

# Festival of Public Health UK 2012

## University of Manchester

### Abstract Book – Oral Presentations

#### Parallel Session 1

##### T1 Health Protection

##### Global Burden of Fungal Disease

Professor David Denning

##### Genotype cluster investigations in TB – a luxury we can ill afford?

Dr Lorraine Lighton and Dr Marko Petrovic (Consultants in Communicable Disease Control, Greater Manchester Health Protection Unit)

##### A comparative review of vaccination performance and delivery across Greater Manchester

Dr Kevin Perrett (Consultant in Public Health Medicine - Health Protection, Public Health Manchester)

A COMPARATIVE REVIEW OF VACCINATION PERFORMANCE AND DELIVERY ACROSS GREATER MANCHESTER Purpose High vaccination coverage is essential for any well-functioning local public health programme. This study reviews, across the ten Primary Care Trust (PCT) areas of Greater Manchester (GM), and for all the main elements of the national vaccination programme, current vaccination coverage levels, the differences in local delivery systems, and, in particular, what lessons have been learnt about how to deliver excellent vaccination uptake. Design Vaccination coverage data was compared across GM and in comparison to the north-west (NW) region. A questionnaire was sent to each PCT to gather high-level information on delivery systems. The findings were used to inform semi-structured interviews with all the GM PCT immunisation coordinators, from which the main themes for successful vaccination delivery were identified. Results Vaccination performance in GM is generally better than the NW region (NW coverage is, in turn, better than the national average). But not all areas perform well, notably Manchester, and several areas have problems with elements of the vaccination programme, such as neonatal BCG. The systems used to deliver the different parts of the national programme were generally consistent, with the main exception of neonatal vaccination. Several themes were identified to explain the relative success of the vaccination programme in most areas of GM. Most important was the role of the immunisation coordinator, who champions vaccination, generating enthusiasm and confidence in vaccination - through training, and by otherwise developing strong relationships with a wide range of staff. And success was always built on a robust data system, underpinned by accurate and reliable data.

##### Celebrate and Protect - a public/private partnership to promote immunisation

Dr Justin Varney (Consultant in Public Health Medicine, NHS Barking & Dagenham/London Borough Barking & Dagenham)

Celebrate and Protect is an innovative partnership project which aims to improve the uptake of the 6 to 8wk check and childhood immunisations under 5yrs old using birthday cards. The project builds on the evidence base from Australia where birthday cards form the basis of much of the call/recall system for children; however this has not been implemented effectively in a sustained way in London. Celebrate and Protect is a partnership between Sanofi Pasteur MSD and nine London boroughs, five of the Olympic host boroughs and four other boroughs. The project launched in June 2012 with a target of 50% of practices in each borough signing up to the scheme and cards being distributed to 55,000 children in the first phase of the project. The private sector partnership has brought significant logistic capacity to the project as well as cost efficiencies and sustainability during a period of transition. This presentation will outline the approach being taken, the significant learning to

date about roll out of health improvement initiatives across multiple political and social landscapes during a time of transition and change, and the initial learning to date.

### **HIV and parenthood: clinicians and commissioners working together to prevent HIV transmission in couples wishing to conceive**

Sarah Stephenson (Programme Manager - Sexual Health & HIV, Greater Manchester Sexual Health Network)

Four thousand people diagnosed with HIV live in Greater Manchester (GM). The city of Manchester has the highest incidence of HIV and HIV-related illnesses outside Greater London). Sperm washing prevents transmission of HIV to the uninfected female partner and, as a result, to any potential child. This has revolutionised family life for people affected by HIV and prevents women and children being needlessly infected. Previously there was inequity of access to this infection control procedure in GM. Specific problems included: • A very slow decision-making process (over 6 months in some cases) • No clear pathway for clinicians or decision-makers • Decision-making based on inappropriate criteria (i.e. assisted conception criteria rather than infection control criteria) • Decision-makers sometimes made inappropriate moral judgements about applicants' suitability for parenthood based on their HIV status. We designed clear clinical and commissioning pathways and guidelines for sperm washing to ensure that decisions are made promptly and consistently in line with public health infection control criteria. They are the first of their kind in the country. The guidelines also recommend referring patients to sperm washing services in Liverpool rather than London which has dramatically reduced transport costs and is more convenient for patients. From a public health point of view, clear guidelines means that there is less chance of couples affected by HIV taking the risk of having unprotected sex in order to conceive. Sperm washing stops HIV transmission in women and children which has public health as well as financial benefits.

### **A qualitative study of a public health informatics system deployment: users' involvement during HPZone deployment in the health protection agency.**

Nur Al-khateeb (Information Officer, South Yorkshire Health Protection Unit)

Summary: Positive organisational learning aspects of the Health Protection Agency (HPA) could be supported through evaluating HPZone deployment from users' perspectives. Lessons learned from this study should serve building an evidence-based practice in managing change for future public health modernisation or intervention programmes. Abstract: Background: HPZone is a decision support and case management system. This new system transformed the way in which cases of communicable diseases are stored and managed, enabling clinical staff to access up-to-date documentations such as algorithms and action lists for on-call colleagues. Aims: In order to identify and share best practices from the HPZone roll-out and post-deployment modernisation processes, it was imperative to understand the needs of different system users at different stages. Recognizing the challenge in meeting local requirements of health protection units (HPUs), as well as the multi-disciplinary teams at regional level, this type of study should serve to identify relevant factors which could be built into the planning phase of the implementation or development of public health informatics services (PHIS). Methods: A comprehensive set of socio-technical factors were evaluated during HPZone deployment. This was achieved through the introduction of an interrupted longitudinal survey where questionnaires tailored towards different professions were distributed to HPZone users across England. Results: By using questionnaire scaling methods made up of convergent or divergent questions, we obtained valid and reliable data sets in comparison to similar international studies. Main findings: 1. A network of HPZone champions was perceived to have a positive impact. 2. Aligning the organisation's business strategy with PHIS, knowing how local teams can do their daily tasks better and strengthening opportunities for HPUs to share and coordinate their pre-deployment preparations plans. As well as, developing clear data entry procedures and guidance were evaluated as important features of a successful deployment.

## **T2 Prevention and Screening**

### **Genocide prevention: the business of public health?**

Dr Heather Roberts (University of Nottingham)

GENOCIDE PREVENTION: THE BUSINESS OF PUBLIC HEALTH? Background Genocide is a specific crime against humanity. Estimates are that, since 1945, mortality alone has been between 12 million and 22 million, more than all victims of internal and international wars. Physical and mental damage is immeasurable. Public health professionals are called on in the aftermath of genocide. This research aimed to review whether public health should be more involved in genocide prevention. Methods Reviews of the prevention of genocide literature Findings Genocide, is instigated by human beings, and is always premeditated. Susceptible countries can be identified in advance with reasonable accuracy through known risk factors. It develops in

observable sequential stages. Genocide is therefore predictable, similar to infectious disease outbreaks. Preventing genocide is a multi-disciplinary challenge; central to current thinking are two highly relevant public health competencies. First, surveillance and assessment to generate data giving early warning of areas at risk of genocide. The development of information technology, such as Ushahidi, for widespread dissemination of relevant information, is revolutionising access to sensitive data. Secondly, using these detection systems for strategic leadership to raise awareness and galvanise the political will to act thereby aiming to prevent situations from escalating. We found very little UK public health education or activity on genocide. An online module on genocide and its prevention has therefore been developed as part of the MPH course at the University of Nottingham. Conclusion There is a role for the appropriately skilled public health community to utilise key skills to help prevent further failure to meet the promise of "never again".

### **Understanding unintentional injury prevention in children: a partnership approach**

Enjay Whitehead (Senior Public Health Manager - Children & Young People, Salford)

**UNDERTANDING UNINTENTIONAL INJURY PREVENTION IN CHILDREN: A PARTNERSHIP APPROACH** Issue: This is an exploration of the importance of taking an evidence-based approach to understanding unintentional injury prevention to children and young people, and the significance of this approach in developing partnership working around the issue. Design: A traditional public health needs assessment process was followed to demonstrate the significance of the issue within public health and for safeguarding and inequalities. This involved the engagement of a wide range of partners, including representatives from public health, Safeguarding, Children's Nursing, Youth Service, Health Improvement, GM Fire & Rescue Service, Housing, Road Safety, Childrens' Services, Voluntary Sector and the Local Authority parks department. It also involved mentoring from the Child Accident Prevention Trust, as part of the Making the Link Programme. Results: The health needs assessment has generated recommendations, including some for training and networking, which require support from partner agencies to ensure their achievement. The approach has also raised the profile of unintentional injury locally, achieving buy-in from the Safeguarding Children Board and forging links with partner agencies. Conclusions: The process of completing the needs assessment was as important as the finished product, achieving recognition for the issue and the approach across a range of partners. This is important given the future of public health within the Local Authority.

### **NHS Derbyshire County implementation of the NHS health check programme for the primary prevention of cardiovascular disease (CVD)**

NHS Derbyshire County (Penny - PhD Student, NHS Derbyshire County)

### **A sociology of medical screening: what can it offer?**

Dr Helen Eborall (Lecturer in Social Science Applied to Health, Social Science Applied to Healthcare Improvement Research (SAPPHIRE) Group, University of Leicester)

**A SOCIOLOGY OF MEDICAL SCREENING: WHAT CAN IT OFFER?** Natalie Armstrong (na144@le.ac.uk), Helen Eborall (hce3@le.ac.uk) Background: The potential reach of medical screening is growing and developing; it is now possible to screen for an increasing number of conditions, using ever-more advanced and sophisticated technologies. Medical screening raises fundamental issues that are amenable to sociological inquiry because screening is a social intervention as well as a medical one, and can raise important social, ethical and legal dilemmas. Aims: A corpus of sociological work has begun to address population-based medical screening in recent years. This paper aims to present an overview of sociological work on screening, and highlight key contributions to date. Findings: A number of key themes were identified. First, the framing of screening as a form of 'surveillance medicine', and attendance as a response to normative expectations about what constitutes the most sensible and responsible course of action and a demonstration of good citizenship. Second, concern about whether and how truly 'informed consent' can be achieved. Sociological study has helped to unpick the complex interplay of factors which influence and inform how people make decisions about whether to have screening. Third, wider sociological concern with issues of risk and uncertainty has also proved to be fertile ground for those seeking to better understand the experiences and understandings of those for whom screening indicates there may be a problem, and the professionals seeking to support them. Discussion: Sociological scrutiny of medical screening, and the tensions it raises, can be particularly useful, both in terms of informing the policy and in the development and implementation of screening programmes.

## Preventing the Uptake of Smoking amongst Young People- The SmokeScreen

Qasim Chowdary (Specialist Advisor for Children, Young People & Families, NHS Stop! Smoking Service, Leicester)

Aim of The SmokeScreen Prevent the uptake of smoking amongst young people Objectives of The SmokeScreen Increase understanding of the global tobacco network and its reliance on young smokers becoming lifelong consumers De-normalise smoking among young people Promote sign up to the pledge to "not become a replacement smoker" and '#Unfollow' the tobacco industry Methods In January 2011 Leicester City STOP! Smoking Service launched a social marketing intervention called 'The SmokeScreen'. Most smokers begin their addiction in their teenage years and The SmokeScreen specifically targeted young people aged 11-19 years with a concise preventive anti-tobacco message. Results Year 1: Approximately 7,500 young people across Leicester City signed up to not start smoking and the messages were well received by young people and school teachers. Research and evaluation by The Oxford Health Alliance used 3 waves of data from 1 pre and 2 post intervention questionnaires in 5 schools alongside an additional post intervention survey in another 2 schools. Year 2: Awaiting evaluation, expected release date June 2012. Conclusions Knowledge about harms of smoking are well known by young people. The SmokeScreen uses a radical approach by influencing youth culture and promoting a credible anti-tobacco brand that young people can associate with and endorse. By replicating tactics used by fashion brands and imagery from popular culture, The SmokeScreen aims to reach a mass youth audience to make it less acceptable to take those first few complacent puffs on a cigarette that often lead to a lifelong addiction.

### T3 Health Promotion

## Combating childhood obesity in UK: a systematic review approach

Dr Sabina Alim

COMBATING CHILDHOOD OBESITY IN UK:A SYSTEMATIC REVIEW APPROACH: Dr. Sabina Alim ,20 BurnsideAltrincham, Alumnus Bedford shire University, UK Gurch Randhawa PhD FFPH,Professor of Diversity in Public Health & Director,Institute for Health Research ,University of Bedfordshire Dr. Noureen A Nishtar. Research Fellow, CHS, Aga Khan University, Karachi, Pakistan. AIMS: The main purpose of the study is to gather the current evidence base outlining the interventions to manage and prevent the further progression of diseases that may arise as a result of childhood obesity and overweight problems in adulthood in UK. Design: A systematic review approach is employed to explore the published literature in order to recognize the prevention of childhood overweight and obesity in UK. The UK government has stressed the significance of systematic review for its contribution of presenting dynamic and trustworthy evidence on the efficacy of interventions. Data was analysed through narrative approach in this study. This approach was found more suitable for this review as studies involved in this systematic review were too diverse. Types of Studies and participants: The author begins with detecting research papers those relating to children from age group 5 to 14 years to examine factors related with childhood obesity. They were mostly employed through community set ups like schools. Other than children the participants included mothers, fathers and some grandparents and health staff with the majority of participants being mothers, which reflects the position of women as primary child-carer in most societies. Results: Studies revealed that there is a strong relationship between cultural, environment, socioeconomic factors and the progression of obesity among children. Thus there is a dire need to change these factors Most studies point out to the fact that no definite strategy has been established to address the primary prevention of childhood obesity completely. It is apparent from the study findings that majority of the population is likely to be exposed to more than one social and environmental factors. Conclusion: It is evident from the studies that there is a need to change the environmental and social factors. It can be done by incorporating behaviour change communications with other strategies as obesity is a multifactorial phenomenon. The programmes like Change 4 Life which are being carried out in United Kingdom have shown a significant improvement. Such programmes should be continued for longer period of time. BEHAVIOR CHANGE COMMUNICATION (BCC) IS A PROCESS NOT AN EVENT...

## Can regional workshops strengthen capacity of national health professional associations in promoting health? Lessons learnt from 17 countries

Dr Shagufta Perveen (Department of Community Health Sciences, Aga Khan University, Karachi, Pakistan)

Introduction Health Care Professional Associations (HCPAs) can contribute to promoting health and achieve millennium development goals 4 and 5. In 2007-08 the Partnership for Maternal Newborn and Child Health (PMNCH) Geneva organized regional workshops in Malawi, Burkina Faso and Bangladesh with three main objectives (i) to increase HCPAs capacity to contribute towards national RMNCH policies (ii) enhance interactions between and among HCPAs, MOH and development

partners (iii) implement Country Specific Action Plans (CSAPs) . Design An impact evaluation of these three workshops with a cross sectional design involved a web survey, desk reviews and telephonic key informant interviews. Countries were judged on a scale of 1-3 based on accomplishment of objectives. Participants & Setting 195 participants from 17 countries attended the three workshops structured around five key areas; advocacy, human resource, organizational strengthening, service quality improvement and Reproductive Maternal Newborn and Child Health (RMNCH) planning. Results 13/17 countries selected organizational strengthening as a key area of interest. Most countries (88%) were unable to successfully implement their CSAPs. 15 countries (88%) however did report increased interactions between HCPAs and Ministry of Health (MOH). In Burkina Faso and Niger where MOH involvement was relatively strong, HCPAs additionally contributed to national RMNCH plans. Conclusion Strong and sustained follow-up by PMNCH and commitment by national HCPAs emerged as important thematic determinants for promoting health of women and children. Such workshops can encourage interactions among HCPAs and country level advocacy if MOH is involved as a major stakeholder during the implementation phase.

### **Romanian sex workers-Finding and using the evidence to protect a vulnerable group in Sandwell, West Midlands**

Professor Patrick Saunders (Sexual Health Commissioning and Development Manager, Sandwell PCT)

Introduction Romanian and Roma communities are amongst the most vulnerable and least understood 'new' groups in Sandwell. Increasing numbers of young and transient Romanian and Roma women have been presenting at sexual health services in Sandwell often with urgent health needs including emergency contraception, termination of pregnancy at late gestation, and symptomatic sexually transmitted infections. This pattern has not been observed in other ethnic groups and coincided with the establishment of a new commercial sex work area. Robust data and intelligence are required on the numbers presenting, characteristics and presentation issues, healthcare needs, and the barriers preventing access to appropriate general and sexual health services. Method We successfully bid for funding to monitor shifts in the commercial sex economy in the Borough and to buy sessions from a fluent Romanian speaking outreach worker to conduct structured face to face interviews with young Romanian and Roma women (under 25 years) Results An emergent cohort of Romanian sex workers has been identified. Interviews have revealed evidence of exploitation, violence, trafficking, multiple health needs, poor language skills and awareness of how to access services This work has led to the development of a strategy to support this vulnerable group and the integration of a Romanian speaking worker within the wider Commercial Sex Industry Outreach Service Conclusion The intervention demonstrates how effective preventative work can be undertaken with a highly vulnerable cohort with low visibility, for modest financial investment through commitment and joint working.

### **Promoting health using WEB 2.0: a service improvement project**

James Haddow (Darzi Fellow in Clinical Leadership, Whittington Health, General Surgery SpR, London Deanery)

Project Development A growing body of evidence suggests healthcare providers need to be promoting health and preventing disease, rather than simply treating illnesses when they occur. Working in close partnership with nGage Health Ltd, and supported by London Deanery, we developed Whittington Health Matters (WHM - [www.whittingtonhealth.com](http://www.whittingtonhealth.com)). This website allows patients and the public to take a detailed health risk assessment from the comfort of their own armchair. Once completed, they instantly receive their report, which provides key information on their lifestyle risks. This is supported with tailored information on how to access local healthcare services. Health questionnaires have traditionally been disengaging. Doctors, nurses and managers worked together and employed good product design principles (e.g. web 2.0) to achieve a visually stimulating and intuitive user-experience. Piloting WHM was launched in March 2012 to a small pilot. In almost four months, there were 975 visitors (impressions) and a high proportion (38%) completed the assessment (conversions). One user said, "As advised, I started exercise and diet-control two weeks ago. Today my weight has dropped from 92kg to 88kg." Feasibility In year-two the running costs will be £9,200. If the rate of engagement is maintained, the cost per impression and conversion will be £2.90 and £7.50 respectively. Establishing the cost per QALY will require a longitudinal study. However, WHM has the potential to be a scalable and cost-effective solution. To compare, a NHS Health Check costs approximately £40. Next Steps The main aim in year-two will be to estimate cost per positive intention to change.

### **Towards a healthier Dorset**

Sarah Austin (Health Inclusion Project Manager, Dorset Cancer Network)

Towards a Healthier Dorset is an ongoing partnership project between Dorset Cancer Network (DCN), South Western Ambulance Service NHS Trust (SWAST) and NHS Dorset Public Health Directorate (PH) – taking the cardiovascular NHS Health Checks and cancer awareness to communities that experience health inequalities, including Gypsies and Travellers (GRT),

rough sleepers and through market place activities, to engage with people who may not usually attend GP practices or health services. Working in Gypsy & Traveller camps, The Great Dorset Steam Fair and market places, the multi agency team provided evidence based cardiovascular risk assessment and cancer awareness messaging. Health promotion focused on highlighting practical ways to achieve health – as appropriate for that community. In addition the team provided Smokestop referral & signposting of fitness and weight management services. Many challenges were overcome; including ensuring information went back to GP's, to maintain continuity, and duty of care. One hundred and eleven people have been seen to date; six people were found to have a Qrisk >22; 33 people had a BMI >30; 10 people required statin therapy. Taking preventative initiatives out to where people live allows for the social determinants of health to be considered when implementing practical methods to achieve health especially in 'hard to reach' or other communities who are reluctant to engage. Being 'out there' helps to reduce some of the barriers of rural isolation and disengagement. The outcomes illustrate areas of focus that have the potential to reduce cardiovascular risk; saving lives and money in the future.

