also the developing world.

### **Ref: 827 Poster**

Local Audit on The Use of Piperacillin-Tazobactam Within The Medical Department of Royal Oldham Hospital.

Presenting author: **Joanna Marley**

University of Manchester Medical School, Stopford Building, Oxford Rd, Manchester, Greater Manchester, United Kingdom.

Co-authors:

Piperacillin-Tazobactam ('Tazocin') is a broad spectrum antibiotic known to be effective against a variety of infection causing organisms, which has also not been implicated with increasing the incidence of Clostridium difficile infection (CDI), therefore making it a popular choice for treatment of severe infections. The question has been raised as to whether Tazocin is being over-used in the medical department of Royal Oldham Hospital since £28,056 was spent on this antibiotic within a three month period, significantly more than other drug costs and there is knowledge of a developing resistance against it. Aim: The aim of the audit is to assess the use of Tazocin across the medical department of Royal Oldham Hospital by means of assessing compliance to the Acute Pennine Local Trust NHS Guidelines; Antibiotic Policy for Adult Patients: EDT007 ('Local Antibiotic Policy') when prescribing it, specifically: 1. If it was correctly indicated; 2. Whether a course duration or review date was stated; and 3. If its requirement was reviewed after 24 hours of commencing treatment. The data was collected between 4 December 2013 and 9 December 2013 and included Tazocin prescriptions written between 25 September 2013 and 3 December 2013. Results: Results showed that: 1. 85% of Tazocin prescriptions were correctly indicated; 2. 30% had either a course duration or review date; and 3. 75% were reviewed 24 hours from commencing treatment. It was also identified that Foundation doctors prescribed 71% of the prescriptions which were incorrectly indicated, as well as over half of those written without a course duration or review date. As a result of this audit, education for all the medical staff in Royal Oldham Hospital, as well as education targeted specifically towards the Foundation doctors, will be planned and alterations made to the electronic prescribing system in order to improve the compliance with the Local Antibiotic Policy and reduce the unnecessary use of Tazocin.



### **Ref: 682 Poster**

Identifying the barriers which prevent Kathmandu's Street Children accessing adequate Healthcare

Presenting author: **Lonn Cheung**

Nuffield Centre for International Health and Development, Huddersfield Royal Infirmary, Lindley, Huddersfield, HD3 3EA, United Kingdom.

Co-authors:

**Introduction** Worldwide, there are millions of vulnerable children that live on the street. In Nepal, there are thousands of street children, many in Kathmandu. They live in extreme poverty and are subject to segregation, exploitation and violence and have significant health and social needs. Health and social policy has been slow to recognise the need for change and knowledge surrounding the existing challenges is poor.

Understanding these barriers is vital to install successful interventions and improve service provision and utilisation. The experiences and opinions of health and social care providers are vital to understanding the challenges of service delivery to this population.

**Aims and objectives** This study aimed to identify the barriers that prevent Kathmandu's street children from accessing services, by exploring the opinions and experiences of health and social care providers working in the field. The objectives were to develop a set of specific recommendations to overcome these. **Methods** A qualitative study was conducted in Kathmandu in May 2010. Ethical approval was granted from the University of Leeds and the Nuffield Centre. Purposive sampling was used to recruit twelve health and social care workers who were interviewed using a semi-structured technique.

Interviews were recorded, transcribed and analysed using thematic analysis. **Results** Two broad themes were identified: Healthcare provision and uptake, and wider societal barriers. Barriers to healthcare provision were poor health prioritisation, poor health knowledge and a distorted perception of illness severity. Poor service provision, poor quality services and service cost were also identified as barriers under this theme. Many social barriers were recognized including marginalisation, stigmatisation and a lack of social support, which decreased service uptake. **Discussion** This study adds to the small body of data available and highlights the far reaching challenges faced by service providers working with this population. Small-scale interventions by NGOs, such as peer education are highlighted as effective methods to empower street children to access services. However, larger socio-political change is required to achieve long-term improvements. .

### Ref: 639 Poster

What is the nature of accident and emergency attendance by patients from a health deprived urban area?

Presenting author: **Nicolas Rey de Castro** University of Manchester, Stopford Building, Oxford Rd, Manchester, Greater Manchester M13 9PT, United Kingdom.

**Aims-** Accident and Emergency (A&E) use in England has risen by approximately 52% in just 7 years, resulting in more than 21 million A&E cases in 2010/11. With the recent major restructuring of primary care funding as part of the 'Equity and excellence: Liberating the NHS' health policy, General Practice (GP) surgeries now have financial responsibility over A&E use by their patients. Invariably, rising numbers attending A&E will drain money from GP surgeries' health budgets, ultimately impacting on the quality of primary care services available. This is of particular concern in health deprived neighbourhoods where both A&E use and primary care needs are likely to be high. This study aims to assess the appropriateness and extent of A&E use by patients registered with a GP surgery located in a health deprived urban area in order to assess the extent of the problem and its potential financial impact. **Design-** A criterion was developed and applied to A&E discharge letters to assess whether A&E visits by patients were appropriate. Using this criterion, two sets of A&E attendance data were collected. The first data sample comprised 7 days of A&E attendance by patients registered with the GP. For each case, the time, reason and management of the presentation were recorded from the resulting A&E discharge letter. The second data set, comprised a list of the top 50 A&E attenders registered at the GP surgery over a 6 month period. The reason and appropriateness of each A&E visit were recorded. **Setting-** The GP surgery at which the study was conducted is located in an urban area which in 2010, according to the Office for National Statistics, was amongst the top 11% of England's most health deprived neighbourhoods. This is reflected by an average life expectancy at birth that is 2.6 years lower than the national average. **Participants-** The study observed patients registered at the GP surgery who had attended A&E within the time periods specified above. **Result-** It was found that 82% of the GP surgery's patients who attended A&E had done so appropriately with almost half being admitted to hospital. Of the surgery's top 50 frequent A&E attenders, an average of 3 out of every 4 of their visits was appropriate. Approximately 30% of the frequent A&E attenders did so because of trauma related injuries. **Conclusions-** The GP surgery studied had a high level of appropriate A&E use by its patients. Of those attending A&E, 43% were admitted which is contrast to the national average of 20%. In addition, the GP surgery's frequent attenders of A&E generally did so appropriately. It is apparent, therefore, that the level of health deprivation in this urban neighbourhood is resulting in increased necessary A&E use. Ultimately, this highlights the importance of coupling the distribution of primary care funding with levels of urban deprivation.

