**P1-28** Linkage of primary and secondary care data to identify risk factors for emergency hospital admission for COPD: Negotiating the legal and ethical hurdles

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Introduction We aimed to identify modifiable risk factors in primary care associated with emergency hospital admissions with Chronic Obstructive Pulmonary Disease in Lothian, Scotland. We sought permission to obtain data from primary to secondary care databases in a way that would allow the required analyses while ensuring that patient confidentiality was protected.

Methods The research protocol proposed an “anonymised linkage” method that linked personal identifiers and pseudonymised them before adding clinical data. All identifiers would be removed from the final analysis dataset. Consent to participate in the project was sought from general practitioners. General information was available to patients about secondary uses of their personal data. Ethical approval was sought from relevant local to national committees.

Results Conflicting views were expressed by different ethical committees. Some took the view that individual patient consent was required for the proposed approach while others viewed it as anonymous database research.

Conclusions In large epidemiological studies it may not be practicable to obtain individual patient consent. UK law and professional guidance supports the use of patient data for research without consent in some circumstances provided the research is deemed to be in the public interest. Data linkage is a powerful tool increasingly used for epidemiological research. However, its use to improve health in Scotland is hampered by lack of clear guidance and inconsistent interpretation. While it is important that patient confidentiality is respected, a balance needs to be struck to enable use of patient data to improve health and the quality of care.

**P1-29** Using international evidence to develop a conceptual framework of facilitators and barriers of chlamydia screening service in community pharmacies

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Introduction Community pharmacies have recently become more involved in providing chlamydia testing and treatment CT&T. We have reviewed published evidence and developed a conceptual framework regarding facilitators of and barriers to provision of chlamydia testing and treatment in community pharmacies.

Methods Electronic databases were searched using the keywords and grey literature was solicited from experts. Studies selected were imported to NVIVO8 and thematic analysis was performed to identify key facilitators and barriers to acceptability/success of CT&T community pharmacy service. The emerging themes were categorised to develop a conceptual framework.

Results 17 papers and reports were included. The framework developed suggests barriers and facilitators operate at three conceptual levels; i) Service delivery, ii) Young people’s decision to access service, and iii) Policy stakeholders’ strategies. Some factors operate at more than one level. Key service user factors identified were convenience of access (location, no need for appointment and extended opening hours for pharmacies), pharmacy visits free of social stigma, within-pharmacy facilities for example, counselling area and toilet. Level of privacy and confidentiality and self-perceived risk of chlamydia. Identified barriers at provider level were, insufficient promotion of service, staff workload and untrained staff. Policy stakeholders’ strategies of implementing services in deprived areas, health professionals’ relationship with pharmacy staff and incentives were considered key to the success.

Conclusion Chlamydia screening in community pharmacies is broadly acceptable to both service users and providers. However if screening is to succeed, policy makers must accommodate the facilitators and barriers identified by young people and pharmacy staff.

**P1-30** Confounded clusters: an assessment of the adequacy of measures to minimise confounding in cluster RCTs

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Introduction Cluster randomised controlled trials (CRCTs), where the unit of allocation is a group, are particularly useful in Public Health, when interventions are targeted at populations. Randomisation is the ‘gold standard’ for dealing with both known and unknown confounders as these are balanced between comparison groups with sufficient numbers randomised. However, CRCTs may have few units randomised, increasing the likelihood of confounding. Confounding can be minimised by design (eg, minimisation) or analysis. We investigated methods used to reduce confounding and their adequacy in a sample of alcohol prevention CRCTs.

Methods Existing systematic reviews published in the Cochrane database assessing efficacy/effectiveness of primary/secondary prevention methods in young people to reduce alcohol use/harms were identified. Reporting of the following for all included CRCTs was established: baseline cluster characteristics, type of randomisation, participation rate, attrition rate and measures reducing confounding at analysis. All data were collected using standardised forms by two independent reviewers with discrepancies resolved with a third reviewer.

Results Two Cochrane systematic reviews were identified yielding a total of 30 CRCTs. Baseline measures at the cluster level were not always reported and the potential for confounding was often not considered in design, analysis and interpretation of results.

Conclusion To our knowledge, this is the first study that investigates whether researchers adequately consider confounding at a cluster-level in CRCTs. We recommend greater adherence to the CONSORT extension for CRCTs with explicit consideration of confounders during all stages of research. This helps ensure misleading effectiveness estimates are not used for Public Health decisions.

**P1-31** Clinical usefulness of Framingham cardiovascular risk profile during a 10-year follow-up in Iran

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Introduction Clinical usefulness of a risk function is a new concept that should be considered beyond the traditional checking of