## T4 Global Health

### Intercontinental trauma teaching in Somaliland using a social networking interface

Adam Ali (Postgraduate Student, Harvard University, University of Oxford)

Intercontinental trauma teaching in Somaliland using a social networking interface Ali AM, Bowen JST, Holmes W, Mahmud I, Handuleh J, Ali FR, Leather A, Finlayson AET Introduction: Somaliland's first cohort of home-trained doctors graduated in 2007. Despite being able, enthusiastic and adaptable, their clinical development is challenged by a lack of senior supervision and postgraduate education. Infrequent visits to the country by foreign doctors have been unable to provide continuity in teaching and traditional internet-based static resources remain insufficient to develop trainees' clinical decision-making skills. Objective: We report on the use of a dedicated web-based portal ([www.medicinafrica.com](http://www.medicinafrica.com)), combining the concepts of clinical education and social networking, that has facilitated the successful delivery of live, case-based trauma teaching to Somaliland's undergraduates and interns using an instant messaging feed. Methods: Trainees uploaded clinical cases to be discussed with a tutor resident in the UK; tutors then questioned trainees in real-time and highlighted areas requiring attention, simulating the bedside teaching experience. Using a social networking interface, tutors were able to teach a geographically dispersed group of junior doctors. Results: Tutorials covering wound healing, fluid resuscitation and surgical emergencies were successfully delivered using a low-bandwidth connection to overcome the technical limitations in the country. Tutorials were well-received and work is now under way to supplement these with further teaching built on ATLS principals. Conclusions: Despite technological limitations in Somaliland, a live text-based teaching service can be delivered effectively and streamlined with local curricula. This may represent a promising alternative to traditional static teaching methods and such novel applications of social networking can be used to support trauma teaching in the developing world. Key References: Finlayson AE, Baraco A, Cronin N, Johnson O, Little S, Nuur A, Tanasie D, Leather A. An international, case-based, distance-learning collaboration between the UK and Somaliland using a real-time clinical education website. *J Telemed Telecare*. 2010;16(4):181-4.

### Family planning service providers perceptions on use of different contraceptive methods and factors influencing their usage amongst youth in slums of Karachi

Dr Noreen Aleem Nishtar (Research Fellow Aga Khan University, Pakistan)

Problem statement: National Contraceptive Prevalence Rate (CPR) is 30 percent in Pakistan. CPR among married female youth in Pakistan is 17.4 percent and even lower in rural areas and slums area. Low CPR leads to rapid population growth on one hand and poor health consequences on the other. Objectives: To explore family planning service providers' perceptions regarding use of different contraceptive methods and to identify different factors that is influencing their use amongst currently married youth aged 18-24 years in slums area of Karachi during July-September 2010 Methodology: Qualitative exploratory study design was adopted and a total of ten in-depth interviews were conducted with family planning service providers of the area. Study was conducted in two Union Councils of Korangi Town in squatter settlement of Karachi, Pakistan from July to September 2010. Purposive sampling was done for the selection of participants. In-depth interviews were conducted in Urdu, transcribed and translated into English and content analysis was done manually. Coding of data into nodes and sub nodes was done and themes were derived. Result: On thematic analysis it appeared that family planning service providers perceived that there is low use of contraceptive methods amongst youth of area and low usage could be due to: side effects; myths and misconceptions; lack of proper knowledge about different contraceptives; unmet needs of contraceptives; sociocultural and religious factors about different contraceptive methods Implications: A research into exploring the perceptions of family planning service providers about contraceptive methods practice amongst youth could help to understand their role on nonuse and help researchers and policy makers to devise interventions which might result in improvement in contraceptive use among youth.

## Myths and misconceptions about male contraceptive method: a qualitative study amongst married youth in squatter settlement of Karachi, Pakistan

Dr Noureen Aleem Nishtar (Research Fellow Aga Khan University, Pakistan)

**Introduction:** Pakistan presently has one of the largest cohorts of young people in its history, with around 36 million people between the ages of 15 and 24 years. One of the main reasons for high population growth in Pakistan is almost stagnant contraceptive prevalence rate of 30% nationally and 17.4% amongst youth. **Objectives:** To explore perceptions regarding myths and misconceptions and to understand the effect of such myths and misconceptions related to male contraceptive methods among married youth aged 18-24 year in Karachi, Pakistan. **Methodology:** Qualitative exploratory study design was adopted and a total of eight Focus Group Discussions (FGDs) were conducted, in two Union Councils of Korangi Town in the squatter settlement of Karachi, Pakistan from July to September 2010. Purposive sampling was done for the selection of participants, the inclusion criteria being aged 18-24 years with at least one live child. FGDs were conducted in Urdu, transcribed and translated into English and content analysis was done manually. **Result:** Thematic analysis was done manually and themes were classified around two male contraceptive methods: Condoms and vasectomy and there appeared to be general, physical, sexual, psychological, sociocultural and religious factors leading to myths and misconceptions related to their use. The foremost myth amongst male and female youth was that use of both condoms and vasectomy cause permanent sterility in males. Another common misperception was that both males and females will compromise the sexual pleasure by condoms use. Additionally, condoms were thought to cause infections, backache and headache in males. Some youth of the area think that vasectomy is meant for prisoners only. It can arguably be said that these myths and misconceptions have led to low prevalence of male contraceptive methods amongst married youth of the area. **Conclusion:** Study finding suggests that the potential reasons behind low use of male contraceptive methods among youth of squatter settlement of Karachi were myths and misconceptions about male contraceptive methods. There are some important policy implications like counselling of the couple through peers and well trained family planning service providers to remove these myths and misconceptions from the minds of youth.

## The role of male circumcision in the prevention of HIV transmission

Witness Mapanga (Student, University of Essex)

**Background** Adult prevalence of HIV/AIDS in Sub-Saharan African is estimated at 5%, with more than half of all new cases occurring in the region. Male circumcision reduces risk of heterosexually acquired HIV infection in men, although the decision to circumcise is a cultural as well as clinical issue. WHO and UNAIDS have endorsed male circumcision as a 'partial' but 'efficacious' intervention in regions with high heterosexual infections and high HIV prevalence, when delivered under appropriate circumstances. Incorporating male circumcision as an HIV prevention strategy has continued to be a matter of serious disagreement because of its ethical, medical and public health related issues. The evidence in favour of male circumcision is supported by well-designed short-term RCTs. However, there has been less attention to ecological evidence demonstrating the long term effects of male circumcision interventions, including any impacts on changing men's sexual behaviour. **Study aim** This study aims to review the evidence available on the efficacy of male circumcision as an HIV intervention in Sub-Saharan Africa attributed to its clinical effect (physiological mechanism) compared with its cultural/social effect (men's sexual behaviour). **Design** A critical literature review. **Results and conclusions** Social, cultural and religious issues that may influence both acceptance of circumcision interventions and male sexual practices are not adequately accounted for in existing analyses; and clinical and social consequences of circumcision interventions are not routinely disaggregated. Further examination of the determinants of men's HIV-protective behaviours may benefit population health. **Acknowledgements** to Allan Hildon (my supervisor and lecturer at Essex university) Sarah Barter-Godfrey (lecturer at Essex university)

## S1 Prevention and Screening

### Improving early diagnosis of Cancer in the community

Kuiama Thompson ((Public Health Manager - Cancer, NHS Salford)

**IMPROVING EARLY DIAGNOSIS OF CANCER IN THE COMMUNITY** In spite of huge developments in drugs and other treatments, cancer survival rates in England still lag behind many of our European neighbours. One of the key aims of Improving Outcomes – A Strategy for Cancer is to reduce cancer deaths and narrow this gap in survival. Evidence suggests that survival rates could be improved by reducing delays in diagnosis and increasing the proportion of cancers diagnosed at an early stage. This requires interventions that educate people about cancer symptoms and the importance of early presentation. A Healthy Communities Collaborative (HCC) programme has been delivered in Salford for two years. The HCC uses volunteers to raise awareness of cancer symptoms within their own communities and encourages people with symptoms to see their GP. They use innovative methods, such as poster workshops, to convey messages amongst groups that tend to have a fear of cancer. The

HCC impact has been measured by the increase in two-week wait referrals for the four HCC delivery wards, compared to 16 non-HCC wards in Salford. There has been improvement across Salford, however, it has been greater in the HCC Wards, despite Salford wide campaigns running during this period. Our early results show that this approach can impact on referrals for cancer and have secured funding for a further two years and the expansion from four to 16 wards. However, further work is needed to evaluate the impact of the HCC on GP attendance and actual number of early cancers diagnosed post referral.

### Early effectiveness of community intervention in cancer awareness

Dr Hanna Blackledge (Public Health Specialist (Clinical Effectiveness), Directorate of Public Health and Health Improvement, NHS Leicester City)

**EARLY EFFECTIVENESS OF COMMUNITY INTERVENTION IN CANCER AWARENESS** Background and Aims: Poor awareness of symptoms is a likely cause of late cancer diagnosis and low uptake of screening. Community interventions may be effective in improving cancer recognition, although evidence is not robust. We evaluated a pilot community-based National Awareness and Early Diagnosis Initiative (NAEDI) project in Leicester using the Cancer Awareness Measure (CAM) survey methodology for lung, bowel and breast cancer. Design: The pilot took place in two selected Leicester wards with poor cancer outcomes and high deprivation. Stratified random sampling of population in two intervention and one control ward was carried out (to detect at least 10% change). Respondents were interviewed in a structured format prior and shortly after the intervention by trained interviewers. As measure of effectiveness we compared the baseline level of cancer awareness and its change after the NAEDI pilot in the intervention group to the outcome in the control group. Participants: A total of 149 participants, 103 from the intervention wards and 46 from the control ward. Results: The baseline cancer awareness level was poor and similar to that reported nationally. Following the intervention, there were significant improvements in awareness for lung (30%) and breast (25%) cancer and less so for bowel cancer, when compared to the control population. Conclusions: These results provide evidence of poor levels of cancer awareness and indicate that community-based interventions can be effective, albeit differentially for cancer sites, at least in short-term.

### Prevention and early detection of breast cancer: using mammograms to assess individual risk

Dr Jamie Sergeant (Research Associate, Imaging Science and Biomedical Engineering, The University of Manchester)

In the NHS Breast Screening Programme women undergo x-ray mammography every three years between the ages of 47 and 73, with the aim of detecting early signs of cancer. Whilst effective in reducing mortality, this one-size-fits-all approach takes no account of the variation in breast cancer risk across the population, and a more tailored screening methodology could benefit women by reducing lifetime x-ray exposure for women at low risk and facilitating earlier detection in those at higher risk. Genetic, family history, hormonal and lifestyle factors are known to be associated with breast cancer risk, as is breast density, the proportion of the breast occupied by radio-opaque fibroglandular tissue in mammograms. Breast density is one of the strongest of all known risk factors and, unlike most others, is modifiable, for example it may be increased by hormone replacement therapy (HRT) and reduced by tamoxifen. We are investigating the most effective way of assessing breast density in the screening population. In the Predicting Risk of Cancer at Screening (PROCAS) study, breast density is being assessed routinely by subjective assessment of the proportion of breast area that is occupied by dense tissue using Visual Analogue Scales (VAS), and by two automated methods that estimate the volumes of dense and fatty tissue in the breast (Quantra™, Hologic Inc. and Volpara™, Matakina Technology Ltd.). VAS results were produced independently by two expert clinician observers and averaged to give a final score. The distributions of available VAS scores and Quantra and Volpara densities for the 40,000 women recruited to the PROCAS trial thus far are illustrated. Inter-observer variability in visual area-based estimation is examined by a scatterplot matrix. We see from our results that the three methods do not select the same set of women as having high breast density and therefore highest risk, and suggest possible explanations for the differences observed. In particular, we do not expect area-based and volumetric results to yield identical results because of the properties they measure. Automatic volumetric assessment avoids the inter-observer variability shown to exist in visual assessment, but work remains in establishing the association between volumetric measures and breast cancer risk.



## Re-designing East Midlands' Cancer Screening Call Recall Services

Jane Woodland (Head of Screening and Public Health Programmes, Directorate of Public Health and Social Care - East Midlands)

**Context:** All women registered with a GP are invited at prescribed ages and intervals for breast and cervical cancer screening by screening call/recall offices. They link with the services that carry out the test, process the samples and assess women with abnormal results. They send out the results of the cervical screening test. In August 2010, East Midlands' Primary Care Trusts accepted a bid made by Shared Business Services to take over and merge 5 county offices. The public health opportunities of the change are being maximised through a partnership of commissioners and providers. **Aim:** Ensure that call and recall services support the objectives of the screening programmes and are cost effective. **Methodology:** 1. Development of service specification and key performance indicators. 2. Creation of a Call Recall Oversight Group to ensure that public health drives the development of the service and that it is integrated with local programmes. **Results:** 1. Service merger completed without interruption to screening services. Annual operating savings realised in excess of 30%. 2. Service specification and work plan includes public health objectives, such as implementing the NHS Equality Delivery System. 3. Best practice policies agreed, such as minimising women excluded from cervical screening. 4. Robust reporting and management of screening incidents. **Conclusions:** The region now has a resilient and consistent call recall service that is focused on achieving screening objectives. There is an opportunity to replicate this approach nationally when screening programmes are led by Public Health England and commissioned by the NHS Commissioning Board.

## S2 Health Promotion

### Cook and eat well in Coventry – a recipe for behaviour change

Claire Jagers - Contin You (Training and Cooking Club Manager, Coventry Cook and Eatwell, ContinYou)

**COOK AND EAT WELL IN COVENTRY – A RECIPE FOR BEHAVIOUR CHANGE** Aim Cook and Eat Well operate in schools and communities across the city and aims to promote good nutrition, improve healthy eating and develop the populations cooking skills. We believe that, 'Whipping up delicious and healthy food doesn't need to be difficult. In fact it is fun, fast and can help you look and feel fantastic' The ultimate aim of the programme is to improve the diet of people in deprived areas of Coventry and combat health inequalities across the city. Tackling diet related diseases such as obesity, diabetes, cancer, coronary heart disease and stroke. Design The programme funded by Coventry Health Improvement Programme, CHIP, is made up of three distinct strands and delivered in partnership across a range of organisations. 1) Cooking in the Community: delivered by Groundwork West Midlands and ContinYou engages the public in cooking activities through a model of community engagement. Free events, taster sessions and cooking courses are delivered to engage the public in cooking activity. A network of local Community Food Champions have been trained to set up and deliver a network of community led cooking clubs. 2) Cook and Eat Well Development Fund: delivered by Voluntary Action Coventry is a grant scheme providing funding for voluntary and community groups to set up cooking projects and clubs, helping to ensure that local people have both the skills and the motivation to cook and eat well. 3) Primary School Healthy Eating Programme: delivered by Food Dudes, Bangor University is a healthy eating programme for 4-11 year olds, changing behaviour through a well established programme of repeated fruit and vegetable tasting alongside a reward system and exciting DVD of Food Dude adventures. Setting and participants The programme operates in schools and communities across Coventry, with a focus on eight priority neighbourhoods. Cook and Eat Well is free and open to all Coventry residents. Results We are currently eighteen months into a three year programme and are successfully engaging local communities and changing behaviour. The numbers tell a story: • 96% of beneficiaries were very satisfied with Cook and Eat Well activities • 92% of participants said they were likely to re-attend events, tasters and courses • Over 10,000 children have been involved in the Food Dudes Programme • 13 Coventry employers have been engaged in the programme and we have delivered 26 workplace events • 5000 community members have been actively involved in Cook and Eat Well events, tasters and courses • 122 Community Food Champions have been trained • Over 200 cooking activities have been delivered by the Cook and Eat Well team • 36 community cooking clubs and 15 cooking projects have been funded • 18% increase in the number of participants cooking from scratch every day • 27% increase in the number of participants eating 5 or more fruit and vegetables a day **Conclusions** The programme has successfully • Delivered a high profile programme brand and identity which capitalises on the equity of the Change4Life brand but gives it a specific Coventry spin. • Successfully engaged and motivated the people of Coventry to cook and eat well with significant progress being made in establishing an effective network of volunteers and beneficiaries across the city who are fully engaged in the programme. • Developed a comprehensive programme of work in priority communities to engage hard to reach individuals through public courses, cooking clubs, workplace initiatives and tasters/events. • Established an effective grants programme which builds on the work established in priority communities and supports voluntary organisations to deliver community food projects. • Engaged schools in delivering a whole school approach to healthy eating involving both children and families • Engaged workplaces in delivering

activities for staff to improve their health and wellbeing. • Established a strong and effective partnership to maximize the impact of our efforts.

## **Live at-Ease – creating an innovative community-based response to military veteran health and wellbeing**

Emma Leigh - Live at Ease team (Live At-Ease, NHS Cheshire, Wirral and Warrington)

**LIVE AT-EASE – CREATING AN INNOVATIVE COMMUNITY-BASED RESPONSE TO MILITARY VETERAN HEALTH AND WELLBEING** Authors: Emma Leigh, Project & Contract Manager, Offender and Military Veteran Health Andy Chaplin, Director, Foundations Chris Pratt, Advisory and Professional Development Manager, Astral PS Aims Live At-Ease aims to provide a non-clinical, wrap around and holistic service that will be offered to Armed Forces Veterans and their families, which is complementary to the Veteran IAPT Service. Many of the causes of psychological problems have external causes that need to be addressed in order that the therapy can be fully effective. Design A trained caseworker working with the client will put together an agreed support plan taking into account: - Budgeting/Debt Support - Housing Support - Family Mediation - Support for ex-offenders and those at risk of offending - Job-related Support - Physical Health Support - Drugs/Alcohol Support Setting Live At-Ease uses trained caseworkers to work proactively with the client to create a support plan that guides the client. Live At-Ease does not replicate existing services, instead provides co-ordination to ensure to access services. Participants There are an estimated half a million veterans living in the North-West, the majority aged 65+. Around 200,000 are estimated to be aged under 65. Approx. 180,000 veterans reside in Greater Manchester (35% of the whole North West total). 90,000 veterans reside in Merseyside (17% of the whole North West total) Results Since service provision commenced in April 2012, 44 veterans have been assessed and supported via Live At-Ease. Conclusions The aim is to build a strong reputation to give Armed Forces Veterans the confidence and information to present to the Live At-Ease service, as well as to provide organisations with the confidence to refer to the service.