## Ref: 142 Poster

Tuberculosis- The Picture in Trafford

Presenting author: **Sepeedeh Saleh**

StR in Public Health Trafford Council, Trafford Town Hall Talbot Road, Stretford, M32 0TH United Kingdom

Co-author: Lisa Davies

Background Tuberculosis (TB) is a notifiable infectious disease which can be both prevented (by vaccination) and cured. It is the leading cause of death amongst curable infectious diseases globally and the UK has seen a resurgence of TB in recent years. There are pertinent equity issues surrounding TB as it is a disease which predominantly affects vulnerable members of a population such as ethnic minority groups and those with drug and alcohol problems. Aims To outline the incidence of TB in Trafford, describe current provision and propose actions aimed at reducing rates across the area. Population In general terms health in Trafford is similar to the national average. Trafford is one of the healthiest regions in the North West, although the North West is the least healthy area in the country. This picture of relative affluence, however, hides regional inequalities. Pockets of deprivation throughout the borough constitute the most relatively deprived areas in the country and recent figures reveal a widening of this gap (measured in terms of Indices of Multiple Deprivation) between the most deprived and least deprived areas of the borough. Results Greater Manchester has the third highest TB rate of all the regions in the UK (PHE Tuberculosis in the UK report 2012). This has been increasing over the past 12 years. Rates of TB in Trafford (as well as mortality rates from the disease) are, however, similar to the national average with 40 patients managed by the TB nurse in 2012. A majority of cases occurred in ethnic minority groups and cases were seen to be markedly clustered in areas of Trafford with higher levels of socioeconomic deprivation and higher concentration of minority ethnic groups. This picture was also clearly visible in data regarding hospital admissions for TB. The BCG vaccination service in Trafford is integrated and effective, with a finding of a 91.7% vaccination rate amongst eligible infants in a recent audit. Other TB services are managed and largely carried out by a TB specialist nurse working locally. This service includes screening and contact tracing of known TB cases, usually on a one-to-one basis. Conclusions The report provides evidence of good provision for TB across Trafford but outlines equity issues across various localities, particularly with regards to socially vulnerable groups. Provision of education regarding TB and access to treatment to all vulnerable groups as well as integration of welfare and social care measures are vital if we are to be successful in combatting this infection.

## Poster Session 3

### Ref: 819 Poster

A community focused approach to prevention of cardiovascular disease, the public's perspective.

Presenting author: **Chuyan Yu**

University of Manchester, Stopford Building, Oxford Rd, Manchester, Greater Manchester M13 9PT, United Kingdom.

Co-authors: Amelia Payne, Professor Satyan Rajbhandari

Each country has its own unique form of a healthcare system. A healthcare system acts on the health demands of the population, ensuring their health and wellbeing. The government decides how healthcare is best delivered to the population, to maximise effects and minimise costs. Healthcare systems are very complex, and due to different demographics, what is best for one country may be bad for the next. This presentation aims to review and evaluate the healthcare systems of seven developed countries; Australia, Canada, France, Italy, Japan, the United Kingdom and the United States. It compares the financing of the system, the general health of the population, the resources, services and healthcare interventions the system provides, the efficiency of pharmaceutical usage, the quality of care and the responsiveness of the healthcare system. This presentation mainly examines the cost-effectiveness of these aspects. Australia and Japan have the best spending-adjusted health outcomes. Canada lacks equal access to healthcare. France is very cost efficient, whereas Britain and America need to improve efficiency. This presentation also briefly examines the healthcare systems of lesser-developed countries; China, Russia and India. Only from learning from each other and past examples, will a system be able to cope with the increasing demands of the population.

### Ref: 602 Poster

What are the gaps in the care of survivors of rape by doctors in India and why are these gaps occurring

Presenting author: **Nisreen Khambati**

University of Southampton, 22 Shaftsbury avenue, southampton, United Kingdom.

Co-authors: Dr Christie Cabral

**Abstract** The brutal gang-rape of a student in India's capital city last December triggered international outrage over the growing problem of rape in India, a form of violence with severe health consequences. This increased attention on the plight of Indian women highlighted many inadequacies in the assistance given to survivors of rape by state institutions, including the public healthcare system. Doctors are responsible for providing comprehensive medical and psychological assistance and collecting relevant evidence for prosecution. However, many doctors in India have been criticised for inadequately caring for raped women. Moreover, little research on this topic exists. Through analysing the literature, this dissertation seeks to provide a detailed understanding of the gaps in doctors' care of rape survivors in India. Specifically, it aims to identify what are the gaps and why these gaps occur. Academic databases, grey literature and publications from health organisations were systematically searched. 15 sources met the inclusion criteria, including empirical data, opinion-based evidence and 'analysis of text' papers. Studies were critically appraised for quality and synthesised using a narrative approach. Many gaps in doctors' care were identified, relating to: delayed assistance, uninformed consent, inconsistent and limited healthcare, poor histories, insensitive examinations and inadequate evidence collection. Substantial variation in practice existed, with gaps not applying to all doctors. Finally, gaps seemed to occur due to gender biases, poor protocols and guidelines and inadequate medical education and training. Negative experiences with doctors have harmful consequences for survivors' health and legal outcomes and recommendations have been made to improve the care given. The lack of available literature, particularly large-scale studies with good reporting quality, is a major issue. Further research is crucial to ascertain how common gaps are and improve the credibility of evidence.

### **Ref: 826 Poster**

The Liverpool Care Pathway: A dignified way to die?

Presenting author: **Hasan Shamsi**

University of Manchester, Manchester United Kingdom.

Co-authors:

**Introduction:** The Liverpool Care Pathway (LCP) is a model of care that has been rolled out across the NHS over the last 15 years, to ensure high standards of end of life care in the acute hospital setting. Despite recognition from the Department of Health and the National Institute for Health and Clinical Excellence (NICE), the LCP has received considerable negative media attention. Such dissatisfaction necessitates an investigation into the framework, to answer the fundamental question: 'Is this a dignified way to die?'

**Methods:** A web based literature search using the 'MEDLINE', 'Google Scholar' and 'Google' search engines provided relevant sources highlighting key criticisms of the LCP. These are explored in detail and their ethical implications are considered. Real cases are used where appropriate to demonstrate the relevance of end of life ethical topics.

**Discussion:** Claims have been made that the LCP is being abused to deny patients treatment, raising issues of beneficence and non-maleficence, and the subjectivity of 'quality' of life. Statistics have revealed a significant proportion of patients are put on the LCP without their consent, which prompts discussions about patient autonomy and paternalism. Doubts have also been aired about the goals of the LCP being financial, rather than patient-centred and thus justice within the NHS has been questioned.

Connections between the LCP and euthanasia have also been made in the press, by those who feel that the discontinuation of life-prolonging treatments seems contradictory to the broader goals of medicine. Outside of the LCP, wider problems in the NHS and society in general have played a role in poor performance in end of life care. An ageing population, deficiencies in resources and thus medical training, public attitudes and structural reforms in the NHS are all pertinent to the discussion. **Conclusion:** In principle, the LCP facilitates a dignified death yet the numerous criticisms of the Pathway in the media and the wide-ranging problems in end of life care demonstrated in this review highlight the challenges that exist, not just in regards to the LCP but in palliative care and also the NHS in general.