## **Cardiovascular disease risk communication in patients with psoriasis: a qualitative study**

Dr Pauline Nelson (Research Associate NIHR IMPACT Programme)

Background and aim: IMPACT aims to better understand the association between psoriasis and co-morbidity. This qualitative study will explore the acceptability of CV risk factor screening for patients with psoriasis and practitioners, and identify factors in the consultation that aid or impede risk perception and enhance motivation to engage in lifestyle behaviours to minimise risk. Design: Nested qualitative study of primary care CV risk screening and follow-up consultations. Patient interviews will explore risk perception, intentions to reduce risk, perceived ability to undertake lifestyle changes and support needed. Practitioner interviews will explore views of delivering risk information, eliciting patients' understanding and detecting/addressing distress and concerns. Principles of Framework Analysis will be used to identify similarities and differences within and across both datasets. Setting: Six general practices in North-West England, including small and large practices in deprived and affluent areas. Participants: Thirty people with psoriasis who have undergone CV risk screening and/or follow-up stratified by age/sex (10 under 30 years old; 10 aged 30-55 and 10 over 55 years). Fifteen primary health care practitioners involved in CV risk screening and/or follow-up. Results: Analysis will enable understanding of the structure/processes involved in risk perception, particularly where the evidence for increased risk is currently unknown, as well as identification of those communication techniques which aid patient understanding of risk and promote positive behaviour changes. Conclusions: Results will inform later stages of the IMPACT Programme which aims to use best available knowledge to develop responsive services to improve the care of people with psoriasis.

## **Building resources for health in community based health projects**

Amy Shephard (Centre for Research for Health and Wellbeing, University of Bolton)

There is a specific gap in the literature about whether community based health projects (CBHP) help to build the resources people need for a healthy life. A substantial amount of investment has been made in CBHP thanks to specific health streams of regeneration programmes and investment via organisations such as the BIG Lottery Fund. Since 2001 the Big Lottery Fund alone has directed over £355 million towards CBHP. Given the size of this investment the literature on these projects is relatively small. Where it exists it looks at whether they are successful in addressing specific risk factors. This focus on the pathogenic aspect of health is important, however it is also important to consider whether they were successful in building the resources people need that allow them to lead a healthy life, the salutogenic perspective. This research is helping to build the evidence base for policy makers about how to commission around these resources for health. It is working with Blackburn with Darwen Healthy Living, a community based health organisation to: • Explore the perceptions of CBHP about what it means to

be healthy • Investigate if involvement in CBHP increases resources for health, in particular social capital • Identify a framework for evidencing the impact of CBHP on health potential This presentation will set out the progress made in this research over the last two years. It will include the perspectives of policy makers and practitioners on the research and include detail on the participatory methodology being used.

### The association of factors affecting parental food purchasing behaviour with childhood obesity

Hamira Sultan (Specialty Registrar, Sanwell PCT)

Title: THE ASSOCIATION OF FACTORS AFFECTING PARENTAL FOOD PURCHASING BEHAVIOUR WITH CHILDHOOD OBESITY  
Introduction: Child obesity is a significant public health problem in the UK. South Asian children in particular tend to have higher obesity prevalence than the national average, and are prone to suffering obesity related complications. Aims: To understand the role of parents' food purchasing behaviour in influencing childhood obesity, as this will inform development of appropriate preventive public health interventions. Design: Cross Sectional Study Setting: Birmingham Participants: Children from a South Asian background (aged 5-7) and their parents Methods: We performed a cross-sectional analysis on data from the Birmingham healthy Eating and Active lifestyle in CHildren Study (BEACHeS) to assess whether factors affecting parental food purchasing behaviour were associated with childhood obesity. We developed three composite scores to measure the importance of certain factors related to food purchasing (Health, Marketing and Taste). We used logistic regression analysis to investigate the relationship between this parental influence and child overweight/ obesity. Results: As marketing factors became more important for parents, the likelihood of their child being obese increased by 19% (adjusted OR 1.19, 95% CI 1.04 – 1.36, p 0.01). Conclusions: Even within a particular cultural context, such as South Asian communities, marketing influences appear to be associated with child overweight/ obesity status.

### S3 Teaching and Training / Health Improvement

#### Internationalisation in higher education: student views on the impact of learning alongside students from other countries on an online distance learning MPH programme

Dr Isla Gemmell (Lecturer in Epidemiology and Biostatistics, University of Manchester)

Internationalisation in higher education: student views on the impact of learning alongside students from other countries on an online distance learning MPH programme. Background and Objectives Internationalisation in higher education has been shown to provide both intellectual and cultural benefits to students which can help in their future employment. In academic year 2010-11 there were 302 students registered on the fully online Master of Public Health (MPH/MRes) at the University of Manchester. 197 (65%) were registered as resident in the UK (50 (25%) in Greater Manchester) and the remaining 105 (35%) were based in over 40 countries worldwide. This study describes student views on learning alongside students from different countries in an online distance learning environment. Methods A descriptive cross-sectional survey using mixed methods. All students were sent a link to an online survey and were asked about their background and their views and opinions on aspects of the course. 73 students responded. Z-tests and Chi-square tests were used to compare responses between UK/EU students and international students. Thematic analysis was used to analyse the qualitative responses. Results The majority of students (82%) felt that there was a positive impact of learning alongside students from different countries. Thematic analysis identified that the benefits of studying alongside students from other countries include learning about other countries health systems and the experiences of health professionals in other countries. Other benefits were that students were able to appreciate other perspectives, broaden their horizons and improve their skills in understanding the context of a problem. There was a significant difference between the percentage of UK/EU students and international students that stated that one of their reasons for taking the course was because they currently or soon intended to work as a public health specialist (29.8% vs 69.2%,  $z=3.362$ ,  $p=0.006$ ). Conclusions Students benefit from learning alongside students from other countries and this benefit can be enhanced within an online learning environment through the appropriate use of discussion boards and other online learning technologies.

#### What should we be teaching? The experience of curricula mapping for a Masters Programme in Public Health

Dr Roger Harrison (Senior Lecturer, University of Manchester)

What should we be teaching? The experience of curricula mapping for a Masters Programme in Public Health. Introduction The University of Manchester runs an online distance learning masters programme in public health, with 300 students a year, (15% from Manchester, 52% rest of UK / EU and 33% based overseas). Students take three core units, five self selected units from a choice of 13, and a 10,000 word dissertation. Recognition that UK Public Health Professionals (PHP) work in an international discipline, raises questions about the content of academic public health education. Professional competency frameworks exist in

England, USA and other European countries. We mapped our course as part of ongoing quality assurance against these recognised competency frameworks and identified important questions relevant to competency framework development and academic education. Methods A literature review identified competency frameworks for masters public health education. Course unit leaders reviewed course material against the competencies with coded responses. Information on items taught but not included in the frameworks were also collected. Results Information on the competency frameworks used for the mapping process AND results of mapping our course to these frameworks will be presented. Conclusions Mapping curriculum against competency frameworks highlighted issues relevant to curricula setting for international public health education. That some popular course units covered issues not included in the competency frameworks raises questions about framework content and the extent they cover the educational needs of PHP across the world.

### **An association between access to alcohol and harm: Salford alcohol equity audit**

Ian Ashworth (Specialty Registrar in Public Health (Mersey Deanery), NHS Salford- Salford City Council)

### **“Today’s healthcare; tomorrow’s health”: new learning and teaching at Leeds medical school**

Sarah Walpole (Clinical Teaching Fellow: Sustainability, Health & Healthcare) & James Chan (Foundation Year 2 Doctor, Sustainable Health Research and Education Group, University of Leeds)

### **The combined impact of smoking and heavy alcohol use on cognitive decline in early old age: The Whitehall II cohort study**

Dr Gareth Hagger-Johnson (Senior Research Associate, University College London)

Objectives: To examine the combined impact of cigarette smoking and heavy alcohol consumption on the rate of cognitive decline in the transition to old age. Design: Prospective cohort study with 3 clinical examinations in 1997/99, 2002/04, and 2007/09. Setting: Civil service departments in London. Participants: 6473 adults (72% men), mean age 55.76 (SD = 6.02) at first cognitive assessment. Main outcome measure: Four cognitive tests (reasoning, memory, semantic fluency, phonemic fluency), assessed three times over 10 years, combined to yield a global score (mean = 0, SD = 1). Results: Adjusting for age, sex, education and chronic diseases, estimated decline in global cognition over 10 years was -0.42 z-scores (95% CI -0.45, -0.39) for moderate alcohol drinkers who reported never smoking (the reference group). Cigarette smoking interacted with heavy alcohol consumption (p value for interaction = .04) for cognitive decline. Heavy drinkers who were also current smokers declined by -0.57 z-scores (95% CI -0.67, -0.48); 36% faster than the reference group. Repeating the analysis after excluding very heavy drinkers and heavy smokers had little attenuating effect on the association. Conclusions: Cigarette smokers who also drink alcohol above recommended weekly limits, have 36% faster global cognitive decline from midlife to old age, equivalent to an age effect of 12 years.

### **With one of the highest differences in life expectancies, Salford performs very badly in terms of health indicators**

Omer Ali (The University of Manchester)

Healthy Voices: A collaboration between GP's and the third sector With one of the highest differences in life expectancies, Salford performs very badly in terms of health indicators. Our research is into access of health services in the city. We have found that there are over 80 charities, many of which are committed to improving the health of citizens, unable to attract the attention of GPs. This means that many do not have enough service users. We make simple but effective suggestions that could potentially be exploited in other areas in the country. Our research is currently ongoing and day by day we are discovering many ideas that have been put forward by frontline staff but never before integrated. We believe that by bridging the gap between General Practitioners and local charities that provide health services, patient health, satisfaction and well being could be increased while simultaneously saving huge amounts of money. This could then be spent on preventative services leading to a virtuous cycle.

## S4 Health Services Research

### Reframing the contribution of community pharmacy to self-care support

Dapo Ogunbayo (Postgraduate Student, University of Manchester)

The rising prevalence of long-term conditions (LTCs) such as heart diseases, diabetes and cancers has become a major public health challenge. Self-care support is increasingly becoming a key strategy for health services to cope with significantly increasing demands on health resources. Self-care support is based on the recognition that patients are central to the success or failure of their own care and should consequently take more responsibility, with the support of health professionals. Health professionals in the UK have been tasked to support self-care by forming effective partnerships with patients and promote their independence. Community pharmacy, as a key primary care and public health profession, offers important services to patients through pharmaceutical care and medication management. These services have been described as 'product-centered', meaning that a patient's medicine is at the center of his care, rather than the patient from a whole perspective. Emerging community pharmacy initiatives such as the Healthy Living Pharmacy scheme, aim to take a holistic, patient-centered approach to improve public health. A review of the literature has allowed for the conception of a framework for self-care support in community pharmacy with a key focus on information, tools and devices, skills and support networks. Self-care support in community pharmacy currently relates to advice and treatment of minor ailments with over-the-counter medicines. Evidence of community pharmacy working individually and as part of the multidisciplinary health-care team to support self-care of LTCs is limited. Further study will explore the self-care support roles of pharmacy in the management of LTCs.

### Holistic care and environmental design: the future for dementia care

Lauren Sadler – Foundations (Communications and Policy Manager, Foundations)

**HOLISTIC CARE AND ENVIRONMENTAL DESIGN: THE FUTURE FOR DEMENTIA CARE** Aims: The development of a new approach, using environmental design and non-drug-based interventions to support individuals with dementia to live independently and safely in their own homes. Although in its infancy, this approach is beginning to show how it can improve mood, socialisation, and short-term memory of people with dementia reducing the need for residential care or hospital admission. Design: The work is based upon the development teams' observations, complemented by those of key stakeholders. The work reviews policy context, evidence for the scale of the problem and some psychological approaches such as reminiscence work, which can alleviate symptoms. It outlines the potential in home improvement work for "dementia-proofing" and "retro-fitting", to enhance reminiscence-based "life experience" work. Finally, the approach is illustrated via individual examples. Findings: The results so far suggest that design-based approaches may add significantly to the effectiveness of psychological management of dementia via reminiscence work; early results suggest a reduction in the use of medications. The work highlights early developments in new approaches with great potential. In the long-term, it is hoped this dementia care model can be rolled out for replication in any home improvement agency or social care setting. Originality/value: The impact of dementia is of increasing concern for individuals and public budgets. The potential in dementia-friendly environmental design to complement other psychological approaches is an example of the increase in holistic approaches to respect and work with the individual's strengths, in contrast to purely medical approaches relying on medication and/or institutional care.

### Developing combined resources for improved CKD detection and management in primary care

Louise Lester (CLAHRC Coordinator NHS Leicester City, Directorate of Public Health and Health Improvement)

Aims: Chronic kidney disease (CKD) affects around 5-10% of UK adults. The GM and LNR CLAHRCs aimed to improve identification of undiagnosed CKD patients and improve care, focusing on appropriate blood pressure management, leading to improved health outcomes and prevention of cardiovascular events. Design: LNR is performing a cluster randomised controlled trial in 48 practices in Northamptonshire looking into the feasibility of a nurse led targeted prevention programme for CKD. The trial was built around a CKD audit tool developed by the team, which has subsequently been implemented in practices in Leicestershire. In GM, two 12-month quality improvement projects led to improvement of CKD risk factors in 30 GP practices and a CKD Improvement Guide was developed. Implementation was supported with workshops, WebEx sessions, and regular site visits. Participants: GM recruited 19 and 11 practices respectively for each 12 month improvement project. LNR offered the audit tool to all practices across Leicestershire & Rutland. Both CLAHRCs worked with local nurses, supporting clinical development and improving teams' understanding of CKD. Results: •The 30 GM practices identified an additional 1,863 CKD patients, also removing many mis-diagnosed cases. Blood pressure management improved from 34% to 74%, and 60% to 83% of patients meeting NICE targets in phases one and two, respectively. •Uptake by 58 practices in Leicestershire, 1 year follow up planned from Sept 2012. Conclusions: Each CLAHRC developed effective individual implementation tools and methods,

but found increased efficacy through combining resources and the implementation tools from each in 2011, with a formal collaboration called IMPAKT ([www.impakt.org.uk](http://www.impakt.org.uk)).

**Audit: Nutritional assessment in patient with bone fractures 2010-2012**

Anushka Mehrotra (Fy1, Trafford General)

## Parallel Session 2

### T1 Prevention and Screening

#### Food allergy and allergen management - Europrevall three years on

Professor Clare Mills (Professor of Allergy, University of Manchester)

#### Is there equity in HPV vaccination and cervical screening in the North West of England? A study of mothers and daughters

Angela Spencer (PhD Student, University of Manchester)

**Introduction** Cervical screening uptake is steadily declining with evidence of inequalities by deprivation and ethnicity. The introduction of the HPV vaccination programme has the potential to reverse the downward trend in cervical cancer prevention by protecting girls who in future may not attend for cervical screening. **Objective** To investigate equity in cervical cancer prevention by examining uptake of adolescent HPV vaccination of daughters and cervical cancer screening attendance in their mothers. **Methods** HPV vaccination records of girls aged 12-13 years were linked by address to their mothers cervical screening records from 15 North West Primary Care Trusts (PCTs) (n = 24,409 mother-daughter pairs). Vaccination and Screening records were matched to deprivation quintiles (as measured by the 2007 Index of Multiple Deprivation [IMD] scores) and ethnicity (classified by South Asian ethnicity using the Nam Pehchan computer programme). **Results** Results from preliminary analysis show daughters vaccination completion was associated with mothers screening attendance. Screening uptake was significantly lower in mothers whose daughters had received no vaccination doses compared to those that had received three doses (Odds Ratio [OR] = 1.35; 95% Confidence Interval [CI] 1.24 to 1.47) or partial immunisation status (OR=1.19; 95% CI 1.05 to 1.35). Uptake of both vaccination and screening programmes were associated with deprivation quintile (Chi Square, p<0.0001) and ethnicity, with uptake significantly lower in South Asian groups (Cervical screening = Chi Square p<0.05, HPV vaccination p<0.0001). **Conclusion** Mother's behaviour towards cervical screening appears to be indicative of HPV uptake in daughters. The HPV vaccination programme may therefore be subject to the same inequalities in coverage as the cervical screening programme.

#### Cervical screening – an attempt to increase coverage in general practice

Sarah Pountain (Practice Nurse Facilitator, NHS Heywood, Middleton & Rochdale)

**Aim:** The aim of the work is to increase cervical screening uptake to the eligible practice population. **Setting:** A low coverage highly populated BME practice within a deprived area of Rochdale that had a locum practice nurse employed on an ad hoc basis. **Design:** Following a meeting with the practice manager it became apparent that not only did they not have a regular practice nurse attending the practice but the practice due to other pressures had not had a designated person completing the prior notification lists and practice electronic cards which are sent from the call/recall agency, they had again been completed on an ad hoc basis with the practice electronic cards dating back to 2009. The following was identified: The need for the prior notification lists to be completed and returned within the specified time, to enable the call/recall agency to invite eligible women for the cervical screening test The need for practice electronic cards to be completed, to identify final non responders, cease women who had undergone a total abdominal hysterectomy and suspend pregnant women and women under the care of colposcopy The need to design an informative practice invite in the form of a letter to send to women as a third invite once they have reached final non responder stage The need to set up regular cervical screening clinics with a designated trained sample taker **Results:** All the above was put in place and as of the 1st June 2012 a practice search revealed that coverage in September was 64% and since the work has been commenced has increased to 75%, with future clinics arranged and fully booked. This is a great achievement. The practice has nearly reached the PCT coverage of 77.8% (2010/11), but now has the vision and motivation to reach above the National Average of 80%. (Call/recall figures will be different to practice figures, unable to gain figures due to time restraints). **Conclusion:** The practice has accepted the fact that they need a designated person who has an understanding of the cervical screening programme completing the PNL's and practice electronic cards on a weekly basis. The development of a personalised informative letter to patients proved successful as following receipt of the practice letter women are actively ringing for appointments and booking in for the test, within the designated cervical screening sessions run by a trained cervical sample taker.

### Twists in the tale: tracing the positions in the breast cancer screening debate

Dr Helen Eborall (Lecturer in Social Science Applied to Health, Social Science Applied to Healthcare Improvement Research (SAPPHIRE) Group, University of Leicester)

**TWISTS IN THE TALE: TRACING THE POSITIONS IN THE BREAST CANCER SCREENING DEBATE** Jian Ying Chen (jyc6@le.ac.uk), Helen Eborall (hce3@le.ac.uk), Natalie Armstrong (na144@le.ac.uk) Introduction: Breast cancer screening has been surrounded by recent controversy, with research evidence questioning its effectiveness, and criticisms of the potential avoidable harm. The information provided when women are invited for screening has been criticised as limited and misleading. This, often heated, debate has received significant media coverage, and interested stakeholders may adopt different positions on the value of breast screening. Aims: To review, trace and analyse the positions on breast cancer screening adopted by a range of interested stakeholders, and the coverage of these issues in the media. Methods: Data were collected from seven national newspapers, websites of four charities and two official bodies over two years. Following screening for relevance, data analysis was thematic and used an approach informed by discourse analysis. Results: Analysis showed that charities and official bodies were broadly in favour of breast screening and tended to emphasise the benefits, whilst minimising the potential harms. The majority of newspaper articles covered the screening debate in a neutral way, but a quarter of all articles were either explicitly or implicitly positive. The few newspaper articles that did explain the uncertainties of breast screening were present in all but tabloid newspapers. A similar number contained criticisms of breast screening. There was no shift in positions over the two-year period. Conclusion: This project has identified how the debate about breast screening has been covered across a range of media sources and may be useful to practitioners in helping them understand the perceptions, understandings and beliefs of women.

### Factors affecting low uptake of cervical screening – evaluation and experience from Leicester

Dr Hanna Blackledge (Public Health Specialist (Clinical Effectiveness), Directorate of Public Health and Health Improvement, NHS Leicester City)

**FACTORS AFFECTING LOW UPTAKE OF CERVICAL SCREENING – EVALUATION AND EXPERIENCE FROM LEICESTER**  
Background and Aims: Leicester has a population of 330,000, high proportion of BME (40%) and high levels of deprivation. Both ethnicity and socioeconomic factors have been linked to low coverage of cervical screening locally (77% against the national 79% in 2009), particularly among younger women. In order to evaluate and suggest improvement in uptake we aimed to look at broader range of factors, including administrative and quality assurance (QA) aspects of the programme and potential organisational issues in GP practices. Design: The evaluation included a cross-sectional study of the effect of demographic and socioeconomic factors on cervical screening uptake in all Leicester practices (N=63), followed by unstructured interviews with staff of all underperforming practices (N=13) and of those significantly above the national average (N=3). The interviews focused on organisational issues and were followed by mutually agreed improvement plans for poorly performing practices. Participants: All Leicester general practices (N=63); 81,600 women of screening age. Results: There was a large variation in screening coverage (50%-90%) between practices and notable discrepancies between practice-based (QOF) uptake measures and national QA measure (KC-53). Surprisingly, we found no clear correlation to deprivation or ethnicity at practice level. Indicators of poor uptake identified through interviews included poor data management, 'list inflation', lists including transient populations or lack of clear leadership for screening. Conclusions: At a practice level, a combination of factors, largely organisational, can lead to variation in coverage of cervical screening. PCT-wide improvement plans need to be sensitive to the local setting and to individual practice needs.

## T2 Health Protection

### 'Pass it on' – a blood-borne virus prevention project

Colin Tyrie (Senior Public Health Development Advisor (Substance Misuse), Manchester Mental Health and Social Care Trust, Public Health)

### Audit of registered drug addicts to ensure they have a record of their hepatitis b and c status in their clinical notes

Divya Jacob (Year 4 MBBS, University of East Anglia)

**BACKGROUND** The current treatment for drug dependence focuses on crisis intervention and structured methadone maintenance programmes. Preventative issues such as vaccination and past infection with bloodborne viruses tend to be



forgotten by both patients and their health care team. This is, however an important issue as hepatitis B (HBV) is preventable and if infected, both hepatitis B and C (HCV) may be treated. AIM; To ensure all injecting drug users registered in at Oak street general practice, Norwich have had their hepatitis B and C status checked and recorded in their notes. DESIGN; A retrospective audit spanning 15 years where patients were identified via computer records (SystemOne). PARTICIPANTS; All patients with a history of intravenous drug use registered at the practice RESULTS; 70 patients were known to have used drugs illegally and were identified as present or past injectors. Of these, between 42-44% of patients met the standard for hepatitis screening, with their serology tested and recorded in their notes, with 30 (42.86%) patients having their HBV status recorded and 31 patients (44.29%) having their HCV status recorded. 16 patients (23.19%) had been immunised against HBV. CONCLUSIONS; Drug users as a group are recognised as having differing health priorities that do not always reflect the clinical priorities of their healthcare providers. There is substantial literature regarding the failure to immunize injecting drug users against hepatitis B and the perceived reluctance of specialist services to offer vaccinations. If this failure is to be addressed, then primary care, where the bulk of the medical care to drug users is provided, will have to play a significant role.

### **Implementation of a programme of infection prevention & control audit and teaching in nursery and early years settings in accordance with HPA guidance**

Anna Anobile (Health Improvement Officer - Communicable Disease & Infection Prevention, Salford)

IMPLEMENTATION OF A PROGRAMME OF INFECTION PREVENTION & CONTROL AUDIT AND TEACHING IN NURSERY AND EARLY YEARS SETTINGS IN ACCORDANCE WITH HPA GUIDANCE. Introduction & aim: In 2011, cases of e-Coli 0157:H7 were identified in a Salford nursery resulting in Ofsted suspension. Other outbreaks of infection within North West early years facilities 2010 – 2011 included Meningococcal (meningitis) outbreaks in 3 nurseries; E coli 0157 outbreaks 4 nurseries; measles; scarlet fever; Norovirus; mumps; dysentery; and hand foot & mouth disease. A need was identified to work with nurseries in Salford to increase knowledge and awareness in Infection Prevention and Control with aim to improve overall standards of hygiene. Design / setting / participants: •Greater Manchester Health Protection Unit looked to update their Infection Prevention and Communicable Disease Control Guidance for Early Years and School Settings in 2011. Opportunity was identified for Salford Health Improvement Service to work with the HPA and partner agencies (NHS Salford Infection Prevention & Control team; Salford Starting Life Well team; Environmental Health) to revise guidance and put into place a programme of audit and training. •RAG rated audit tool developed following the outline of updated HPA guidance. •Full day care nurseries (51) in Salford contacted and invited to attend a launch event September 2011 and sign up to the programme. •Pilot audit and teaching programme within full day care nurseries commenced October 2011. •Nurseries achieving Green: 80 - 100% compliance awarded 'We are Clean' certification and re-audited annually. Nurseries indicated as Amber 50% to 70% are given specified actions to take to help them achieve compliance. Red nurseries are asked to rectify areas of concern. Any concerns or reluctances are fed back to partners to work with the nursery to promote good practice. Results: •More responsive action taken to report outbreaks to the Health Protection Team, ensuring more efficient monitoring and management of outbreaks •Greater collaboration between NHS, Local Authority and the Health Protection Agency •Nurseries sharing good practice and encouraging greater cost effectiveness – higher levels of cleanliness and increased awareness of need for infection prevention and control •Nurseries now requesting children's vaccination records on registration - encouraging uptake of MMR and primary vaccination. Conclusion: Partnership working has encouraged awareness and uptake of an audit and training programme to increase knowledge and awareness of the need to achieve and maintain high standards of cleanliness within Salford nurseries, with an aim to reduce the risk of preventable infection.

### **Improving access to seasonal flu vaccination for pregnant women in the North West (2011/12), evaluation report (April 2012)**

Liz Petch (Public Health Specialist, Maternity & Early Years, NHS Central Lancashire)

#### **TB Treatment**

Hamira Sultan (Specialty Registrar, Sanwell PCT)

Title: DELAY AND COMPLETION OF TUBERCULOSIS TREATMENT: A CROSS-SECTIONAL STUDY IN THE WEST MIDLANDS, UK  
Background: TB remains a significant problem in the UK with the West Midlands having the highest incidence after London. Treatment is usually for a minimum of 6 months and requires a high level of compliance. Aims: To investigate potential determinants of delays and completion of treatment for tuberculosis (TB) in the West Midlands, UK. Design: Cross Sectional Study Setting: West Midlands Participants: People with TB (from 01.01.2005 to 01.10.2010) Method: We used data on 4840 patients with TB in the West Midlands from the Enhanced Tuberculosis Surveillance database from 01.01.2005 to 01.10.2010. We used regression models to investigate the cross-sectional association between sociodemographic and clinical risk factors and the timeliness and completion of TB treatment. Results: Patients with TB waited 82 days on average from symptom onset to treatment initiation. Female patients spent 6% longer than males before receiving treatment (95% CI 1.2 to 11.6%,

$p=0.015$ ). Asian/Asian British patients were 11 times more likely to complete treatment than White patients (adjusted OR 11.4, 95% CI 1.31 to 100.3,  $p=0.028$ ). Conclusion: Females in the West Midlands took longer to receive TB treatment than males, representing a health inequality that could be addressed through gender-sensitive awareness raising programmes. White patients were less likely to complete treatment than Asian/Asian British patients; additional support is needed in this group. These results will inform a West Midlands wide TB awareness raising programme.

### The impact of the level of awareness of toxoplasmosis on its prevalence

Tamara AlasAd (University of Essex)

THE IMPACT OF THE LEVEL OF AWARENESS OF TOXOPLASMOSIS ON ITS PREVALENCE Alas'ad, T. A. (2012) MPH university of Essex Talala@essex.ac.uk, +44 47056 48403 Objectives: Toxoplasmosis is one of the most common zoonotic parasitic infections in humans and other warm-blooded animals. Although human transmission is broadly preventable, life time exposure affects about one third of the population. The objective of this literature review was to assess the impact of increase the Toxoplasmosis knowledge among pregnant women on its prevalence. Search Strategy: CINAHL, MEDLINE and Cochrane Library Database of Systematic Reviews were search to identify any published studies that investigated Toxoplasmosis prevalence and the level of awareness among pregnant women. Although the systematic review has no other constraints, the effectiveness of being informed about Toxoplasmosis among pregnant women has not been adequately evaluated in published studies. Findings: Studies whose main objective was to investigate the effectiveness of parental education were few and generally had limited methodological strength. Almost half of the studies were observational designs. . However the few available studies suggest that increasing awareness could be an effective primary prevention strategy (educating the general public, filtering water and veterinary public health intervention) and probably the most efficient and least harmful way to prevent the disease compared to secondary (parental screening) and tertiary (Neonatal screening) preventions. Conclusion: There is limited evidence addressing the effects of the level of awareness about Toxoplasmosis on prevalence among pregnant women, although the available evidence suggests that this is a promising approach.

### T3 Health Services Research

#### Multi-criteria decision analysis approaches to prioritisation in NICE

Brian Reddy (PhD Student, University of Sheffield)

#### A systematic review of qualitative studies on barriers and facilitators of Type 2 diabetes self-management: Patients' perspectives

Ugochinyere Ukah (University of Sheffield)

Diabetes is a global health issue and according to WHO, about 5% of the world's population is estimated to be living with this disease. Diabetes, if not well managed could result in the development of serious medical complications and premature death. Research reports poor compliance by patients to recommended management activities which include lifestyle modification, blood glucose monitoring and medication. This study presents a systematic review of qualitative studies investigating the major challenges and facilitators to self management of type 2 diabetes as perceived by the patients. Electronic bibliographic databases were searched, accompanied by other internet sources and hand-searching of journals, were used to retrieve relevant articles. The articles were assessed for reliability, internal and external validity using the CASP checklist and only high study quality papers were included in the review. A total number of 10 articles involving in-depth interviews and focus group were reviewed. Relevant data were extracted in a form and synthesized using approaches from meta-ethnography and thematic analysis. The major themes emerged from the studies identified lack of financial resources, complexity of self-care regimen, lack of self control, physical inability, environmental and cultural barriers, stigma/ fear as key barriers and will power, psychosocial support, knowledge of benefits and gradual lifestyle changes as key facilitators. These results call for high consideration by healthcare systems when planning programmes for Type 2 diabetes management. Promoting adherence of patients to the recommended self-management activities is essential as the importance of reducing mortality and improving quality of lives cannot be overemphasised.

#### What does an effective public health intelligence network look like? Generating lessons from the Greater Manchester experience

Neil Bendel (Head of Health Intelligence, Public Health Manchester) and Soraya Meah (Lead, Greater Manchester Public Health Practice Unit)

The aim of this work was to apply some of the learning from the field of business networks to the development of public health intelligence networks. Theoretical models were aligned with the ongoing development of the Greater Manchester Public Health Intelligence Network (GMPHIN). Key themes from the literature relevant to public health practice include: Building effective relationships and emotional resilience is more important than engaging in surface-level interaction with as many people as possible. A bigger network is not necessarily a more effective one. Insight and understanding of the people in the network and the benefits they seek from interacting with each other is essential to goal attainment. Networks are strengthened by diversity of people, from different backgrounds or values who will challenge rather than reinforce existing biases. An effective network has established links between network members and the co-ordinating body. The GMPHIN has put theory in to practice with a new approach to network development. Focus is placed on a defined number of workstreams sponsored by GM DsPH but identified by network members as 'best buys' for joint effort. Key lessons from our experience are: Managing expectations of the network is a precursor to measuring success. Outputs and outcomes need to be clearly articulated and agreed by both the sponsors and members of the network. Measures of network success need to include process outcomes as well as products delivered.

### **A community-based approach to improving male infant circumcision services**

Dr Paula Whittaker (Specialist Registrar in Public Health, NHS Tameside and Glossop)

**A COMMUNITY-BASED APPROACH TO IMPROVING MALE INFANT CIRCUMCISION SERVICES** Aims To prevent harm from non-therapeutic infant male circumcision across Greater Manchester by: o Implementing a voluntary audit and expert review process to quality assure private providers o To support families by providing clear, accessible information about the procedure and contact details of quality assured providers. Design and Participants A multi-layered public health led initiative. This presentation will describe how the project team worked with: a) local communities and faith groups to address their concerns about difficulty accessing, and assessing the quality of, local male infant circumcision providers b) providers, safeguarding, public health, general practice, and acute sectors colleagues to develop the quality assurance process Setting Community and acute Results Parents can now get impartial advice on what to look for in a good quality service via an information leaflet distributed by maternity services, health visitors, GPs, community and faith organisations. The leaflet is also available on-line in six languages where parents can also see the contact details of all the quality assured providers. Conclusions Stakeholder and community involvement has been key in making this project a success, and will continue to be key to keep the information up-to-date, relevant and accessible for the parents who need it. Public health is well placed to respond to complex challenges to health, that fall outside the NHS remit, through innovative problem solving.

### **T4 Occupational and Environmental Health**

#### **The microbiological impact of Environmental Health Practitioners' food hygiene inspections**

Louise Jackson (West Midlands Learning for Public Health, Sandwell and Dudley PCTs)

Introduction Foodborne disease is a major cause of illness in the UK imposing a significant burden on patients and the economy. An estimated million people suffer a foodborne illness in the UK annually, with 20,000 hospitalisations and 500 deaths, at a cost of £1.5 billion. Local authorities prioritise food hygiene inspections on the basis of the level of risk associated with a particular type of premises. Sandwell MBC also targets inspections on areas that are considered to be problematic and we have shown that this has a highly significant impact on food hygiene scores. However these scores are based on the professional judgment of the Environmental Health Professional and therefore open to some subjectivity. Methods We are assessing the objective impact of food hygiene inspections and actions through the microbiological testing of surfaces, foods and food handling techniques before and after inspections/actions during February and March 2012. The results will be measured against accepted standards and comparisons will be made before and after inspection/action, and over a range of time intervals to assess whether any effect is mediated over time. Statistical analysis will assess whether inspections or other actions have a significant effect on microbiological standards. Results Over 50 premises are being tested with food samples and swabs from work surfaces. This presentation will describe the methods used and the initial results. Discussion The results will provide intelligence as to the impact of food hygiene actions and determine how local food hygiene enforcement agencies discharge their responsibilities.

#### **Establishing an Environmental Public Health Tracking System in the UK**

Dr Patrick Saunders (Consultant in Public Health, Sandwell PCT)

Introduction Historically Britain's public health movement was based on addressing the impact of our environment on individual and community health and well-being. While environmental quality has improved considerably, there is abundant evidence that it continues to exert a powerful effect on public health. Estimates of this impact vary and the nature of environmental stressors has changed over the decades. The public, however, has consistently identified basic environmental amenity such as litter,

noise, bonfires, and housing disrepair as critical 'front-line' issues. These immediate interferences with day to day life have objective impacts on both health and quality of life. However, little is known about interactions between lifestyle and environmental factors. This is especially important given the disproportionate exposure of, and effect on, vulnerable populations such as deprived communities and children. Methods A multi-disciplinary confederation of surveillance, horizon scanning, exposure assessment, research, and integration of data and intelligence on hazards, exposures and outcomes is required. These are the fundamentals of an Environmental Public Health Tracking System established in Sandwell including the routine analysis of public health nuisance, the efficacy of local authority practice, local horizon scanning, and the innovative use of industrial quality control methods to target interventions as well as the routine surveillance of environmental insult and environmentally related disease to generate plausible and focussed hypotheses for research. Results/Discussion The Sandwell system introduced in 2011 has already produced some notable products receiving WHO endorsement, influencing practice, focusing research and is being taken up by other regions in England and Wales.

### **Calculating incidence rates of work-related ill-health from general practice – establishing the denominator**

Louise Hussey (Project Manager THOR-GP, University of Manchester)

Title CALCULATING INCIDENCE RATES OF WORK-RELATED ILL-HEALTH FROM GENERAL PRACTICE – ESTABLISHING THE DENOMINATOR Authors L. Hussey<sup>1</sup>, S. Turner<sup>1</sup>, R. McNamee<sup>2</sup>, R. Agius<sup>1</sup>. 1.Centre for Occupational & Environmental Health (COEH), School of Community Based Medicine, The University of Manchester 2.Health Methodology, School of Community Based Medicine,, The University of Manchester Objectives Valid population based incidence rate data is essential when assessing employment sectors at risk. This study aimed to investigate the best methods of estimating the size and characteristics of the denominator of a population derived from General Practitioners (GP) from which incidence of work-related ill-health was determined. Methods Since 2005 The Health & Occupational Reporting network in General Practice (THOR-GP) has collected information on work-related ill-health from 250-300 GPs. The THOR-GP denominator is the registered population of all participating GPs' practices. Two methods of estimating the THOR-GP population were used; one based on the practice postcode and another on the postcodes of the registered patients. Population data was broken down by industry. Results from the two methods were compared. Results Patient postcode files were received from 108 GPs totaling 938,070 postcodes. These were mapped to their corresponding geographical output area (OA). Each OA was weighted according to the number of patients and the total population broken down by industrial sector. When compared to population data based on the corresponding practice postcodes, the proportional distribution by industry was similar. The use of practice postcode alone was not reliable for estimating the size of the population; however this was calculated using published information on practice list size together with a correction factor. Conclusions Estimating the denominator using the 'gold standard' of patient postcode data and comparing it to practice postcode information validates the use of practice postcode in the absence of individual patient information in GP based health studies.

### **Barriers and facilitators to remaining in and returning to work: experiences of people with musculoskeletal disorders**

Dr Paula Holland (Lecturer in Public Health, Division of Health Research, Faculty of Health and Medicine, Lancaster University)

Background: Tackling health-related worklessness is a priority of the UK government. Worklessness, and receipt of incapacity benefits, is high among people with MSD, particularly those working in manual occupations. Quantitative studies have revealed that physical symptoms of MSD are less strongly associated with worklessness than are socio-economic characteristics of the employee, the demands of their occupation, and the organisational culture within which they work. Aims: This qualitative study explored the employment experiences of people with rheumatoid arthritis, a chronic auto-immune disorder with painful and fluctuating symptoms. It investigated the role of employers, workplace sickness absence policies, and colleagues in influencing the ability of people with rheumatoid arthritis to remain employed or return to work. Design: Exploratory qualitative study; in-depth interviews with members of the National Rheumatoid Arthritis Society. Participants: Men and women who were employed when diagnosed with rheumatoid arthritis (n=11). Results: Respondents reported discussions with rheumatologists about returning to work were rare. All respondents struggled to stay working. Support from employers, and their willingness to modify the working environment, tasks and hours, was crucial for remaining in work. Respondents reported bullying from colleagues and two raised Formal Grievances against their employers. Employers with personal experience of disability were more willing to offer workplace modifications. When offered, homeworking helped employees stay working. Respondents feared sick leave policies which punish work absence, delaying their return to work after sick leave in case further leave was needed. Conclusions: Rheumatologists and employers play a pivotal role in helping people with MSD remain in employment. Sick leave policies can exacerbate symptoms and worklessness by encouraging presenteeism and causing fear of returning to work.