### Ref: 623 Poster

Why are there Differences in Mental Health Outcomes Between the UK and US Armed Forces Deployed to Iraq?

Presenting author: **Anika Rahim and Janani Arulrajah**

University of Manchester, Flat 6 Cotton Square, Claremont Road, Manchester M14 7NB, United Kingdom.

**Introduction:** Both UK and US armed forces have taken a prominent role in the Iraq War. However, evidence suggests differences in mental health outcomes of military personnel with regards to: PTSD (4.8 vs.19.9%), depression (11% vs. 14.7%) and alcohol misuse (18% vs. 35.4%). No studies to date have been undertaken to explore these differences.

**Background:** Previous conflicts in Vietnam and the Gulf war have shown negative effects on the mental health of military personnel. The high intensity of the Iraq War has raised concerns over the mental health outcomes of the US and UK armed forces. Therefore, mental health surveillance with regards to factors which influence these outcomes are of great importance **Objectives:** To assess why there are differences in mental health outcomes between the UK and US Armed Forces in Iraq. **Methodology:** A systematic literature review of available studies relating to mental health of UK and USA armed forces was undertaken by searching the Cochrane Database, PubMed and OVID Medline. **Results:** 1. Deployment length: UK deploys personnel for a maximum of 6 months while the US ranges from 12-15 months. 2. Combat intensity: higher exposure to combat intensity for the US forces compared to the UK: coming under small arms fire ? 32% vs >90%, body handling experience ? 15% vs >50% and seeing allied persons killed or wounded - 25% vs 65-75%. 3. Healthcare Provision: The NHS in the UK provides cost-free, life-long services for veterans while the US offers costly TRICARE health insurance and cost-free services only for 5 years after military duties. 4. Health-Seeking Behaviour: Stigma, embarrassment and the fear of being perceived as weak were found to be frequently cited barriers among both UK and US personnel. **Conclusion:** Differences in factors such as 1) deployment duration, 2) combat engagement, 3) healthcare provision and 4) health-seeking behaviour may contribute to the differences in mental health outcomes between UK and US Armed Forces. Furthermore, there appears to be a complex interaction between these factors which should be considered collectively rather than independently when explaining the disparities in mental health outcomes. **Recommendations:** **Research:** More independent studies for the UK armed forces should be undertaken; grouping Afghanistan and Iraq military personnel together should be avoided. Explore possibility of more factors, such as pre-existing mental health conditions. **Military Services:** Improve healthcare information about available services. Address stigmatization within armed forces.

### Ref: 683 Poster

Antibiotics and urban health

Presenting author: **Appiah Shweta**. University of Manchester, M23 9LT, United Kingdom.

Co-authors: Rojoa Djamila. M

**Aim:** In 2010 a surveillance report regarding systemic antimicrobial consumption in primary care showed the median European consumption was 18.3 defined daily doses (DDD) per 1000 inhabitants per day. The United Kingdom has shown the largest increase of antibiotic consumption from 17.3 to 18.6 DDD per 1000 inhabitants per day from 2009 to 2010. This observation has raised the concern of antibiotic overuse leading to resistance. Following the evolution of antibiotic use and misuse, it is important to explore the factors leading its prescription and analyze up-to-date guideline pertaining to good practice. Our aim is to use the above to account for antibiotic resistance predominantly regarding urban health. **Design:** The four main aspects explored in the poster are:-

- Influencing factors - Adequate communication between a physician and a patient is the stepping stone to adherence. This depends on intrinsic factors – physician’s own attitudes and personal experiences and on extrinsic factors – patient’s ability to understand and process information given to them.
- Antibiotic resistance - Resistance to antibiotics is an increasing cause of concern for public health and new resistances are rapidly emerging. This calls for a review of antibiotics prescription, since one of the major causes for this resistance is the excessive use of antibiotics. Solutions to avoid further resistances are encouraging the adequate use of antibiotics through mass communication, rapid diagnostic tests for infections and new antibiotics development. Our focus will be mainly the effect of antibiotic resistance in the context of urban health, i.e. how living within a community affects antibiotic resistance and vice versa.
- Ethics of prescribing antibiotics to patients - Closely linked to antibiotics resistance are the ethics of prescription. The dilemma of prioritizing the patient’s speedy recovery and potentially contributing to widespread antibiotic resistance or minimize the ramifications on global health by preserving specific classes of antibiotics for a last resort use. This conflict can be examined using the 4 basic ethic principles: beneficence, non-maleficence, autonomy and justice.
- Current guidelines of prescription - NICE has set up a series of guidelines which attempt to provide a solution for this quandary. These have been used as a baseline and have been explored together with the aforementioned aspects for an all-around review of antibiotic use.

**Conclusion:** The advent of antibiotics was seen to be the ultimate panacea until bacteria evolved to be resistant. This mechanism of resistance is more widespread when considering urban health since people share common resources. This has indeed been an area of interest for many years and a lot has been looked at. However, practice suggests that not many of the guidelines have been implemented. Thereby suggestions as to how to improve antibiotic resistance are still important.



## Friday 7th March

**14.00-15.30** Poster presentations Session 3 Groups 1-3

Poster Session 1	Poster Session 2	Poster Session 3
Rachael Matthews Graham Clarke Omar Mahmoud Katrina Stephens	Kirsten Morris Nevena Tzacheva Ann Gregory Lucy Birmingham Aoife Dervin Elaine McFarlane	Suzannah Lant David Dolan Sam Moody Olivia Light Kavaldeep Jabbal

## Poster Session 1

### Ref: 388 Poster

Is Screening for Dementia Effective at Improving Diagnostic Rates?

Presenting author: **Rachael Matthews**

University of Manchester, Oxford Road, Manchester, United Kingdom.

Co-authors: Lucy Birmingham

Background: Currently there are approximately 800,000 individuals in the UK suffering from dementia, however only 46% of these people have received a formal diagnosis. Dementia is one of the primary determinants in the incidence of disability and dependence in the elderly population. Therefore it is vital to improve on these diagnostic rates if we are to provide appropriate care for those who suffer from this illness. NICE guidelines state that the general public do not undergo screening for dementia. According to statistics approximately 64% of residents in care homes have dementia. The GP practice in which this study was conducted, has a total of 13 patients currently living in a local residential home, and of these patients 4 have been diagnosed with some form of dementia. This produces a dementia prevalence of 31% in this residential home, significantly lower than the estimated mean of 64%. These statistics indicate there may be patients with undiagnosed dementia in residential homes. Aims: The principle aim of this study is to assess whether a cognitive screening tool would assist in improving dementia diagnoses in this practice. Methods: Cognitive testing was carried out on registered practice patients living in the residential home. A total of 6 patients were tested (5 female and 1 male). All patients were between the ages of 69 and 100 years. Patients' medical records were checked to ensure no previous history of dementia or cognitive illness existed. The Mini mental state examination (MMSE) was chosen as the screening tool and was conducted on all 6 patients. Although not diagnostic of dementia, the MMSE is a strong indicator of cognitive impairment and thus an indicator for a potential diagnosis of dementia. Results: The scores of the cognitive testing demonstrated that two thirds of patients had some degree of cognitive impairment. This indicates that screening is a useful tool in early identification of cognitive impairment. If we make a linear assumption that those with cognitive impairment in the residential home have undiagnosed dementia, practice dementia statistics are far more parallel with national epidemiological statistics. The results of the study also demonstrated a link between cognition and education, as the two persons scoring highest in the MMSE had demonstrably more privileged educational backgrounds than the rest of the cohort. Conclusion: This result highlights the potentially invaluable role screening could play in improving dementia diagnosis. Other areas of importance for dementia diagnosis were noted during this investigation such as the role of education and literacy, as well as mental stimulation and physical activity in assessing cognitive decline.

### Ref: 675 Poster

NSAIDs; safe prescribing in the over 65s. An audit in primary care.

Presenting author: **Graham Clarke**. University of Manchester CMFT, Education North, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL, United Kingdom.

Non-steroidal anti-inflammatory drugs (NSAIDs) have been in use since the 1950s for the treatment of both acute and chronic conditions where inflammation is the precipitating factor for pain. NSAID use in the elderly is primarily reserved for pain in osteoarthritis, soft-tissue lesions, back pain and pain secondary to rheumatoid arthritis. Despite the efficacy of NSAID use in these chronic pain conditions, it doesn't go without adverse effects, particularly in the elderly population; those at higher risk of the gastrointestinal, cardiovascular and renal effects of NSAIDs. NSAIDs function by blocking the cyclooxygenase pathway (COX-1/2), which prevents the build of a mesmerising array of biological substrates that aid inflammation, gastroprotection and vascular homeostasis. NSAIDs are either non selective and block all of the above, or they are selective to COX-2 (coxibs) and block the COX arm responsible for inflammation. These different NSAIDs carry gastrointestinal, renal and cardiovascular risks respectively and so due care should be given when prescribing NSAIDs to reduce the risk of any adverse effects, particularly gastroprotection in the form of proton pump inhibitors to patients susceptible to GI intolerance. Purpose; To investigate the prescribing trends of NSAIDs in patients over the age of 65 in primary care, with particular attention to gastroprotection, cardiovascular and renal risk in these patients. Due to the high prevalence of comorbidities in many of this patient group, we sought to determine the association between prescription guidelines and everyday practice. Methods; A retrospective study in a suburban general practice, with all patients  $\geq 65$  years of age who are on a repeat prescription of NSAIDs of at least 3 month duration in the last year included. Multiple variables were considered in the prescribing of NSAIDs including; indication, gastrointestinal and cardiovascular risk factors, and renal disease. Results; A total of 76 patients (mean age 75 years; female:male = 1.6:1) were included. Over the last year 36 patients were prescribed topical NSAIDs alone, 38 oral NSAIDs and 2 patients on a combination of topical and oral. Of the population on oral NSAIDs, 30% went without gastroprotection, although all patients with GI risk factors had gastroprotection. 28% of the patients had at least 2 cardiovascular risk factors, 55% of these patients were prescribed either a coxib or diclofenac, and 12.5% had CKD stage 3. Conclusions; NSAID prescribing in the elderly requires more education on guidelines, with a need for trials of other analgesia preceding NSAID prescription to prevent unnecessary NSAID prescription. If NSAIDs are required then all patients over 65 should be gastroprotected, as well as caution and regular follow ups to be given when prescribing to patients with cardiovascular risk factors and renal failure. This could be achieved using a prescribing pro forma when prescribing NSAIDs.

### **Ref: 653 Poster**

Can Artificial Turf Inspire A Generation?

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Co-authors: Dr J Evans

**Aim** The report's aims were to examine the possible impact an increase in the number of safe and accessible sporting facilities available to young people can have on sport participation and more importantly the health of youngsters. The report focuses on third-generation artificial pitches that can be used for a variety of sports and can be especially useful in urban areas countering the lack of open green spaces. **Method** My research focused on comparing Nordic nations with the UK due to the similar climate and culture but also due to the higher number of artificial pitches compared to the UK's lower numbers. The report examines data of sport participation and health figures comparing them with figures collected from the UK in order to establish the impact that more artificial turf pitches could have in the UK. **Results** Looking at the data compiled, a clear trend has emerged that shows that children and adults from Nordic countries have the highest rate of sport participation in Europe. For example, the percentage of citizens reporting that they participate in sport 'never' in Finland and Sweden were 7% and 6% respectively. Whilst in the UK the figure was 32%. Moreover citizens of these two countries show exceptionally high satisfaction rates with 90% of their population believing the area where they live offers them opportunities to be physically active. Despite the UK's larger spending power, satisfaction is only 72%. These figures reflect clearly on the health of these nations. It has been found that one in three boys and girls (2-15) in the UK are obese or overweight whilst the figure in Norway is under 15%. **Conclusions** Clearly a nationwide intervention is needed in order to combat these alarming figures. However a clear and well designed plan must be produced before investment is approved. For me, the first step would be trialling these pitches in a number of different cities before rolling the plan out nationwide. Moreover, it is believed that by increasing the number of these pitches, their impact can be widespread affect different parts of society such as reducing crime and youth offending whilst increasing social cohesion and generating economical benefits.

### Ref: 139 Poster

Weighing and measuring children in Early Years day-care settings: an opportunity to identify overweight and obesity in children before Reception-age.