### Dirty Smelly Cities or Sterile Urban Streets?

Dr Victoria Henshaw (Research Associate (Architecture and Urbanism), University of Manchester)

Dirty Smelly Cities or Sterile Urban Streets? Since the introduction of modern public health and sanitation programmes across the UK in the mid nineteenth century, urban smell environments have changed significantly. Previously dirty places, filled with mud, excrement and organic waste and home to smelly businesses and poorly ventilated residences, city streets and buildings have since been completely transformed. However, Henri Lefebvre observed the modernism project to have worked towards the 'complete atrophy of smell', producing what Ivan Illich describes as sterile environments that numb the senses. Such comments infer that odour removal efforts may have gone too far and in some parts of Canada and America, people are reporting extreme reactions to remaining odours with hyper-sensitivities being used as justification for policies that further remove odours in public buildings such as schools and hospitals. Is reduced exposure to odour today, having an adverse effect upon public health? This paper works towards answering this question by examining contemporary perceptions (detection and cognition) of smell in the environment and explores in detail, the role this sense plays in people's everyday experiences in, and of, the city. It asks what smells people detect in the city and what they think about them, what factors influence smell detection and cognition and identifies those public health issues that emerge as a result. It does so by drawing from empirical studies carried out in Sheffield, Manchester and Clerkenwell, London, and Doncaster, South Yorkshire. The findings are further supplemented by smellwalks in Seattle, United States and Grasse, South of France.

### Acute risks from soil contaminants; "Blue Billy" and a determination under the Contaminated Land regime based on acute health risks to children

Dr William Welfare (Consultant in Communicable Disease Control/ Consultant in Health Protection, Greater Manchester Health Protection Unit)

### Sewers and culverts - an uncommon pathway for vapour exposure in dwellings

Dr William Welfare (Consultant in Communicable Disease Control/ Consultant in Health Protection, Greater Manchester Health Protection Unit)

## S1 Prevention and Screening

### Prevention of stillbirth in high income countries: Understanding Risks, Causes and Rates

Frances MacGuire (Specialist Registrar in Public Health)

**PREVENTION OF STILLBIRTH IN HIGH INCOME COUNTRIES: UNDERSTANDING RISKS, CAUSES AND RATES** Introduction The UK's stillbirth rate is high relative to other high income countries and stillbirth is now specifically included in the NHS Outcomes Framework. In 2011 the Lancet's Series on Stillbirths called for greater local understanding of causes and risk factors to drive prevention. As part of a review of the evidence base for preventing stillbirth, rates and causes were analysed in Bradford, West Yorkshire where stillbirth rates are higher than the national average. Methods Data on stillbirth rates in Bradford District from 1996-2009 were compared to national rates and analysed by gestational and maternal age, socio-economic deprivation, ethnicity and baby gender. A case series of stillbirths in the Born in Bradford (BiB) cohort, a recently established birth cohort study of 13,766 births, was analysed to inform prevention strategies at a local level. Cause of death data were analysed for District stillbirths and the BiB cohort. Results Stillbirth rates at term in Bradford appear to have increased over the study period. A higher proportion of BiB stillbirths took place at term which reflects the findings for Bradford District. Cause of death was unspecified in around 70% of District cases and in 78% of BiB cases. This is higher than is usually reported in the literature. Discussion A range of obstetric and public health guidelines are relevant to the prevention of stillbirth. These need to be consolidated to enable a focus on prevention. Bradford's higher than national average stillbirth rates and the apparent increase in rates at term require further investigation.



## First Foods – When, What, Who, Why? – A study into the introduction of complementary foods

Kuiama Thompson ((Public Health Manager - Cancer, NHS Salford)

FIRST FOODS – WHO, WHEN, WHY? – A STUDY INTO THE INTRODUCTION OF COMPLEMENTARY FOODS IN SALFORD  
National surveys show a recent increase in the numbers of parents introducing complementary foods at six months or later, but a significant proportion still introduce solid food before five months. The process is confusing for parents and challenging for professionals to support. In order to encourage parents to adhere to recommendations it is important to be aware of when they are introducing solid foods, what motivates their decisions and how this varies between population groups. A postal survey was conducted in Salford amongst parents of infants aged seven months. Data from 298 responses were analysed to identify factors influencing decisions and complexities between demographic groups. Despite a high proportion of parents receiving advice from health professionals, most did not base their decisions on this advice and the majority focussed on perceived signs of hunger from the infant. There were marked differences between population groups. Parents from a non white British background were more likely to follow guidelines on the age at introduction and less likely to focus on perceived signs of hunger from the baby, but were less likely to provide finger foods, relying on spoon-feeding. Parents from more affluent areas were more likely receive advice but were less likely to introduce complementary foods at six months or later. Further complexities were identified when examining white British and non white British groups within the deprivation quintiles. The study highlighted complexities and identified a need to tailor messages to different demographic groups. The results will be disseminated and incorporated into training.

## Alcohol Screening and Prevention in Later Life

Liz Burns (Public Health Development Advisor-Alcohol, Public Health Development Service, Manchester Mental Health and Social Care Trust)

National data supports the concern that alcohol misuse is increasing in the general older adult population and those who have mental health problems are a particularly vulnerable group. An audit carried out among a sample of service users within Later Life Mental Health provision in Manchester showed that almost a third of clients were identified to be drinking at risk levels as identified by a score of 8 or more on the Alcohol Use Disorder Identification Test (AUDIT). As part of wider development work within Manchester Mental Health and Social Care Trust to develop a new pathway for service users with alcohol use disorders using NICE guidance, a series of training events were designed and delivered for staff working within Later Life services to help implement alcohol identification and brief advice routinely into practice. A newspaper themed leaflet "Safer drinking in later life" was also produced to support the delivery of brief advice using a visual aid as well as to improve access to general information and advice for older adults and their carers. A total of four training sessions were delivered with 42 individual members of staff participating. Immediate feedback demonstrated that staff found it useful to focus on the specific risks for older adults as well as the benefits of using AUDIT as a quick and easy way to introduce questions about alcohol. This work indicates that it is feasible to incorporate alcohol identification and brief advice into standard mental health assessments among an older adult population.

## Wider than rickets: prevention of vitamin D insufficiency and deficiency in young children and their mothers in Greater Manchester

Magda Sachs (Public Health Manager (Infant Feeding), NHS Salford)

WIDER THAN RICKETS: PREVENTION OF VITAMIN D INSUFFICIENCY AND DEFICIENCY IN YOUNG CHILDREN AND THEIR MOTHERS IN GREATER MANCHESTER Rickets, fractures, fits and developmental delay may result from vitamin D deficiency in children. During pregnancy women need adequate levels of vitamin D to aid bone formation in their babies and women and young children have ongoing requirements. Diet is very unlikely to deliver adequate amounts and exposure to sunlight at the latitude of Greater Manchester (GM) leaves most of the population insufficient or actually deficient. The national Healthy Start programme delivers supplements for means-tested groups. Fewer than 5% of those eligible currently access these vitamins, and eligibility criteria do not easily map to population need. This results in an estimated 1,000 children with undiagnosed rickets in Greater Manchester. An audit discovered a lack of consistent messages by health staff despite long-standing recommendations for supplementation. Variations in testing and prescribing lead to treatment inconsistencies of deficiency across GM. In 2011, a GM multi-disciplinary group conducted a rapid health impact assessment on the effects of vitamin D for women and young children. This concluded that the preventative health impact of universal supplementation justifies cost. It is currently proposed that GM should offer universal supplements to pregnant and breastfeeding women, women in the first postnatal year and children up to the age of 5. A universal approach is likely to ensure consistent messages from professionals, increased usage, as well as effectively reaching those at highest risk of adverse effects. Staff training and public awareness will also need addressing. A summary of the health impact assessment will be presented.

## Infolink champions – an innovative community-based approach to the prevention and self-care agenda

Emma Leigh (Projects and Contract Manager - Offender Health and Military Veteran Health, NHS Cheshire, Wirral and Warrington)

### INFOLINK CHAMPIONS – AN INNOVATIVE COMMUNITY-BASED APPROACH TO THE PREVENTION AND SELF-CARE AGENDA

Author: Emma Leigh, Public Health Manager, emma.leigh@cecpct.nhs.uk Aims Identifying approaches that benefit the population as a whole enables public health practitioners, to operate more effectively – InfoLink Champions does this by 'up-skilling' the workforce to deliver health promotion. Design InfoLink Champions are professionals who signpost people to local health supporting services. Being an InfoLink Champion is something that a person does alongside their day-to-day job to provide an enhanced service. Setting InfoLink is designed so that any professional who has a client-facing role is able to participate in the training, then immediately make use of their learning. Participants InfoLink Champions come from a diverse group including: supported housing; pharmacy staff; Probation Officers; leisure services; older peoples visiting teams. The one-day training includes: • Delivering a brief intervention • Training covering 5 areas of health promotion (key facts and where to access support) • InfoBuild – assessing participants knowledge as the training progresses • City & Guilds accreditation Results Monitoring data, received from Champions is analyzed on a monthly basis, providing rapid feedback to how Champions are signposting people in the community. To date: May 2012 300 InfoLink Champions have been trained - demonstrating the following outcomes. 400 people provided with signposting information: 68% verbal signposting, 32% provided with leaflet/resource. Conclusions Following training, staff have an increased skill-base which enables them to make every contact a health promoting contact. By enhancing knowledge within the community of healthy behaviours and appropriate use of services it is anticipated that members of the public will be able to better manage their health.

## S2 Health Promotion

### Harnessing Students to Lay the Foundations of Health for All

Thomas Callender (Medical Student, University of Manchester)

Britain faces an epidemic of non-communicable diseases, the underpinnings of which are often in our own behaviour. Almost 90-95% of cancers are related to our lifestyles and environment, making many preventable. Meanwhile, rising rates of obesity are contributing to growing problems of diabetes and cardiovascular diseases. Without concerted focus on prevention, though life expectancy may continue to rise, life without disability will lag behind. At the same time our health systems may no longer be sustainable, consuming a growing proportion of the nation's income. Knowledge is a key foundation of behaviour change. Yet health education is not an obligatory part of the secondary school curriculum. BE is a programme designed to organise University students, particularly those in health-related courses, to systematically teach health issues to adolescents. Adolescence is a crucial period where health behaviours develop, many of which carry through into adulthood. Peer education has been shown to be not only acceptable to both schools and pupils, but also more effective than teacher-led health instruction. University students are an ideal body, present in large numbers throughout the country and willing to work as volunteers. This can be the beginning of a financially sustainable, comprehensive and large-scale method of teaching health issues.

### The value of community based health – findings from a 5 year evaluation

Amy Shephard (North West Healthy Living Network)

In 2007 the North West Healthy Living Network received £7 million from the BIG Lottery Fund to invest in wellbeing projects across the North West. These projects initially focused on trying to change awareness, attitude and behaviour around physical activity, mental wellbeing and healthy eating. The projects funded through this portfolio were primarily community based. This means they worked with their local communities in the design and delivery of the service. The delivery organisations included the voluntary sector, Primary Care Trusts and Local Authorities. The findings from a 5 year evaluation are now ready. They help demonstrate: • Funding community health projects not only helps address risk factors, they also help build the wider resources that can lead to improved health; • Several different approaches are effective in creating a change in attitude, awareness and behaviour across each of these themes. However, there are common features of successful projects; • The portfolio approach to management is successful and encourages the sharing of best practice between individual projects in the network; • While many projects started by addressing one theme, by the end of the funding cycle they were providing services cross cutting many different aspects of health and wellbeing. This presentation will set out the findings from the evaluation. It will explain the importance of building capacity among deliverers as a means of improving the public's health. It will argue well managed and delivered projects are a key factor in improving the public's health.

## **Preliminary findings from two studies using the Baby Triple P Positive parenting programme in women with postnatal mood disorders**

Anja Wittkowski (Lecturer In Clinical Psychology, The University of Manchester)

## **Capacity building through health literacy: Quick guides to health and wellbeing**

Jennifer Ashburner (Healthy Communities Team, NHS Central Lancashire)

The WHO International Healthy Cities movement requires all sectors to work collaboratively to improve health and sustainable development, through political leadership, formal structures, and active local communities. The Healthy City programme worked on building capacity and capability for political leaders; Voluntary, Community & Faith sectors [VCFS] and other health professionals to ensure health equity was at the heart of policy development and implementation. The rationale: • Elected members – to influence the guardians of population health and champions of local causes; • VCFS - increase participation and empower communities as co-production of health & wellbeing; • Community Pharmacy - proactive in supporting health & wellbeing. NHS Central Lancashire undertook three Knowledge and Skills Audits (KSAs) with these target groups to establish a baseline by exploring understanding of determinants of health; key terminology used in policy /process. It set out to identify gaps in skills they will need in developing health and wellbeing in their communities; to effectively respond to emerging partnership challenges and develop bespoke training to support gaps in expertise. It provided a key opportunity for engaging with these groups, to be better informed and equipped on the governments proposed changes for health and wellbeing linked to Fair Society Healthy Lives and the White Paper, Equity and Excellence. It provided a mechanism for engagement and involvement with elected members on their proposed new responsibility; VCFS in being empowered to take on a greater role of influencing needs and identifying assets as potential advocates and service providers; and community pharmacies preparing for "Healthy Living Pharmacy" to tackle health inequalities. Outcomes: 1. Brokering collaborative working with North West Employers and the Royal Society of Public Health to develop a Health Champions training programme for elected members 2. Production of a KSA toolkit 3. Production of health literacy "quick guides" series 4. 40 VCFS individuals trained as RSPH Health Champions Documents available from: • [www.centrallancashire.nhs.uk/ksa](http://www.centrallancashire.nhs.uk/ksa) • <http://www.nwemployers.org.uk/learning-and-sharing-skills/councillor-development/health-reform-transition.html>

## **S3 Health Promotion**

### **Health trainers based in GP practices use a social prescribing model to improve health and wellbeing in poor communities**

Judy White (Centre for Health Promotion Research, Leeds Metropolitan University)

Background Altogether Better Diabetes links primary care practitioners, health trainers and community health champions (CHCs) with people with diabetes to achieve better self-management and improved health. The model was trialled for 12 months in Sheffield and Bradford, using the existing Health Trainer Services and CHC programmes in areas with high levels of deprivation and a large proportion of residents of South Asian origin. Design An evidence synthesis was carried out, based on two qualitative studies, a social return on investment (SROI) report, routine monitoring data and a selection of case stories. Results Of 289 clients seen by health trainers, working with 11 GP practices, 66% were working on improving their diet and 13% on increasing physical activity. 176 clients who had completed their sessions with the health trainer had changed to healthier lifestyles. 75% of those followed up had maintained these changes. Three quarters of clients were from black and minority ethnic groups, as were most of the health trainers and CHCs. Clients appreciated support from 'someone like them' who could speak their own language. They reported improved knowledge, confidence, motivation and diabetes self-management skills. GPs and practice staff felt positive about Altogether Better Diabetes. The SROI analysis found that Altogether Better Diabetes represents good value for money: up to £8.22 of benefits for every pound invested. Conclusions Altogether Better Diabetes helped clients to make and maintain positive lifestyle changes, was valued by clients and primary care practitioners, and represents good value for money.

### **Radical mental health promotion: how a community-run magazine facilitates empowerment of users and ex-users of mental health services**

Tamasin Knight (Mersey Deanery)

Since the invention of the printing press, community controlled publications have enabled the voices of the marginalised, and those with little power in society, to be heard. In this presentation we introduce Asylum magazine, a community-run magazine part of a wider social movement working for the empowerment of those who are, or have been, users of mental health



services. Asylum magazine takes a grassroots community development approach and encourages participation and submissions from people who have used mental health services. By using a combination of personal narrative and public health knowledge, we will explain how Asylum magazine and its associated activities promotes mental health. We will explain that although 'user involvement' in mental health commissioning is now widespread, there are many mental health service users who find the approach of statutory mental health services unhelpful or even harmful to their health. As their views challenge the status quo, these (ex)service users can find that 'user involvement' initiatives are not an effective means to get their perspectives heard. Asylum magazine provides a place where these alternative voices can be listened to, and in doing so challenges us all to question what promotes mental health. As part of the presentation, JH will describe her personal involvement in Asylum magazine, and how writing for the magazine helped facilitate her recovery after her treatment in psychiatric hospital. We conclude by highlighting how the work of Asylum magazine raises awareness of the social determinants of mental health, and contributes to social justice.

### **A new measure to assess the impact of weight management interventions on the quality of life (QOL) of adolescents**

Yemi Oluboyede (NIHR Doctoral Research Fellow at the Academic Unit of Health Economics, University of Leeds)

**Aim:** To develop a new weight specific measure that is suitable for the calculation of quality adjusted life years (QALYs) for economic evaluation of weight management interventions aimed at the adolescent population (aged 11 to 18 years). **Methods:** A two stage mixed method approach was adopted to create a new weight specific quality of life (QoL) measure. Qualitative interviews were conducted with adolescents and appraised using thematic analysis to inform the content of the measure. The next step involved its refinement by a) asking adolescents to complete the measure using a web and paper based survey, and b) evaluating the survey data using two quantitative methods. These included psychometric assessments and Rasch analysis, a form of item response theory providing a framework for testing the performance of the new measure with the expectations of the Rasch model. **Results:** The thematic analysis of interview data identified the following themes: physical, psychological, and social functioning. Most adolescents reported that the consequence of being above normal weight status resulted in negative feelings such as anger, annoyance, embarrassment, worry or frustration. Direct interview quotations were utilised to craft 29 items covering these themes. The psychometric analysis on the survey data identified 7 dimensions from the original 29 item questionnaire. The application of Rasch analysis highlighted 14 items with disordered thresholds (N=6), differential item functioning (N=5) or both (N=3). One item from each of the 7 dimensions was selected by combining the qualitative and quantitative findings. **Conclusions:** A new 7 item weight specific outcome measure has been created. To ensure that it is suitable for the calculation of QALYs, a valuation study is necessary which is currently being undertaken. In the UK there is a nation-wide campaign for tackling obesity. This new outcome measure can be adopted to aid the allocation of scarce resources in this key area of public health.

### **Using social marketing techniques to develop a health-focused scheme to support the continuity of healthcare for newly released female prisoners in the North West**

Emma Leigh - Live at Ease team (Live At-Ease, NHS Cheshire, Wirral and Warrington)

**USING SOCIAL MARKETING TECHNIQUES TO DEVELOP A HEALTH-FOCUSED SCHEME TO SUPPORT THE CONTINUITY OF HEALTHCARE FOR NEWLY RELEASED FEMALE PRISONERS IN THE NORTH WEST** Author: Emma Leigh, Project & Contract Manager – Offender and Military Veteran health Jo Harwood, Health Improvement Officer, HMP Styal Aims A prisoner discharge pack, developed using social marketing techniques, has been produced to ensure that the barriers and desires to change could be supported. The process included engagement with the prisoners – ensuring that Healthy Beginnings would become one that they would use. Design The scheme incorporates a 'brand' which has been designed in conjunction with prisoners' ideas. The pack itself is a 'ruck sack' style bag, which contains a wide range of health information, led by national health promotion policy, but selected by prisoners themselves (thus ensuring that issues around reading abilities are addressed). Setting HMP Styal is one of the largest women's prisons in the UK with an average 450 women in residence at any time. There are approximately 4000 movements in and out of HMP Styal each year, with the average length of stay being 6-7 weeks. Participants Prisoners entering Styal have complex healthcare needs. Prisoners, upon release into the community can face substantial barriers in life that are known to affect health detrimentally, such as access to affordable housing and access to health care services. Results Healthy Beginnings is now packed by prisoners within Styal, and distributed by Healthcare staff on release. Conclusion Through a partnership approach, complemented by the engagement of prisoners themselves we have been successful in developing an existing discharge pack that now represents a high quality approach which is underpinned by social marketing techniques.