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Co-authors: Amy Ashton, Jan Dawson, Dr Gillian Maudsley

Introduction: Obesity in under 5 year olds is a global public health concern. In England, reducing obesity in school-age children is a public health priority. In response to high rates of obesity in Reception-age children, Manchester's Healthy Weight Strategy has focused on work with under 5 year olds. Aim: To investigate current weighing and measuring practice in local authority day-care settings and staff perceptions of their role in supporting children to attain and maintain a healthy weight, to inform weighing and measuring practice in Early Years day-care settings. Design: A mixed methods study design, with exploration of height and weight data, complemented by semi-structured interviews with day-care staff. Setting: The study focused on quantitative data collected by staff from day-care settings in an urban local authority (Manchester, North West England) and interviewed them. Method: Quality of weight and measure data from 20 day-care settings was explored, with descriptive and paired data analysis. Nine semi-structured interviews were conducted with staff from five settings. Thematic codes were generated from and applied to the qualitative data, with 'framework' analysis used to organise and draw out findings. Qualitative and quantitative data were mixed at the level of analysis and interpretation. A multi-agency group was convened to review the findings, and develop and implement a protocol for weighing and measuring children in day-care settings. Results: Six themes emerged overall: data quality; prevalence of healthy weight; cases of, and response to, overweight and obesity in children; weighing and measuring practice; and wider healthy lifestyles work. Quantitative data suggested high prevalence of overweight and obesity in children (80/271, 30%), but day-care staff did not process, interpret, or act on the data. Day-care settings faced challenges in measuring young children accurately, due to unsuitable equipment and inconsistencies in practice between staff. A multi-agency group developed a protocol for weighing and measuring children in day-care settings; 19 day-care settings implemented this protocol (January 2013). Training and equipment were provided to settings adopting the protocol. Of 546 children weighed/measured in March 2013, 89 (16.3%) children were above 91st centile, with 56/89 (62.9%) referred to weight management services or health visitor (none having previously accessed weight management support). Conclusions: Early Years day-care settings can play an important role in promoting healthy lifestyles, and identifying early the children who are not a healthy weight. With provision of suitable

equipment and training, it is feasible to weigh/measure children meaningfully in this setting. Further research should explore the prevalence of healthy weight in preschool populations, and identify effective interventions to reduce overweight and obesity in preschool children.

### Ref: 720 Poster

Evaluation of dengue fever surveillance system in District Hyderabad, Pakistan

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Co-authors: Dr Muhammad Asif Syed

**Aims** The objectives of the study were to identify the strengths and weaknesses of dengue fever surveillance system in Hyderabad, Pakistan. **Design** Descriptive cross sectional survey based on CDC updated guidelines for evaluation of Surveillance system revised and republished in 2001. **Setting** The study was conducted in Provincial directorate of health, district health offices, public & private hospitals and laboratories of Hyderabad, Pakistan. **The study period** was from 1st April to 31st July 2013. **Participants** The target population was 50 stakeholders of system including health managers of provincial & district public health departments, Incharge of public and private health facilities, laboratory staff, general practitioners and patients. The study comprised of two parts both quantitative and qualitative. Reports from the health facilities for the past year were reviewed to find out the sensitivity, Predictive Value Positive (PVP), timeliness and data quality of surveillance system, while remaining attributes such as usefulness, simplicity, flexibility, representativeness and stability were assessed with the key informants interview. **Results:** System was useful in early detection of outbreak and to estimate morbidity and mortality. It was simple in structure, process, highly flexible in nature and had ability to adapt any type of new change. Completeness of case reporting forms was (90-95%) filled by trained persons. Staff was highly motivated and dedicated in providing timely and accurate information. Cases information was send from first level to higher levels within 24 hours by email or fax. Representativeness was average as received information was only from public health facilities not covering the private health sector. Sensitivity of surveillance system was poor because it catches only 897 (27%) suspected cases from the total population (1.8 million), while PVP was average 592 (65.9%) after laboratory confirmation of suspect cases. **Conclusion:** The dengue surveillance system is useful in early detection of outbreak, monitoring the trends in disease occurrence and estimating morbidity and mortality. Compulsory reporting to the dengue surveillance cell on daily basis enhanced its timeliness. The dengue surveillance System is needed to be improved in terms of sensitivity, PVP and representativeness.

### Ref: 853 Poster

Survey of experience and attitude to electronic Prescribing and Medicines Administration (ePMA) in a large UK secondary care organisation

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Co-authors: G Ng Man Kwong, J Hemnant, E Woodcock and A Miah (Pennine Acute Hospitals NHS Trust, Manchester, M8 5RB)

**Background** Electronic Prescription and Medicines Administration systems (ePMA) have advantages over paper drug-charts by improving accuracy of information, reducing medication error and increasing patient safety. Between July 2012 and December 2013 Pennine Acute NHS Hospitals Trust (5 hospital sites (3 acute), population of 850,000) implemented an ePMA system (MedChart, CSC) into 49 clinical areas in medicine, surgery and critical care covering 725 beds and >3500 users (representing the mid-point of ePMA roll out program). Our study evaluated the attitudes and views of both paper drug chart and ePMA users towards ePrescribing. **Methods** In October 2013, a questionnaire survey was distributed to a sample of clinical staff including doctors, nurses and pharmacists on different sites to compare ePMA & non-ePMA users. Data was collected on perceived benefits of ePMA, ease and confidence using ePMA (for current users) and advantages/disadvantages of currently used prescribing and administration system. Likert scale responses to specific statements were analysed using Chi-squared test for trend. **Results** In total 142 responses were returned mainly from nursing staff (95/142, 70%) with doctors and pharmacists representing 16% (18/142) and 7% (9/142) of the sample respectively. Overall, 79/139 (57%) were current ePMA users. The majority of respondents were based on three acute sites: 61/142 (43%) from Site A [=early ePMA implementation covering medicine and surgery, including theatres and critical care], 62/142 (44%) from Site B [non-ePMA users prior to planned roll out] and Site C 15/142 (11%) [late ePMA implementation for medicine only]. Compared to staff using paper drug-charts, ePMA users were significantly more likely to positively rate benefits of ePMA regarding clarity of patient information and drug details ( $p<0.001$ ), allergy information ( $p<0.01$ ) and ease of identification of cautions, interactions and contraindications ( $p<0.001$ ). Interestingly, there was no difference between ePMA users and non-users regarding ease of use of current prescribing and administration systems or how each system was rated overall. Confidence in using ePMA was increased at Site A where the system had been in place longer. Nursing staff reported a more positive attitude to using ePMA compared to doctors and pharmacists. A small number of ePMA users reported problems relating to system speed and work-station crashes as additional comments. **Conclusions** In our limited survey, ePMA was perceived by healthcare professionals to improve patient safety particularly relating to clarity of information, allergies and drug alerts. Our survey did not identify any preference in ease of current prescribing and medicines administration between ePMA users and non-users. Confidence in using ePMA and benefits realization was most evident in early ePMA implementers (Site A) suggesting a user ?learning-curve? that is associated with change to work-processes and behaviour.