### **Tackling community malnutrition in Staffordshire**

Nicola Day (Community Food Co-ordinator, Staffordshire Public Health Team)

Programme Summary Background and Aims People's concerns about malnutrition, a community prevalence of 10-14% and associated local NHS and social care costs of £65-£91 million in the over 65's were raised at a Staffordshire Social Care Scrutiny meeting in October 2010. In February 2011, a joint Social Care and Health Scrutiny Community Malnutrition Inquiry ensued, scrutinising representatives from a leading malnutrition awareness-raising charity, statutory services, regulatory bodies, local commissioning, the community and voluntary sector and care home management. This explored how to: - Raise the profile of community malnutrition. - Raise standards of nutritional care across community settings. - Encourage local partners to engage in supporting this agenda. Design Recommendations from the scrutiny review informed community / political / strategic leadership by the county council and a cabinet action plan, which is being reviewed 6 monthly by Staffordshire's Health Scrutiny Committee. Setting and Target Audience The action plan covers community settings and nutritional provision in hospital settings. It focuses on the over 65's. Results In its early stages, the action plan has already influenced: • Inclusion of malnutrition within the Joint Strategic Needs Assessment, the authority's People commissioning plan and other commissioning plans that link to this. • Political support for programmes encouraging higher nutritional quality standards in care settings. • Targeted partnership working. • Innovative research approaches. Conclusions Whilst it has historically been a low profile public health issue, raising the political awareness of malnutrition has resulted in Staffordshire County Council supporting it at the highest strategic level.

#### S4 Health Services Research

##### **The Public Health Outcome Framework for Preventable Sight Loss: Analysis of routine data on registration for blind and partially sighted people 2007/8 and 2010/11**

Darren Shickle (Head of the Academic Unit of Public Health, University of Leeds)

##### **Why don't people have their eyes tested**

Darren Shickle (Head of the Academic Unit of Public Health, University of Leeds)

##### **Professionals on tap not on top: a qualitative study of the ongoing support needs of people with long conditions following attendance at self management programmes**

Dr Nicola Wright (Research Fellow: Research Delivery and Support Unit, Collaboration for Leadership in Applied Health Research and Care (CLAHRC) Nottinghamshire, Derbyshire and Lincolnshire)

Background Long term conditions represent a major public health challenge and approximately 80% of care for is undertaken by the individual themselves or their carer. This has led to increasing interest in promoting "self management" strategies. One strategy is self management courses. These have been widely researched and improvements in health outcomes are frequently reported. However, participants have critiqued the highly structured and short term nature of this type of support. Aim To explore the ongoing support needs of people with long term conditions who have attended self management programmes. Methods Data were collected between May and July 2011 through focus groups. In total 24 people took part in the study. The data was transcribed verbatim and analysed using thematic content analysis. Findings Participants identified the importance of technical skills (e.g. understanding the pain cycle), a structure (e.g. having to be there every Thursday afternoon) and social support from other attendees as those factors leading to positive outcomes. Although participants felt more in control of their interactions with health care professionals they did not consider themselves to be "self managers" at the end of the course. To achieve this further social interaction through face to face groups, telephone contact or web based forums was required. Discussion Social networks and the support of peers have a buffering which enables individuals to use the technical skills necessary to manage a long term condition. The benefits of friendship to promoting health and wellbeing and reducing social isolation are also confirmed. Conclusion For self management programmes to achieve the best outcomes for individuals a strategy for providing ongoing social support after they have finished is required.

##### **Do you know who I am? Problems with patient identity**

Dr Paula Bolton-Maggs (Medical Director, SHOT, Manchester Blood Centre)

DO YOU KNOW WHO I AM? PROBLEMS WITH PATIENT IDENTITY Background: Errors in medical practice can cause death or serious harm. The UK national haemovigilance reporting scheme (Serious Hazards of Transfusion, SHOT) since 1996 collects adverse and 'near miss' events following transfusion. Currently, 98.4% of UK hospitals participate. Methods: Reporters in hospitals (usually transfusion practitioners or laboratory staff as representatives of the hospital transfusion team) enter data under an appropriate category using an on-line data collection programme. The cases are analysed, classified and reported annually in a published report ([www.shotuk.org](http://www.shotuk.org)) with recommendations for changes or improvements in practice. Results:

Every year half the reported events are caused by human error. Cumulative data shows 3038 incorrect blood components were transfused between 1996-2011. Causes include taking blood samples from the wrong patient, mislabelling them with another patient's details, mistakes in laboratory processing, supplying a wrong component or transfusing the component to the wrong patient. For every mislabelled sample that results in an ABO-incompatible component transfused there are another 100 'near miss' events where the error is discovered before the transfusion took place. Despite attempts to address this by transfusion education, training and assessment of competence there has been little change in error rates, and similar problems are reported by others for medicines. Conclusion: More attention must be paid to correct identification of patients at every point. Patients should be encouraged to make sure that at every contact, their GPs and all clinical staff know who they are together with correct date of birth, and patient identification should be a core clinical skill.

### **Health Impact Assessment (HIA) of a digital health service**

Dr Sue Wright (HIA Gateway Content Manager, West Midlands Public Health Observatory)

This is a Health Impact Assessment (HIA) study of a digitally delivered health service. HIA systematically assesses the likely impacts of a proposal on population health and health inequalities at the pre-planning or early implementation stage. Evidence based recommendations are made as to how likely positive impacts can be enhanced, negative impacts reduced and how health inequalities can be addressed. The Digital Health Service (DHS) aims to improve the overall health of the public and patients, and support staff in the delivery of healthcare by providing information on health, healthcare services and on professional development opportunities. The aim of the study was to address two questions: how will the DHS impact on the health of population; will the DHS increase health inequalities? The study followed the recognised HIA stages and focused on three groups: the public, patients and healthcare professionals, and on one condition, diabetes. Several research methodologies were used to collect evidence: health profile, policy analysis, literature review, interviews with stakeholders, and short survey of potential service users. The results showed the DHS has the potential to impact positively on health e.g. by increasing information and knowledge of health and health conditions and improving support in self-management of conditions. But there was evidence that the service could potentially increase health inequalities due to differential access to the internet. The study conclusions are a series of recommendations to decision makers as to how the service can maximise health impacts and how delivery can reduce the negative impact on health inequalities.

## Festival of Public Health UK 2012

### University of Manchester

## Abstract Book – Oral Presentations

### **Healthy foundations life-stage segmentation model toolkit: an effective tool for public health interventions?**

Alison Bareham (Centre for Health & Social Care Research, Human & Health Research Building, University of Huddersfield)

### **Effectiveness of Olmesartan Medoxomil as compared to other Angiotensin II Receptor Blockers (ARBs) among patients suffering from hypertension**

Allah Dino Keerio (School of Health and Related Research (SchARR), University of Sheffield, United Kingdom)

Effectiveness of Olmesartan Medoxomil as compared to other Angiotensin II Receptor Blockers (ARBs) among patients suffering from hypertension Allah Dino Keerio, Sajid Mahmood, Tahira Perveen School of Health and Related Research (SchARR), The University of Sheffield, United Kingdom  
Abstract Objectives: To assess the effectiveness of olmesartan medoxomil (OM) as compared to other angiotensin receptor blockers (ARBs) in management of hypertension  
Data source: Medline Search via Ovid SP and PubMed (1994-2011), CINAHL (1994-2011), Google Scholar, hand search, secondary references and experts in the field.  
Study selection & Methodology: Studies published in English language from 1994 to 2011 were eligible for the review, aimed to evaluate the effectiveness of olmesartan medoxomil as compared to other angiotensin receptor blockers (ARBs) in management of hypertension. Studies comparing effectiveness of OM with drugs other than ARBs group were excluded. Data from eligible studies were extracted. Quality assessment of the included studies was done. Finally, narrative data synthesis was carried out.  
Results: A total of six studies published from 2001 to 2011 were included in the review. These studies were conducted in United States, Italy, Germany, Poland and the Czech Republic. All of the studies were randomised, double-blinded controlled trials. OM found to be effective in reducing mean seated diastolic Blood Pressure (SeDBP), mean seated systolic BP (SeSBP), mean 24-hour ambulatory blood pressure; 24 hours mean difference in daytime and nighttime values of ambulatory blood pressure measurement (ABPM) as compared to losartan, valsartan, irbesartan and candesartan cilexetil among hypertensive patients. Additionally, less adverse effect of OM was reported comparatively.  
Conclusion: Olmesartan medoxomil showed promising results in reducing blood pressure among hypertensive patients as compared to other drugs from ARBs group.  
Key words: Olmesartan Medoxomil, hypertension, angiotensin receptor antagonist, ARBs, adult.

### **New and emerging biochemical tests for the screening of colorectal cancer (CRC)**

Angaja Phalguni (Horizon Analyst, MPH, NIHR Horizon Scanning Centre, University of Birmingham)

Aim To identify and characterise new and emerging biochemical tests for the screening of colorectal cancer (CRC). Current practice The National Health Service Bowel Cancer Screening Programme (NHS BCSP) uses Hemoscreen, a guaiac faecal occult blood test (gFOBT). Many countries use immunochemical FOBTs (iFOBTs) within their screening programmes. Methods Published literature on biochemical tests for CRC was searched and appropriate developers identified and contacted to obtain information on relevant tests. Advice from experts was sought on potential utility of the identified technologies in the NHS BCSP. Results Ninety-three companies were contacted and 61 responded to a request for information. Seventy-three relevant tests were identified. Detailed information was available for 52 tests, 75% of these were CE marked, with the remainder considered as emerging. Forty-nine tests use immunochemical methods, and three use the guaiac method to detect occult blood in faeces. Nine, four and two tests detect biomarkers (other than occult blood) in a sample of blood, or exfoliated cells either shed in faeces or collected from rectal mucosa respectively. Some tests (29%) can be automated and the majority of

automated tests (76%) provide quantitative measurement of biomarkers. Conclusion Biochemical tests for the screening of CRC showed considerable variation in test performance and characteristics. Only 11 tests matched the preferred criteria of automated, semi-quantitative immunochemical FOBTs, however these still have a limited specificity for CRC and adenomas. Tests detecting biomarkers other than occult blood are more specific to neoplasms but have limited sensitivity due to the heterogeneity of cancer.

## **New and emerging tests for the detection of human papilloma virus (HPV)**

Angaja Phalguni (Horizon Analyst, MPH, NIHR Horizon Scanning Centre, University of Birmingham)

Aim To identify and characterise new and emerging tests for the detection of HPV genotypes associated with cervical cancer. Current practice HPV testing was introduced into the NHS Cervical Screening Programme (NHSCSP) in 2011. Currently used HPV tests are primarily based on molecular technologies that utilise signal and target amplification techniques. Methods Published literature on HPV tests was searched, and appropriate developers identified and contacted to obtain information on relevant tests. Advice from experts was sought on the potential utility of the identified technologies in the NHSCSP. Results Forty-eight companies were contacted and 25 responded to a request for information. Sixty relevant HPV tests were identified. On the basis of available information for 36 HPV tests, 72% of tests were CE marked, and 14% were considered as emerging. Signal and target amplification were used by 12% and 78% of HPV tests respectively, while 7% utilised immunochemical techniques for HPV identification. Out of the 60 tests, 53 were DNA based assays and 3 were RNA based assays. Twenty-four DNA based assays distinguished specific HPV genotypes detected, while the remaining detected HPV genotypes in a group with/without identifying specific genotypes. Conclusion RNA based assays and assays based on immunochemical techniques can potentially distinguish between transient and persistent HPV infection, and have better specificity compared to HPV DNA assays. The decision to use a particular test for screening purposes will depend on a number of factors, including ease of use, the ability to perform multiplex high-throughput testing, cost and availability of data for clinical validation.

## **Determining whether GP endorsement can affect bowel screening uptake**

Angela Osei (Health Improvement Practitioner, NHS Bowel Cancer Screening Programme in Greater Manchester)

## **Gaining an insight into barriers to bowel cancer screening in Manchester**

Angela Osei (Health Improvement Practitioner, NHS Bowel Cancer Screening Programme in Greater Manchester)

## **Is there equity in HPV vaccination and cervical screening in the North West of England? A study of mothers and daughters**

Angela Spencer (PhD Student, University of Manchester)

Introduction Cervical screening uptake is steadily declining with evidence of inequalities by deprivation and ethnicity. The introduction of the HPV vaccination programme has the potential to reverse the downward trend in cervical cancer prevention by protecting girls who in future may not attend for cervical screening. Objective To investigate equity in cervical cancer prevention by examining uptake of adolescent HPV vaccination of daughters and cervical cancer screening attendance in their mothers. Methods HPV vaccination records of girls aged 12-13 years were linked by address to their mothers cervical screening records from 15 North West Primary Care Trusts (PCTs) (n = 24,409 mother-daughter pairs). Vaccination and Screening records were matched to deprivation quintiles (as measured by the 2007 Index of Multiple Deprivation [IMD] scores) and ethnicity (classified by South Asian ethnicity using the Nam Pehchan computer programme). Results Results from preliminary analysis show daughters vaccination completion was associated with mothers screening attendance. Screening uptake was significantly lower in mothers whose daughters had received no vaccination doses compared to those that had received three doses (Odds Ratio [OR] = 1.35; 95% Confidence Interval [CI] 1.24 to 1.47) or partial immunisation status (OR=1.19; 95% CI 1.05 to 1.35). Uptake of both vaccination and screening programmes were associated with deprivation quintile (Chi Square, p<0.0001) and ethnicity, with uptake significantly lower in South Asian groups (Cervical screening = Chi Square p<0.05, HPV vaccination p<0.0001). Conclusion Mother's behaviour towards cervical screening appears to be indicative of HPV uptake in daughters. The HPV vaccination programme may therefore be subject to the same inequalities in coverage as the cervical screening programme.

## People in public health: scoping review of the literature

Anne-Marie Bagnall (Senior Research Fellow, Centre for Health Promotion Research, Leeds Metropolitan University)

**Background** The use of participatory approaches in public health programmes is well established and seen as necessary for sustainable improvements in public health. 'People in Public Health' was a scoping study about approaches to develop and support lay people in public health roles, comprising three linked elements: a systematic literature review; expert hearings; and liaison with practice. The systematic review findings are presented here. **Design** The systematic scoping review included a systematic literature search, study selection and simple data extraction carried out by two reviewers. The scope of the literature was mapped and models of lay engagement were identified. Studies of any design that presented primary data on the engagement of lay people in public health roles were eligible for inclusion. Results 16204 records were identified in the literature search. 224 papers were included; 62 from the UK. Ten papers were about smoking cessation, 51 about nutrition, 69 about sexual health, 44 about inequalities, 29 about generic health promotion interventions, nine about physical activity, one about mental health, and 32 about other topics. 138 papers gave a clear definition of the lay worker role, the most frequently used terms were: lay health advisers; peer educators, volunteers, community health workers and peer supporters. **Conclusions** The literature search identified a relatively large volume of literature about lay workers, covering a range of target groups and topic areas, but this was not spread evenly. Many descriptions of lay worker roles were used but educational level and training of lay workers was poorly reported.

## Altogether better diabetes: engaging communities to improve self-management

Anne-Marie Bagnall (Senior Research Fellow, Centre for Health Promotion Research, Leeds Metropolitan University)

**Background** Altogether Better Diabetes links primary care practitioners, health trainers and community health champions (CHCs) with people with diabetes to achieve better self-management and improved health. The model was trialled for 12 months in Sheffield and Bradford, using the existing Health Trainer Services and CHC programmes in areas with high levels of deprivation and a large proportion of residents of South Asian origin. **Design** An evidence synthesis was carried out, based on two qualitative studies, a social return on investment (SROI) report, routine monitoring data and a selection of case stories. Results Of 289 clients seen by health trainers, working with 11 GP practices, 66% were working on improving their diet and 13% on increasing physical activity. 176 clients who had completed their sessions with the health trainer had changed to healthier lifestyles. 75% of those followed up had maintained these changes. Three quarters of clients were from black and minority ethnic groups, as were most of the health trainers and CHCs. Clients appreciated support from 'someone like them' who could speak their own language. They reported improved knowledge, confidence, motivation and diabetes self-management skills. GPs and practice staff felt positive about Altogether Better Diabetes. The SROI analysis found that Altogether Better Diabetes represents good value for money: up to £8.22 of benefits for every pound invested. **Conclusions** Altogether Better Diabetes helped clients to make and maintain positive lifestyle changes, was valued by clients and primary care practitioners, and represents good value for money.

## Mothers Learning About Second-hand Smoke (MLASS)

Becky Reynolds (Specialty Registrar in Public Health, NHS Airedale, Bradford and Leeds)

**Introduction** Exposure to second-hand smoke during pregnancy and early infancy leads to low birthweight and childhood illnesses. 50% of newborns in the UK are exposed to tobacco smoke through maternal smoking or second-hand smoke. We aim to reduce unborn and newborn babies' exposure to second-hand smoke through delivery of a smoke-free homes health education intervention with pregnant women and mothers with newborns. **Method** Extensive consultation on the nature and delivery of the intervention took place with over 100 pregnant women, mothers with young babies, and midwives/health visitors. Behaviour change techniques from models including Social Cognitive Theory, Information-Motivation-Behavioural Skills, Control Theory, and Theory of Reasoned Action were incorporated into the design. **Result** The resulting intervention will be delivered to women in four stages by routine midwifery and health visiting services. Stage one, for women who do not smoke during pregnancy, focuses on supporting the pregnant woman avoid second-hand smoke to protect the developing foetus. The remaining stages will to be delivered at 36/38 weeks pregnancy, 5-7 days after birth, and 10-21 days after birth. They are aimed at protecting the baby from second-hand smoke after birth. The intervention consists of written health education materials talked through by the health professional. **Discussion** Our study shows how the views of health providers, pregnant women, mothers with newborns, and application of behaviour change techniques can be incorporated into a comprehensive

smoke-free homes intervention. The next stage of the study is to investigate the feasibility of the intervention with 200 pregnant women and their newborns.

## To what extent does living with disability and/or a learning disability increase probability of being obese or overweight across all age groups?

Christopher Whitfield (University of Leicester)

This is a report of a systematic review to establish to what extent disability increases the risk of obesity. Obesity and its health implications are important public health issues. There is a documented relationship between obesity and disability which have a two way causal relationship. There is a lack of published evidence detailing to what extent disability increases the risk of obesity. Our search produced 268 papers which were narrowed down to 17 deemed appropriate for inclusion. The reviewed papers encompassed 520,506 participants who had a physical or learning disability. The included studies were published in the USA, UK and Australia. Conclusions: 1. A correlation between obesity and both physical and intellectual disabilities does appear to exist. As young disabled children age there is limited evidence suggesting their risk of obesity diverges, increasingly, from that of the general population. 2. There is a more pronounced increase in risk of more extreme obesity (BMI 35-40 and 40+) in disabled people. 3. Some subgroups of disabled people are at particularly high risk of obesity. These include women with intellectual disability, people with Down syndrome and dyslexics with co-existing dyspraxia. 4. Amongst people with intellectual disability those with less severe impairment and those who are living outside of professional care environments and who are responsible for decisions about their own diet are at the greatest risk of obesity. The findings of this review present a range of potential improvements to how health and social care is delivered to the disabled population.