### **Ref: 701 Poster**

Diagnostic electrocardiogram (ECG), blood pressure (BP) review, and thromboprophylaxis in patients with atrial fibrillation

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Co-authors: Dr. Arun Mohindra

**BACKGROUND:** In 1999, strokes were responsible for over 56,000 deaths in England and Wales. In a year, over 100,000 people suffer a first or recurrent stroke, with a million currently living with the consequences of stroke. As atrial fibrillation (AF) increases the risk of suffering a stroke by 5-fold, measures should be undertaken to mitigate the incidence of stroke in AF patients. This is especially important with the rising trend in the prevalence of AF in the next five decades. **METHOD:** A retrospective audit was conducted on 76 patients on the AF register of the Practice. The audit standard set was at 100%. All of these patients should have had a diagnostic ECG, a BP review in the last 12 months, and should have received appropriate thromboprophylaxis treatment according to their CHA2DS-VASc scores and current clinical guidelines. Data was extracted from the practice's EMIS Web system. **RESULTS:** Out of the 76 registered patients, only 78% (60) of them have had a diagnostic ECG for AF, and 96% (73) of them had their BP reviewed in the last 12 months. Hence, the audit standard was not met for these two criteria. Nonetheless, 100% of registered AF patients received the appropriate thromboprophylaxis based on their stroke risk and clinical guidelines. **CONCLUSION:** The Practice performed well according to the guidelines with regards to providing the appropriate prophylaxis treatment for the patients. However, measures should be taken to improve the diagnosis of AF in patients, and the Practice should have an organised system to monitor its patients appropriately in terms of stroke risk factors, and this includes BP monitoring. Healthcare professionals in primary care should be aware of the current AF guidelines as this would help reduce the incidence of stroke, and subsequently the morbidity and mortality rate of AF patients across the nation.

## Poster Session 2

### Ref: 828 Poster

#### Obesity and the Use of the Combined Oral Contraceptive Pill

Presenting author: **Kirsten Morris**

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Co-authors: Cecile Chung

**Background:** In 2013 the Health and Social Care Information Centre reported that between 1993 and 2011 the proportion of obese (body mass index (kg/m<sup>2</sup>) greater than 30) women in the UK rose from 16% to 26%. Obesity affects the safe prescription of the combined oral contraceptive pill (COCP). In 2006 the Clinical Effectiveness Unit of the Faculty of Sexual and Reproductive Health adapted guidelines - originally laid out by the World Health Organisation in 2004 - to produce the UK Medical Eligibility Criteria for Contraceptive Use (UKMEC); a comprehensive set of evidence-based recommendations. The guidance analyses the potential effect of obesity on patients using the COCP. A BMI of >30 is classified as 'the advantages of the using the method generally outweighs the theoretical or proven risks'. A BMI of >35 is classified as 'the theoretical or proven risks usually outweigh the advantages of using the method'. Specifically, the relative risk of venous thromboembolism (VTE) increases with COCP use; two fold for the former and four fold for the latter. **Aims:** To evaluate the adherence of two general practices to the UKMEC with regard to measuring patient weight when they are on the COCP. **Setting:** Dial House Medical Centre (DHMC) and Ellesmere Medical Centre (EMC), Stockport, Manchester. **Participants:** All patients across the two general practices using the COCP, Microgynon® (352 patients, April 2009-April 2010; 207 patients, October 2012-October 2013). **Methods:** The electronic patient record was searched to determine whether each patient receiving a prescription for Microgynon® had had their BMI measured within the previous 12 months. Within this cohort the number of patients with a BMI >35 was also recorded. **Results:** The original audit of 352 patients in 2010 revealed that 43% of patients taking Microgynon® at DHMC and 15% of patients taking Microgynon® at EMC had not had their BMI measured within the previous 12 months. Furthermore, 3 patients (0.85%) across both practices were found to have a BMI of >35. The re-audit in 2013, following interventions, revealed that 18% and 28% of patients from DHMC and EMP had no BMI recorded in the previous 12 months, respectively. In 2013, one patient (0.48%) was found to have a BMI >35. **Conclusions:** Between 2010 and 2013 the total proportion of patients on the COCP who did not have their BMI checked in the previous 12 months fell from 28% to 23%. However, given the prevalence of obesity in the UK population (26% of women), this theoretically represents 25 (26% of 97) patients in 2010 and 12 (26% of 48) patients in 2013 who are obese and did not had a BMI check and risk assessment for COCP use. Further recommendations are thus required. Over 100 million

women use the COCP worldwide and with the prevalence of obesity increasing globally, this audit aims to highlight the importance of assessing a women's BMI during her use of a COCP, owing to the risk of a potentially life-threatening VTE.

### **Ref: 38 Poster**

Should the Slovak-Roma patients be screened routinely for hepatitis B in primary care?  
Report of an unexpected high prevalence in a cohort in Sheffield.

Presenting author: **Ann Marie Gregory**

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Co-authors: Alicia Vedio, Benjamin Stone, Stephen Green, Chris Bronsdon

**Introduction:** In Slovakia, Roma constitute 10% of the population, and indeed the Roma are the largest minority ethnic population in the European Union, making up around 2% of the 450 million inhabitants of the EU. Since 2004, when Slovakia joined the EU many Roma chose to leave Slovakia for Canada and the UK, and in Sheffield the City Council has estimated that currently there are approximately 3,000 Slovak-Roma residing in the City. Page Hall Medical Centre (Page Hall) is an inner city General Practice in Sheffield caring for a large number of migrants from many countries, including increasing numbers of people identifying themselves as Slovak-Roma. **Aim:** In January 2007, Page Hall established a specialised nurse-led Slovak clinic with the objective of addressing the particular health issues of Slovak-Roma patients and minimising the potential consequences of a culture of diminished healthcare access. Attendance at an appointment at this clinic was made an essential requisite for being allowed to register with the practice, and the assessment process was facilitated by ensuring that Slovak interpreters were present both in the reception and in the clinic. All new patients underwent a full general health check and were also offered screening for blood borne viruses, including hepatitis B. **Method:** Retrospective case study. Numbers of asymptomatic patients screened in Page Hall were examined, grouping together those identified as Slovak. Children are among those reported, but only adults are screened in the practice. Prevalence of HBsAg reactivity is reported as chronic infection, and those with anti-HBcore reactivity but without HBsAg were reported as past infection. **Results:** From January 2007 to December 2012, 1114 patients were screened for blood born viruses including Hepatitis B, and of these 57 were found to be HBsAg (+); showing an overall prevalence of chronic infection with hepatitis B of 5.1%. Of these, 341 identified themselves as Slovak-Roma, of which 32 were HBsAg (+) therefore prevalence of chronic infection in this group was 9.4%. Furthermore past infection as determined by HBcoreAb (+) without evidence of HBsAg reached 28%. This contrasts with an estimated low prevalence of Hepatitis B in Slovakia as reported by WHO. Follow-up for these patients and contact tracing proved very difficult due to their very high mobility and low health seeking behaviour, a third of those identified as chronically infected left the area without a forwarding address. **Conclusion:** In line with the recent NICE guidelines, Slovak-Roma patients should be considered a priority for screening for hepatitis B, most importantly

with provision of enhanced programmes of vaccination for and patient education about hepatitis B. An additional but related issue for consideration is how an effective contact tracing programme might best be established for a group with recognised very high mobility and language barriers. Submitted 8/9/13

### **Ref: 378 Poster**

Identifying future problems with flu vaccine uptake using current data

Presenting author: **Lucy Birmingham**

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Co-authors: Rachael Matthews

**BACKGROUND:** A new group of eligible people have been added to the flu vaccination list for 2013/2014, this includes all two and three year olds. The Department of Health believe this could reduce the number of people suffering with flu each year by 40%. Uptake has always been a problem, especially in pregnant women. Barriers for pregnant women are important as this may affect the decision to get their children vaccinated. These barriers are identified during this study. **METHOD:** A retrospective qualitative study was conducted at a medical centre in Manchester. Questionnaires were given to women who were pregnant during the 2012/2013 season, who had not taken up the vaccine. After excluding patients who had the vaccine, a miscarriage, still birth or abortion, 75 patients were identified as being pregnant in the 2012/2013 season. Out of the 75 women identified by EMIS 47 were in fact miscoded and therefore only 28 women were appropriate for this study. **RESULTS:** Of the 28 women who were pregnant within the time period and did not have the vaccine, 24 questionnaires were completed. Using data of pregnant women who had the vaccination during this period, uptake of pregnant women was 54% which is below the current target of 75%. Of the women interviewed 27% did not receive a recommendation for the vaccination, 65% were worried that the vaccine would harm the unborn child and 36% were worried it would cause side effects to themselves. Finally 91% of women would be interested in having their child vaccinated in the new scheme. **CONCLUSIONS:** This shows there is still an element of lack of education about vaccination during pregnancy. Furthermore, there is a perception of harm to the foetus. However there were significantly less concerns about the vaccination causing harm to children aged 2-3 years. Further education should be incorporated into the seasonal influenza program. There was substantial difficulty using EMIS to identify groups who have not had the vaccination they are recommended. This could definitely cause problems identifying children in the new scheme who do not come for their vaccination. With an improved system this group could be more easily identifiable, resulting in more effective recall.

### Ref: 789 Poster

The use of the General Practitioner Assessment of Cognition (GPCOG) screening test for cognitive impairment in at risk patient groups in general practice

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Co-authors:

**Introduction** Dementia is quickly becoming one of the most important and frequently discussed issues in healthcare today. It affects many people, having a huge impact on individuals and on society, and is associated with a huge emotional and financial burden. Early diagnosis is associated with great benefits; allowing patients to make early, informed decisions about their future care, and for early intervention. Screening for early signs of dementia in at risk patient groups in general practice was incentivised from 1st April 2013. The General Practitioner Assessment of Cognition (GPCOG) has been shown to be most effective screening tool for cognitive impairment for use in general practice. **Objectives** To identify how many patients meet the inclusion criteria to be at risk for the development of dementia at a suburban Manchester general practice. To identify how many of these patients had been assessed by the GPCOG since the initiation of the screening programme. To perform 20 isolated GPCOG screening assessments to see how feasibly this test may be performed as an 'add-on' to a general practice consultation. **Method** EMIS software was used to identify patients meeting the criteria for being at risk for cognitive impairment. Patients who had attended the general practice to see a doctor since April 2013 were then manually selected. A second search was then carried out to identify the number of patients who had been assessed so far. 20 at risk patients were asked to have a separate consultation when they attended the practice, and the time taken for assessment was recorded. **Results** The audit identified 403 at risk patients; 390 of these patients had attended the general practice and were seen by a doctor since April 2013. 22 of these at risk patients (5.64%) had been screened for signs of cognitive impairment since the programme began. The study demonstrated that the average time taken for assessment using the GPCOG was 3.88 minutes. Patients with more severe cognitive impairment with lower GPCOG scores required longer for assessment, with an average time of 5.34 minutes taken to complete the GPCOG. **Conclusion** Despite being developed with the intention of being a quick and easy-to-use tool for general practice, the GPCOG still remains a relatively time consuming way of assessing cognitive status when added on to a normal consultation. It may not be practical to assess all patients opportunistically as the scheme originally suggests. It seems that there is no 'quick and easy' way of screening for signs of dementia; due to the nature of this condition it is a consultation that will inevitably take time. **Recommendations** from this audit are that patients could be targeted during medication or chronic disease reviews to see if this is a

more feasible time to complete the screen. Elderly patients require longer for consultation; this must be taken into consideration in order to allow for appropriate assessment of these patients.



### Ref: 712 Poster

Correct Coding and Early Diagnosis of Dementia: An Audit

Presenting author: **Elaine McFarlane**

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Co-authors:

**Aims:** In the context of Dementia being highlighted as a national priority, with a target set of two-thirds of people to be diagnosed by 2015, this audit aimed to answer two questions: 1. Can we increase the number of patients on the dementia register at a Manchester GP practice by coding more accurately? 2. Is it feasible and worthwhile providing the Direct Enhanced Service 'Facilitating timely diagnosis and support for people with dementia' in this practice? **Method:** Using a model audit provided by a nearby practice I have run searches on EMIS to find patients who are not coded as suffering from Dementia but who have had symptoms as such, e.g. memory loss. Of these I have identified those patients who actually do have Dementia but have not had it recorded. Secondly I have reviewed the Direct Enhanced Service specification- which advocates screening at-risk patients for Dementia- in order to make recommendations about how it could be used in the practice, and more importantly, ethically, whether it should be. **Results:** I increased the Dementia register from 30 cases to 40, which in turn increased the practice's diagnosis rate from 40% to 53.3%. I found evidence both supporting and questioning the efficacy of the service. **Conclusion:** Whilst I increased the diagnosis rate, the practice still has a way to go to meet the national target by 2015. As for the enhanced service, population screening for Dementia has its drawbacks and the National Institute for Health and Clinical Excellence do not recommend it; however in order to increase the practice diagnosis rate to bring it in line with national targets I have made recommendations for how it could best be carried out and how it should be followed up to ensure patient safety and satisfaction.