## The CAPED programme

Claire Rogers (Community Action to Promote Early Detection (CAPED) of Cancer Project lead)

The CAPED programme is funded through the DH and supported by the GMCCN. A recent Health Inequalities National Support Team (HINST) visit cited the programme as good practice. The programme raises awareness of the early signs and symptoms of Breast, Bowel and Lung Cancer through community volunteers who deliver a range of evidence-based activities. The team are proactively developing new ways to engage the public using games, poems and discussions. We would like to increase recruitment of volunteers to increase our capacity. NHS Bury train the volunteers and show commitment to the project through key partnerships with stakeholders. This multi-agency approach is essential for a holistic raising awareness campaign and supporting volunteers/the public. The initial evaluation shows high satisfaction from primary care, volunteers and the public. A larger sample is required to assess whether the programme can have an impact on the fight against cancer. This project is designed to be complementary and increase the impact of any other national/local campaigns e.g. "Don't be a cancer chancer" or "Be Clear on Cancer". The delivery of key messages through trained volunteers is essential to translate social marketing campaigns into behaviour change, especially in socially excluded groups. All the BBLCs will be targeted as per the current CAPED programme. We will target the areas of highest need including BME, Gypsy Roma etc. We have innovative plans to do awareness work with local businesses. The training will include signposting into primary care. The project have successfully bid for MacMillan funding to provide a cancer lead GP as part of the Clinical Commissioning Group and he is championing the CAPED programme. The outcomes are to:- 1. increase the number of trained community volunteers 2. increase referrals to primary care and two-week target, if clinically indicated 3. reduce the number of patients with spread at diagnosis. The project will present a report on its progress.

## Ensuring Equitable Uptake of the Derbyshire Diabetic Eye Screening Programme

Elizabeth Orton (Lecturer and Specialty Registrar in Public Health, University of Nottingham, Division of Primary Care and NHS Nottingham City, Health Equality)

Introduction: Fractures are a common and important preventable cause of childhood morbidity and hospitalisation. Long bone fractures are a marker of more severe injury. NICE guidelines recommend identification of households with children at greatest injury risk to target interventions. Using a large primary care database (THIN), we identified risk factors for long bone fractures and for less severe fractures (hand and foot fractures) among preschool children. Design: Matched population based nested case control study. Method: Maternal, household and child risk factors for injury were assessed among 1878 cases of long bone fracture and 449 cases of hand and foot fracture. 18,079 controls for long bone fractures and 4233 controls for hand and foot fractures were matched on general practice. Odds ratios were estimated using conditional logistic regression. Results: Fractures of long bones were independently associated with lower maternal age ( $p$  for trend=0.005), increasing birth order ( $p$  for trend <0.0001) and maternal alcohol misuse (OR 2.94, 95% CI 1.34-6.46). The odds of long bone fracture were highest at age 25-36 months (OR 4.90, 95% CI 4.10-5.85). Risk factors for hand and foot fractures included maternal age ( $p$  for trend=0.023), increasing birth order ( $p$  for trend <0.0001) and increasing child's age ( $p$  for trend <0.0001). Children over the age of 37 months had the greatest fracture risk (OR 17.00, 95% CI 10.38-27.84). Conclusion: Maternal alcohol misuse is an important modifiable risk factor for more severe fractures in preschool children.

## The use of Khat, its cultural, social and economic aspects among three of the United Kingdom migrant communities

Faisa Ibrahim (School of Health and Related Research, The University of Sheffield, UK)

The use of Khat, its cultural, social and economic aspects among three of the United Kingdom migrant communities Abstract Objective: To explore the extent of Khat use, its perception, cultural, social and economic-related aspects among three UK migrant communities, in order to identify the required support needed. Methodology: It was a mixed method study conducted in three major cities of United Kingdom - London, Manchester and Sheffield. The research involved two stages: a survey of adult men and women belonging to the Ethiopian, Somali and Yemeni communities who attended support organisations in the cities, and in-depth semi-structured interviews with 9 participants from the communities. Quantitative data analysis was carried out on SPSS. Descriptive characteristics of the participants were reported. Chi square test and regression were also applied to assess association among study variables. Qualitative data was analysed by using thematic coding and emerging were applied to results. Results: Three quarters (75%, n=150) of the participants were male. The median duration of stay in UK was 13 years. Self-reported use of Khat was high (80%, n=150) with 33% (n=150) using Khat on daily basis. There was no statistically significant difference in use of Khat among three ethnicities. Over three quarters of those using Khat, reported using more than one bundle per session (75.2%, n=150) and the average Khat chewing session lasted over three hours. The most common time of chewing Khat was early afternoon. Reasons for using Khat use were identified in terms of its benefits for social interaction and retention of culture and identity. The survey and interviews revealed a perception amongst participants that Khat use was associated with adverse health, social and economic implications; in interviews, some participants perceived a significant financial burden and a more liberal use of Khat amongst younger users and women, in contrast to native country use. A key finding in both stages was a perceived lack of information about Khat generally and possible harm, with attendant claims that appropriate services and health awareness campaigns were needed. Attitudes towards regulatory control were mixed. Conclusion: Khat is used widely among these migrant communities in the UK and is perceived not only as acceptable behaviour but considered to play an important role in social life. Recent changes in the trends of Khat use have raised concern among some members of these communities; however a ban is not supported, as they feel that this would further exacerbate the social and economic implications. The acknowledgement of its negative consequences has resulted in the expressed need for intervention in the form of raising awareness among community members. Key words: Khat, Health implications, Social implications, migrant communities, UK

## Mindfulness and compassionate based meditative practices as interventions for stress: a systematic review of randomised control trials.

Gregory Lee (The University of Manchester)

MINDFULNESS AND COMPASSIONATE BASED MEDITATIVE PRACTICES AS INTERVENTIONS FOR STRESS: A SYSTEMATIC REVIEW OF RANDOMISED CONTROL TRIALS. Background: Evidence from randomised controlled trials suggest that mindfulness meditation (MM) and compassion meditation (CM) can reduce stress. Objectives: To systematically review randomised controlled trials of MM and CM practices for reducing stress in people with a range of health circumstances. Search methods: Seven electronic databases were searched. Grey literature, clinical trials databases and conference abstracts were also searched electronically. Selection criteria: Studies: Randomised control trials. Participants: Participants of any health status, age or setting. Interventions: MM or CM that must have been practiced for at least six weeks. Outcomes: 1) Self reported measures of stress; 2) Physiological measurements of stress; 3) Measurements of compassion towards self and others; 4) Measures of mindfulness; 5) Adverse events or side effects recorded from the meditations. Studies were required to record two separate outcome measurements (listed 1-4), with at least one being a primary outcome (listed 1-2). Main results: Eight studies were eligible for inclusion in this review. Five studies reported results showing significant reductions in Perceived Stress Scale scores ( $p < 0.05$ ) in MM groups compared to controls, with large ( $d = 0.87$ ) and moderate ( $d = 0.64$  &  $0.73$ ) effect sizes. Additionally, CM was found to significantly reduce plasma interleukin (IL)-6 but only at higher levels of practice ( $F_{2,58} = 3.45$ ,  $p = 0.041$ ). Authors' conclusions: Self-reported measurements indicate MM is effective for reducing stress in people from a variety of health circumstances. Evidence for CM was significantly limited, however the observation of a significant reduction in IL-6 with higher levels of practice supports future research.



## What are the influences and mechanisms directing the timing of reproduction in females and how are they interrelated?

Helena Lendrum (Medical Student, University of Manchester)

What are the influences and mechanisms directing the timing of reproduction in females and how are they interrelated? Reproduction requires great maternal investment, so its timing is important. This poster serves to describe both the adaptive mechanisms (both individual and cultural) and the random influences (relationship factors and chance infertility) which have control over reproductive timing. Although evolutionarily adaptive, early reproduction is associated with a number of negative outcomes for both mother and child, including lack of education, unemployment, poverty, poor housing and poor diet. This poster aims to show that public policy for reducing teenage pregnancies needs to address why young people are not using contraception, with schemes aiming to improve personal aspirations. Evidence has shown that providing traditional sex education and free contraception is not enough.

## Audit in general practice: uptake of the seasonal influenza vaccination (2011) among pregnant women registered at an inner city GP practice

Helena Lendrum (Medical Student, University of Manchester)

Audit in general practice: uptake of the seasonal influenza vaccination (2011) among pregnant women registered at an inner city GP practice Pregnant women are at an increased risk of serious complications due to the influenza virus, and therefore are eligible to receive the free seasonal flu vaccination in the UK. Evidence of the safety and efficacy of the vaccine is strong, but despite this, uptake rates among this patient group were only 38.0% in the winter 2010-2011. This audit analysed the records of 93 patients at an inner city GP practice who were identified as pregnant between 1/10/11 and 31/12/11. Results showed that 38.7% were vaccinated against influenza, a figure which is very similar to national rates. On investigation into the strategies used by the practice for recruiting pregnant women to have the vaccine, letters were shown to have no positive influence over the likelihood of vaccination. Meanwhile, face-to-face encounters were shown to be very effective. Therefore, in the action plan for improving the uptake rates next year, the main recommendations are: re-writing of the invitation letters; improving rates of opportunistic vaccinations by midwives (by re-education, re-training and policy-making); and introducing a text/phone invitation service at the beginning of the 2012-2013 flu season.

## Healthy over 50s campaign - increasing bowel screening uptake

HMR/Helen Skidmore (Public Health Manager - Lifestyles, Heywood, Middleton and Rochdale NHS)

Summary A series of Healthy Over 50s events were held as a way of promoting the Bowel Cancer Screening Programme with a softer wrap around of general healthy lifestyles advice / health checks. Events were held in areas with lowest bowel screening uptake as identified via screening uptake figures – Wardleworth, Langley, Deeplish and Castlemere. Aims • Increase bowel screening uptake in areas of low uptake. • Promote healthy lifestyle messages to over 50s. Results Year on year increase in uptake percentage - March 2010 - March 2011. • 16.5% across HMR • 12.6% non targeted areas • 27.8% areas where campaign was targeted When analysing year on year increase, of the eight GP surgeries in target areas:- • Six saw increases way above average increase in uptake • Five saw increases of above 30%, one achieved increase of over 40% • Two target area surgeries with below average increase in uptake still achieved increases - Dr Ghafoor, Nye Bevan (4.5%), Dr Ahmad, Windermere Road (2.9%) The eight surgeries to see a decrease/no change in uptake were from areas not targeted with this campaign. Although not included in the figures, screening opt ins (aged 69+ do not automatically receive a postal kit but phone to request one) increased massively during campaign - 7 in October, 40 in November and 8 in December. These were clustered around the areas where events were held.

## Strategies to increase cervical screening uptake at first invitation (strategic)

Jamie Oughton (Research Trial Coordinator, Academic Unit of Obstetrics and Gynaecology, The University of Manchester)

Cervical cancer screening coverage in England, amongst women aged 25-29 is low (63% for tests taken in 2009/10). In Manchester PCT only 25% of women attended after receiving their first invitation (age 25). There is a lack of published evidence regarding the effectiveness of interventions designed to increase cervical screening attendance amongst women under 35 years old. The STRATEGIC RCT aims to determine whether a range of complex interventions designed to improve young women's receptivity to, and uptake of, cervical screening are successful when embedded within routine cervical

screening practice. Phase 1 consists of a bespoke targeted leaflet sent to women 10 weeks before they are invited to attend for cervical screening. When invited women will have the option of booking their screening via an internet-appointment system. For women who do not attend following their first invitation and reminder phase 2 tests a range of interventions (HPV self-sampling kit, nurse navigator and timed GP appointments). The trial randomises GPs in clusters taking into account practice size and previous screening uptake rate. Each GP in Manchester, Salford, Trafford and Grampian PCT will be allocated one intervention. The primary outcome measure for each intervention will be attendance for cervical screening. Secondary outcomes include cost-effectiveness and the effect of prior HPV vaccination. A pilot study is currently underway to test the feasibility, acceptability and effectiveness of the proposed phase 2 interventions using qualitative interviewing in addition to the primary outcome measures. Phase 2 is scheduled to start in January 2013 and run for 1 year. Funded by the NHS NIHR Health Technology Assessment Programme (Ref 09/164/01). The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the HTA programme, NIHR, NHS or the Department of Health.

### **' Top tips for bowel screening' -will a pictorial step by step guide posted out before the faecal occult blood testing kit increase the uptake of bowel cancer screening? An intervention study carried out in Salford, Bolton and Wigan.**

Jennifer Aindow (Health Improvement Practitioner, Bowel Cancer Screening Programme in Greater Manchester)

### **Collecting case studies to promote the bowel cancer screening programme**

Jennifer Aindow (Health Improvement Practitioner, Bowel Cancer Screening Programme in Greater Manchester)

### **Both sides of the coin, looking at assets and needs of young people in Fairfield**

Jilla Burgess-Allen (Specialty Registrar in Public Health, Derbyshire County PCT)

Background Clinical Commissioning Groups, now flexing their muscles, will need to take a broad view to effectively address local health inequalities. This presentation will reflect on how High Peak CCG, in partnership with other stakeholders, is rising to the challenge. Aims of the presentation • To share an approach to community-based needs assessment which also aims to celebrate and help protect local health assets • To explore the emerging role of CCGs in tackling the wider determinants of their populations' health Design Community consultation methods complemented epidemiological data, and a partnership approach ensured both local ownership of the process and commitment to take recommendations forward. The entire process was rapid and executed with minimal resource allocation. Main findings The approach taken served to highlight the resources young people living in Fairfield have to protect and promote their health, but also reminds us that there are still inequalities to be addressed and pinpoints needs that could be more fully met by working across the local health economy in a resource-scarce context. Reflections & conclusions This rapid low-cost approach could be a useful template for other CCGs wishing to incorporate an asset-based approach in addressing local health inequalities.

### **Cardiovascular risk screening in people with psoriasis**

Karen Kane (NIHR IMPACT Research Assistant, University of Manchester)

Title: CARDIOVASCULAR RISK SCREENING IN PEOPLE WITH PSORIASIS Background: Accumulating evidence indicates that moderate/severe psoriasis is associated with cardiovascular disease (CVD). However it is unclear as to whether other risk factors such as obesity and physical inactivity contribute to a reported increase in CVD events in people with psoriasis. Aims: a) To establish the prevalence of traditional CVD risk factors in a group of primary care patients with psoriasis and; investigate the feasibility of screening this group for CVD risk in primary care. b) To compare levels of arterial stiffness as measured by pulse wave velocity (PWV) in people with and without psoriasis and to relate PWV to psoriasis severity in those with psoriasis. Setting: 5-6 collaborating general practices across 2 PCTs in both deprived and affluent areas. Participants: People with psoriasis over the age of 18 years stratified by gender and age (over and under 40 years). Design: 320 people with psoriasis will undergo CVD risk assessment in their general practice. Data will be collected on traditional and non-traditional risk factors, medical history and self-assessed psoriasis severity with a subgroup undergoing PWV and skin assessments. Results: Data are being collected between June 2012 and April 2013. Risk scores will be calculated and used to compare the prevalence of subjects who have, for example a 20% risk of a CVD event, in the psoriasis groups with national control data. Further analysis will assess whether psoriasis severity is related to arterial stiffness. Conclusions: Findings from this study will inform the future development of CVD screening for people with psoriasis.

## The development of an antenatal and postnatal care pathway for fetal neural tube defects

Karen Toulalan (Programme Associate, NHS Fetal Anomaly Screening Programme, University of Exeter)

**THE DEVELOPMENT OF A CARE PATHWAY FOR FETAL NEURAL TUBE DEFECTS** Background Neural tube defects (NTDs) are one of 11 conditions specified by the NHS Fetal Anomaly Screening Programme (NHS FASP) to be screened for in the 18+0 to 20+6 weeks fetal anomaly scan. The NHS FASP commissioned the development of a NTD care pathway as a means to promote equity in antenatal screening services and provide a pathway for commissioners to assess services against. Objective To develop a nationally-agreed standardised NTD care pathway for health professionals to ensure equitable antenatal and postnatal care in England. Methods We identified stakeholders, including professional body representatives, health practitioners, charities and parents who were invited to attend a national meeting to discuss current practice and set out key aspects of the pathway. The information generated was collated and a care pathway for NTD's was drafted. After consultation, a final NTD care pathway was developed. Results Discussions from the national stakeholder meeting showed that there was variation in service provision and management of fetal NTD cases and a need for improved diagnosis and MDT counselling to enable informed choice during women's pregnancies. Despite the challenges presented, the stakeholders were enthusiastic about developing a care pathway to drive up standards. Although the initial objective was to develop a single integrated care pathway, it was found to be too complex resulting in the creation of two pathways for the antenatal and postnatal periods. Conclusions Producing a standardised national care pathway is achievable by engaging key stakeholders throughout the development process. An evaluation of the NTD pathways application in antenatal and postnatal care practices is now required.

## Evaluating air pollution exposure measurement techniques in pregnancy: a validation study in North West England

Kimberly Hannam (Maternal and Fetal Research, University of Manchester)

Background: There is increasing evidence on the harmful effects of maternal exposure to air pollutants. Most studies use large retrospective birth outcome datasets and make a best estimate of personal exposure (PE) during pregnancy periods. Objectives: To compare personal NO<sub>x</sub> and NO<sub>2</sub> exposure of pregnant women in two cities in the North West of England with exposure estimates derived using different exposure modelling techniques. Methods: A cohort of 85 pregnant women recruited from Manchester and Blackpool measured their PE for 48 hours and completed a time-activity log at ~20 weeks gestation. Questionnaires were completed during early and late pregnancy. Personal measurements were compared to: monthly averages, nearest stationary monitor to participant's home, weighted averages of closest monitor to home and work location, proximity to major road, as well as to background modelled concentrations, inverse distance weighting (IDW), ordinary kriging (OK), and a Land use regression (LUR) model with and without seasonal adjustment. Results: PE was most strongly correlated with seasonally adjusted DEFRA (NO<sub>2</sub>  $r=0.61$ , NO<sub>x</sub>  $r=0.60$ ), OK and IDW modelled concentrations (NO<sub>2</sub>  $r\sim 0.60$ ; NO<sub>x</sub>  $r\sim 0.62$ ). Correlations were stronger in Blackpool than Manchester. Conclusions: The study found moderate correlations between PE with nearest stationary monitor estimates and seasonally adjusted IDW, OK, DEFRA and LUR estimates; the latter demonstrating the importance of incorporating temporality in predicting PE.

## The importance of congenital anomaly surveillance

Laura Berry (EMSYCAR Administrator, Department of Health Sciences, University of Leicester)

**THE IMPORTANCE OF CONGENITAL ANOMALY SURVEILLANCE** BACKGROUND Congenital anomalies affect around 2% of UK births, yet account for 30% of infant deaths. Anomaly surveillance provides reliable baseline data and an early warning of potential teratogen exposure. Recent government publications have recognised its importance to public health, and the data collected is a valuable resource for research and audit. However, only 49% of births in England are currently monitored in this way. AIM The British Isles Network of Congenital Anomaly Registers (BINOCAR) aims to "provide continuous epidemiological monitoring of the frequency, nature, cause and outcomes of congenital anomalies". A member of BINOCAR, the East Midlands and South Yorkshire Congenital Anomalies Register (EMSYCAR) will be used to demonstrate how an anomaly register works, and some of the challenges and successes involved. METHOD EMSYCAR is a population based register, monitoring over 74,000 births annually across 15 PCTs. Data are collected using voluntary notifications from clinical units. Data are validated, coded and recorded centrally, before submission to the European hub (EUROCAT). Suspected clusters are investigated locally, and any concerns reported to Public Health professionals. Data collected by EMSYCAR is available for research (subject to REC approval) and audit. RESULTS The prevalence of congenital anomaly in England and Wales is 205.7 [95% confidence interval: 199.5, 212.0] per 10,000 births; the most prevalent subgroup is congenital heart defects at 54.6 [51.4, 57.9] per 10,000 births. CONCLUSION Congenital anomaly surveillance requires commitment from clinical and public health professionals, but is important from a public health perspective, particularly for planning care services.

## **Bowel cancer screening: reaching sensory impaired people (Sight & Hearing Impaired)**

Marie Coughlin (Commissioning Lead for Screening, Cheshire and Merseyside Public Health Network)

Across England, people with a sensory impairment – a visual and/or hearing impairment – constitute a sizable minority of the eligible screening population. National statistics in 2006 informed that 307,000 people were registered as blind or partially sighted, with approximately 2 million people in the UK self-defining sight problems. Within this group, 85% were aged 65 and over. Similarly 219,000 people were registered as deaf or hard of hearing, with approximately 9 million people in the UK self-defining hearing impairments. Within this group, 75% were aged 60 and over. Studies have revealed the many barriers faced by minority groups, including the sensory impaired. Particularly in the case of sensory impaired, evidence has suggested that their knowledge and awareness of bowel cancer and the role of screening was limited and, furthermore, that they might have difficulty engaging with the screening process. In 2007, Cheshire & Merseyside bowel cancer screening centre was funded by National Office to commission a research project to explore the accessibility of the screening programme (up to the point of completed FOBt kit) for people with a sensory impairment. This project was completed in March 2008 and made a number of recommendations. Recommendations from the stage-one research project have already been acted upon by the National Team. Cheshire & Merseyside were subsequently commissioned to undertake stage-two of the project and this completed last year. Communication guidelines were developed for: BCSP staff for when interacting with sensory impaired participants; and practical advice guidelines for sensory impaired participants to support them through the BCSP pathway.

## **Improving awareness, acceptance and uptake rates in bowel cancer screening in Cheshire & Merseyside**

Marie Coughlin (Commissioning Lead for Screening, Cheshire and Merseyside Public Health Network)

Bowel cancer screening was implemented in England in 2006. During the Pilot, an uptake rate of around 60% was achieved and thus this is used as the informal benchmark. Since national roll-out of the programme we have seen throughout the country that uptake rates can vary greatly within PCTs, from as little as 25% to as high as 85%. Within Cheshire & Merseyside the picture is pretty similar with local PCT uptake rates ranging from 35% to 65%. In keeping with other screening programmes in Cheshire & Merseyside, areas of affluence and deprivation have shown to have an impact on uptake rates. Literature so far has not revealed any magic formula that would help increase uptake rates, however what it has suggested is a combination of initiatives used together may bring improvements. Using this knowledge, a communications project began last year in Cheshire & Merseyside in an effort to increase uptake rates in the poorer performing areas. The campaign aimed to improve uptake rates by 5% within the participating GP practices using 5 main approaches: information for PCTs; awareness posters and leaflets for display in GP practices; education sessions for GPs and practice staff; a letter from the GP to non-responders endorsing the programme along with simplified information and a DVD showing how to complete the FOBt kit; and lastly, face-to-face encouragement from the GP or other practice staff if the patient attended surgery on another matter. Results showed an overall increase of 11% with nearly all of the 16 participating practices achieving 5% increase or more. One practice added a further step to the process and saw their rate increase to over 40%. Recommendations of the project are currently being implemented.

## **The National Awareness and Early Diagnosis Initiative (NAEDI) – Using cancer health trainers to raise awareness, encourage and advocate breast, bowel and cervical screening programmes in North Lincolnshire**

Marie Hancock (Project Manager – Cancers, North Lincs PCT)

Cancer screening programmes (CSPs) are an effective way of detecting the disease before symptoms appear or treating early changes to prevent cancer developing. However, not everyone participates. National evidence reveals lower uptake in people with learning disabilities or mental health problems and from Black and Ethnic Minority (BME) groups. Uptake in North Lincolnshire is lowest in our most deprived communities. The NAEDI - is a public sector/third sector partnership between the Department of Health, National Cancer Action Team, and Cancer Research UK. Our two cancer health trainers (1WTE), funded by a local authority grant, work proactively to reduce inequalities in accessing CSPs and improve early detection of breast, bowel and cervical cancer by raising awareness and offering practical support to attend appointments. Aim To increase uptake

of breast, bowel and cervical CSPs. Design Contacting men and women who have not completed/ attended for screening. Offering practical support in arranging appointments, transport and accompanying women to screening Helping GP practices improve the patient experience. Setting and Participants All patients eligible for screening Results Increased uptake of breast, bowel and cervical screening. Conclusions Greater participation means better value for money from CSPs. Additionally, the earlier cancer is detected the more cost-effective the intervention. Cancer health trainers are proving to be an effective and useful resource for both PCT and women in our local community. We anticipate an effect on future cancer survival rates.

## **Safe: a sexual health campaign designed by and for young people in Tameside and Glossop**

Pamela Watt (Public Health Project Manager, NHS Tameside & Glossop)

Title SAFE: A SEXUAL HEALTH CAMPAIGN DESIGNED BY AND FOR YOUNG PEOPLE IN TAMESIDE AND GLOSSOP Pamela Watt 0161 304 5453 pamela.watt@nhs.net Aims • Provision of a central resource for young people to easily access relevant, reliable and easy to understand information about contraception and sexual health. • High level of young person involvement in campaign development. • Use of contemporary communication channels that young people readily and regularly access. Design Market research questionnaires and campaign design testing with young people. Setting and Participants Over 200 young people completed questionnaires exploring their knowledge about sexual health and their preferences for accessing services and information. Their answers formed the basis of the SAFE (Sexual health Advice For Everyone) campaign, and young people from Ashton College, sexual health clinics, and youth services chose the design concept for the campaign. Results The SAFE campaign consists of adverts, phone number, text service, Facebook page and website through which young people can access key facts about contraception and sexual health, and details of all local sexual health clinics. The poster will include evaluation details including the number of hits on Facebook and website. Conclusions The engagement of young people throughout the campaign development process has been central to the development of this accessible sexual health resource which did not previously exist. The use of Facebook has also been central; its popularity with young people, and the momentum with which its traffic and followers can grow through peer group reference and recommendation, in turn driving traffic to the new dedicated website, has enabled us to make powerful connections with young people.

## **Obesity Atlas: A public health intelligence tool for childhood obesity in Greater Manchester**

Dr Paul Jarvis (NWeH Software Engineer, University of Manchester)

## **Redesign of a comprehensive multi-disciplinary community falls service in consultation with services and older people in Tameside and Glossop**

Dr Paula Whittaker (Specialist Registrar in Public Health, NHS Tameside and Glossop)

REDESIGN OF A COMPREHENSIVE MULTI-DISCIPLINARY COMMUNITY FALLS SERVICE IN CONSULTATION WITH SERVICES AND OLDER PEOPLE IN TAMESIDE AND GLOSSOP Aims To incorporate the views and needs of older people in Tameside and Glossop in the design of a comprehensive evidence-based falls service Design Key provider stakeholders were engaged in a collaborative workshop to review the evidence base for best practice and collectively determine what a good quality service would consist of if best practice and NICE guidance was fully implemented. A consultation workshop with older people explored their awareness of falls and osteoporosis, and of services available. Participants shared their experience of treatment after falling and their knowledge of what messages and communication methods would work with local older people. Their recommendations were incorporated into the proposed service design. Setting and Participants Older people resident in Tameside and Glossop were recruited by Age UK Tameside's community-based falls prevention programme. Results Service redesign has focused on the promotion of good bone health, the prevention of falls, and providing rapid response to fallers in the community. A single point of access will make navigation of the system easier for service users, their carers and referring professionals. Conclusions This work is an example of how the unique insight of older people who have used services is a vital resource in service redesign.

## **A study of the relationship between geographical distance from a radiotherapy facility and access to radiotherapy services across Yorkshire & the Humber, for patients with multiple myeloma**

Philipa R Johnstone (Postgraduate Cancer Epidemiology, University of York Medical Student, HYMS)

In 2000 the NHS Cancer Plan deemed the "postcode lottery" (geographical variations in access to high quality cancer services) to be entirely unacceptable. This study is intended to explore the relationship between multiple myeloma patients' home locations and their access to radiotherapy services. Multiple myeloma is a sub-group of haematological cancer. Between 2004 and 2007, 613 patients were diagnosed with multiple myeloma in the Yorkshire & Humber region. It was found that 137 out of 611 sample patients received radiotherapy during their treatment pathway. The average age of the sample was 70.8 years, SD 11.6 (range 30.6 - 95.5); male 56.46% and female 43.54%. Already a statistically significant relationship has been shown between hospital of diagnosis and whether or not the patient received radiotherapy ( $p = 0.008$ ). The proposal is to explore whether there is a quantitative association between where the patient lives (i.e. home postcode) and whether or not s/he receives radiotherapy. Following on from this, semi-structured, qualitative interviews will take place with a purposive sample of haematology clinicians from hospitals in the involved region and focus groups will be organised with consenting patients from the sample. This research should expand our understanding of how, and if, access to cancer treatment in the UK varies and remains unequal 12 years after the Cancer Plan set out to reduce such inequality.

## **Risk factors for fractures in preschool children. A population based nested case control study**

Dr Ruth Bunting (Speciality Registrar in Public Health, Health Protection Agency, Nottingham)

Introduction: Fractures are a common and important preventable cause of childhood morbidity and hospitalisation. Long bone fractures are a marker of more severe injury. NICE guidelines recommend identification of households with children at greatest injury risk to target interventions. Using a large primary care database (THIN), we identified risk factors for long bone fractures and for less severe fractures (hand and foot fractures) among preschool children. Design: Matched population based nested case control study. Method: Maternal, household and child risk factors for injury were assessed among 1878 cases of long bone fracture and 449 cases of hand and foot fracture. 18,079 controls for long bone fractures and 4233 controls for hand and foot fractures were matched on general practice. Odds ratios were estimated using conditional logistic regression. Results: Fractures of long bones were independently associated with lower maternal age ( $p$  for trend=0.005), increasing birth order ( $p$  for trend <0.0001) and maternal alcohol misuse (OR 2.94, 95% CI 1.34-6.46). The odds of long bone fracture were highest at age 25-36 months (OR 4.90, 95% CI 4.10-5.85). Risk factors for hand and foot fractures included maternal age ( $p$  for trend=0.023), increasing birth order ( $p$  for trend <0.0001) and increasing child's age ( $p$  for trend <0.0001). Children over the age of 37 months had the greatest fracture risk (OR 17.00, 95% CI 10.38-27.84). Conclusion: Maternal alcohol misuse is an important modifiable risk factor for more severe fractures in preschool children. Routine data from primary care can be used to identify those at risk of injury.

## **Overweight and obesity among medical students of Karachi, Pakistan: A university based cross-sectional analytical study**

Dr Sajid Mahmood (Student PhD (Health and Related Research), School of Health and Related Research (SchARR), University of Sheffield)

## **Centralised health records can facilitate public health notifications and translate these into patient-specific prevention support**

Samantha Crossfield (University of Leeds)

Electronic health records (EHRs) must be utilised for international clinical innovation and national health (MRC, 2011; HM Treasury, 2011; DH, 2012). SystemOne is one of the most widely used clinical systems in the NHS and is provided by TPP. SystemOne contains the EHRs of over 25 million patients in a centralised database, shareable across primary and secondary care settings. This delivers the cross-sector, real-time unification of information envisioned by the Information Strategy (DH, 2012). These centralised, real-time records (Keen and Denby, 2009) mirror national statistics and so can relay information to the researchers and national organisations including the Health Protection Agency (HPA) to support public health initiatives. Centralised EHRs can feedback timely warnings such as outbreaks to clinicians and can translate global trends into patient-specific decision support (Hippisley-Cox et al. 2007; Piccini and Singer, 2012).

The aim was to develop an agenda of public health monitoring and research within the TPP Research Programme<sup>6</sup> that activates the potential for centralised records to support public health initiatives. Opportunity arises from the timeliness and structure of these shared records, which have representative coverage across both England and different care sectors, where users can electronically consent to projects and receive relevant feedback through the centralised system. An agenda to utilise such potential formed from the input of those who develop, use and benefit from public health innovations.

The agenda will drive forward projects with the following objectives:

- Increase the rate, accuracy and timeliness of notifications sent by clinicians for public health monitoring
- Facilitate access to de-identified EHR data for public health research
- Develop monitoring and mapping tools within SystmOne to enable clinicians to track health events
- Electronically disseminate real-time health warnings and patient-specific support to clinicians through the SystmOne EHR

This agenda is currently supporting the use of centralised health records in public health through the following projects:

- Secure development of an ethical research database, ResearchOne, to centrally house linked data from primary and secondary care EHRs
- Development of an electronic system to notify the HPA in real-time regarding disease cases recorded in general practices
- Assisting health units to electronically and automatically provide de-identified data extracts for national health surveillance purposes

## Towards a Public Health Curriculum in Undergraduate Medicine

Dr Subhashis Basu (Academic Unit of Medical Education, The University of Sheffield)

**Aim:** The need to adequately train medical professionals in public health has been recognised internationally. Despite this, public health curricula, particularly in undergraduate medicine, are poorly defined. This study explored the public health disciplines that newly qualified doctors in the United Kingdom (UK) should know. **Methods:** We developed a 31-item questionnaire covering public health subject areas and expected competencies that medical graduates should know. The questionnaire was then administered to a stratified sample of medically-trained individuals across a number of postgraduate schools of public health in the United Kingdom. Following administration, a ranking list was developed by subject area and by competency. **Results:** There was an 85% response rate (69/81). Subject areas ranked highest included epidemiology, health promotion and health protection. Sociology and the history of public health ranked lowest. Competencies perceived as important by the respondents included understanding health inequalities, empowering people about health issues and assessing the effectiveness of healthcare programmes. Significant gender variation was seen between given ratings upon medical sociology and ethics ( $p=0.0001$  and  $p=0.002$ , respectively), suggesting that women may view these subject areas as more important components of medical training. Participants' free text comments provided insight into given ratings. **Discussion:** Our study identifies the expected public health subject areas and competencies that newly-graduating medical students should know. They provide a context through which to begin addressing concerns over the disparity between these expectations and what is actually taught in medical school, highlighting the continuing need to reframe undergraduate public health education in the UK.

## Investigating the attribution of work to skin cancer case reporting to The Health and Occupation Research (THOR) network

Dr Susan Turner (Centre for Occupational and Environmental Health, University of Manchester)

## The uptake and effectiveness of health checks for people with learning disabilities

Dr Susannah Baines (Part-time Research Associate, Centre for Disability Research, School of Health and Medicine, Lancaster University)

**THE UPTAKE AND EFFECTIVENESS OF HEALTH CHECKS FOR PEOPLE WITH LEARNING DISABILITIES** **Background:** People with learning disabilities have poorer health than the general population. Reasons for this include difficulties in recognising and communicating health needs and in accessing health services. Annual health checks may help mitigate these difficulties. Since 2009 primary care services in England have been incentivised to provide annual health checks for people with learning disabilities. The IHAL Learning Disabilities Public Health Observatory has investigated the uptake and effectiveness of health checks. **Aim:** To review evidence on the uptake of annual health checks and the scientific literature on their effectiveness. **Methods:** 1. Analysis of data from Primary Care Trusts (PCTs) on the uptake of annual health checks. 2. A systematic literature

review of 38 studies. Results: In 2008/9, 27,011 adults with learning disabilities had a health check, 23% of those eligible. In 2009/10 this increased by 118% to 58,919, 42% of those eligible. In 2009/10 there was wide variation in the uptake of health checks across Strategic Health Authorities (SHAs) (30-55%). In 2010/11 72,782, 49% of those eligible had a health check. The systematic review found that health checks consistently resulted in: • The detection of unmet, unrecognised or potentially treatable health needs (including serious and life threatening conditions). • Targeted actions to meet those needs. Conclusions: While there has been progress in the uptake of health checks (which are effective in identifying health needs), less than half of eligible adults with learning disabilities in England received a health check in 2010/11, with wide variation by SHA.

## Out of sight, out of mind

Yasmin Hashimi (Postgraduate Student, University of Manchester)

## Building up mental health resilience

Martin Meyer (Placement student (Public Health, Germany))

**BUILDING UP MENTAL HEALTH RESILIENCE** Martin Meyer, BA1 | Christopher Whitfield2 | Dr. Justin Varney, MBBS FFPH MSc3  
1 Placement student Public Health, Barking and Dagenham Public Health Directorate; Faculty of Medicine, Dresden University of Technology, martin.meyer@lggd.gov.uk, | 2 University of Leicester, cjt1@le.ac.uk | 3 Barking and Dagenham Public Health Directorate, justin.varney@lbbd.gov.uk  
**AIM:** The incidence of mental illness has increased considerably within the last 10 years and there are no signs of an end to the growth. An essential factor protecting the development of a mental illness is the mental health resilience. It can be understood as an individual's capacity to withstand stressors and not to manifest psychological dysfunction. Many studies focused on mental health resilience are only analyzing it in a specific context. The aim of this work is to point out general factors supporting the build up of mental health resilience. **METHODS:** Systematic literature review. To increase the significance of this review, only RCTs and longitudinal studies/surveys are included. **RESULTS:** The results of 19 included studies show diverse factors relevant for building up or strengthening mental health resilience. This includes sleep behaviours, maternity and family relationships as well as relaxation and workplace changes. Although an improvement at every age is possible, especially children appear to benefit from early measures for improving mental health resilience. **CONCLUSION:** The present findings show possibilities for strengthening mental health resilience, which can be realized without great effort. An increased communication and of these results and education about mental health resilience according to primary prevention and health promotion is recommended.

## Move. Eat. Treat.

Joseph Lightfoot, Edward Maile, Thom Phillips, Sean Carmody, Benjamin Snowden

Move. Eat. Treat. is a campaign which aims to promote the importance of preventative medicine with the aim of eventually developing a healthcare system, which doesn't wait until patients become ill before it acts, but works to keep the population healthy – a true *health* service that is proactive rather than reactive. We believe that the best way to achieve this is to educate healthcare professionals on how to deliver effective lifestyle advice. We hope that this will lead to a sea-change in culture within the healthcare system to one that assertively seeks prevention instead of cure. Then this will be followed by policy and organisational changes to prioritise prevention via promotion of healthy lifestyles. Lifestyle should be a core theme of healthcare education, alongside other key pillars such as anatomy, physiology, and pathology. This campaign wants to pave the way for updated curriculums and provide education to both undergraduates and current healthcare professionals.