## Poster Session 3

### Ref: 810 Poster

Improving Schedule Completion in Hepatitis B Virus Vaccination of At-Risk Patients

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Co-authors: Dr Benjamin Goorney

Introduction: Practice relating to Hepatitis B vaccination of at-risk patients who attended the sexual health service at the Lance Burn Health Centre, Salford, was compared against prior 2008 audit. Vaccination protocol in targeted patients includes an accelerated course of 3 Doses of 20mcg Enegerix B at monthly intervals (0,1,2 months). The rate of completion of the 3-vaccine course in the original audit was 44%, 6% below target outcome (BASHH National Guideline Target >50%). Aims: We aimed to re-evaluate the rate of Hepatitis B vaccination course completion and ascertain the success of changes made following the recommendations of the previous audit. These included the development of a recall protocol; correct use of coding; and provision of education prior to initial vaccination. Methods: Patient data was taken from the computerised system and vaccination dates were checked against the Hepatitis B vaccination record book. 106 patients received vaccinations in the specified time frame and 13 were excluded leaving 93 patient data sets available for analysis. The audit template was based upon the BASHH National Audit Group case note questionnaire on 'Hepatitis B screening and the Management of Hepatitis B Vaccination'. Fishers Exact Test was used to discern any statistically significant difference in completion rate between current and prior audit data. Results: Results showed a statistically significant improvement (p-value 0.0029) with an increase in vaccination completion rate to 65% (from 44%). Evidence of patient recall following non-attendance was documented in the notes in 85% of cases. Patients were initially sent texts to their phones, followed by telephone calls if they did not respond. Correct coding of Hepatitis B vaccination was shown to be accurate in 96% of cases. Conclusion: The use of a health visitor-led recall protocol; introduction of computerised coding in patient records; and improved patient education at initial consultation have contributed to increased vaccination course completion rate and attainment beyond target outcome.

### Ref: 842 Poster

Are Asplenic Patients Receiving their Meningococcal Immunisations?

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Co-authors: Frances Harris

**Introduction:** Splenectomy is a widely performed surgical procedure that is generally considered safe and routine. However, removal of an organ so central to immunological function does have implications. For this reason, there are extensive guidelines on management of patients post-splenectomy. Immunisation combined with patient education and prophylactic antibiotic treatment represents the mainstay of these recommendations. Ensuring that all patients receive their appropriate immunisations can prevent dangerous infections in these immunocompromised patients. This reduces mortality, morbidity and expensive ICU admissions. The recommended protection against meningococcal disease includes two different vaccines given at different times. **Aims:** To audit the number of post-splenectomy patients who have received meningococcal immunisations as recommended by current literature. **Design:** Using the electronic database at the GP practice (EMIS), we audited if 100% of asplenic patients had received their meningococcal immunisations. **Setting:** The audit took place at a General Practice situated in an inner city area of Manchester, UK. **Results:** Only a third of relevant patients had the meningococcal immunisations on their patient records at the GP. There were some problems with the audit process, including inaccurate coding using the EMIS system and lack of documentation of immunisations. **Conclusions:** The audit raised some interesting questions about responsibilities and communication in the modern day NHS. The lack of a unified system linking GP practices with hospitals presents a challenge when it comes to transfer of information. Another issue is that many guidelines don't stipulate whether services (in this case immunisations) should be offered in primary or secondary care. When these dilemmas are combined, it becomes unclear who has responsibility for a patient's care. In cases like this where simple preventative measures can have significant impacts on patient outcome, basic improvements in communication and guidelines could save lives. Finally, with an ever-increasing emphasis on patient education, could there be a degree of responsibility that lies with the patient? Actions to improve include patient education (including development of a patient information leaflet), opportunistic advertising, practitioner education and improved communication between primary and secondary care providers.

### Ref: 611 Poster

What Challenges Face Humanitarian NGOs Working in an Urban Context?

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Co-authors:

The world is changing. The population is exploding by orders of magnitude, being carried along on a tide of oil, technology and healthcare. The social migration into urban or 'peri-urban' areas, usually in search of work, security or higher standards of living, forces humanity to adapt the way it lives and conducts its business - with new opportunities, benefits, and possibly disastrous consequences. For instance, 52% of Africa's population are expected to live in towns and cities by 2025- The highest pace of urbanisation on the globe. This mass human migration - sometimes extremely rapid - creates communities overnight, with these peri-urban areas undergoing continuous remodelling and settlement. These areas are often created with no design or formal infrastructure or housing, and may lack basic necessities such as power and water supplies or sewage handling systems. and the plight of those affected appears to be confounded by invisibility, political apathy and a refusal of recognition by formal housing programmes and community infrastructure. Disasters, usually known hazards multiplied by the pre-existing vulnerability- has changed the face of humanitarian crises, as well as the needs of those affected, priorities and methods of response and need for sound development after such a situation. Along with it, responding humanitarian and development agencies must also realign their perspective to ensure the effective handling of emergencies. The disasters seen today create a complex need in those affected, often with compounding issues such as security concerns for the NGO workers in the field. This poster explores the urbanisation of the global population, noting on the new issues faced by response agencies not only during the response to crisis, but issues endemic to urban and peri-urban areas, such as the importance of controlling communicable disease early. We ask ourselves if NGO's are responding to this new climate with the efficiency and speed required, focusing not only on measures taken in the field, but the international stages of NGO response policy and the importance of effective partnership with governments and UN organisations. Exploring the issues -outside the refugee camp-, such as the semi-permanence of these peri-urban areas making development difficult, It will finally weigh up the success of the NGO in such a rapidly changing area of expertise, and concludes that although NGO's are a positive force for those in need, simple service improvements are not enough to maintain their viability in a changing world.

**Ref: 714 Poster**

Treatment and Management of Severe Anorexia Nervosa in Adults

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This report looks at anorexia nervosa, focusing principally on the treatment and management side of care. Anorexia nervosa is a condition with both severe psychological and physical effects on a patient. This report will begin by reviewing a case report of a patient with anorexia nervosa. Then the epidemiology, diagnosis criteria and prognosis of anorexia nervosa will be discussed and it will look at the support available from the NHS for sufferers. Finally the Mental Health Act will be considered, where it applies to patients with this condition.

### **Ref: 725 Poster**

Anadin Extra® overdose: The emergency management options for acute adult salicylate poisoning

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A 32 year old gentleman presented to Accident and Emergency having taken an overdose of Anadin Extra®. The total consumption included 4.8g of acetylsalicylate, 3.2g of paracetamol and 0.72g of caffeine; taken approximately three hours previously. The patient was alert with a GCS of 15 and did not complain of any symptoms; however the upper quadrants of his abdomen were tender upon palpation. He was given 0.9% compound sodium lactate solution intravenously and observed for 24 hours before being admitted for psychiatric reasons. Salicylate overdose is rare in the UK; however it is important to know how to manage an overdose as they are potentially fatal. Initial management of an overdosed patient should include airway, breathing and circulatory assessment followed by specific treatment. Treatment options for salicylate overdose are: activated charcoal, gastric lavage, urinary alkalinisation and haemodialysis. The treatment selection should be determined by symptoms, time after consumption and serum levels of salicylate. The methods of overdose treatment have scope for further research, such as the use of an emulsifying agent to trap aspirin. Treatment of aspirin toxicity is already at a high level, however we must continue to enhance our knowledge and develop more efficient treatments.