**Results** During the study period 56 elderly patients were admitted to the Stroke Unit. At the time of admission 63 prescribing omissions were found in 69.8% of elderly (average 1.19 omissions per patient), of which 74.5% (n=48) were corrected at the time of discharge. Prescribing omissions were also detected in 80.9% of patients receiving five or more medications simultaneously. In 10 patients, 15 omissions found at admission were not corrected during hospitalisation, and in three patients three new omissions were detected.  

**Conclusion** The prevalence of prescribing omissions of cardiovascular risk management therapy in elderly patients admitted to a Stroke Unity is high. START criteria is an evidence-based and easy-to-use screening tool that can assist clinicians in the optimisation of geriatric therapy, particularly in relation to cardiovascular disease prevention.

**SP2-8 BIAS REDUCTION AND PRECISION IN DIFFERENT TYPES OF CONTROL SELECTION IN ANALYTICAL CROSS-SECTIONAL STUDIES: A METHODOLOGICAL PAPER**

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**Introduction** Control selection is a crucial step at the study designing phase. Although, the concept of the different types of matching for control selection has been discussed in the context of case-control studies, here we targeted analytical cross-sectional studies to explore the effects of each type of control selection on the amount of bias and precision of the OR.

**Methods** 41 coronary atherosclerotic patients and 92 disease-free hospital controls were recruited to assess the relationship between opium consumption (OpiumHx) and coronary atherosclerosis (Outcome). Considering the OpiumHx as the main independent factor and age as the confounder, we calculated point estimate and the CI for OR in different scenarios of matching for control selection, namely exact, stratified, frequency and propensity matching. Syntaxes were developed by STATA 10.

**Results** The crude OR was 3.4 (95% CI 1.5 to 7.9). By exact matching on age, 21 pairs remained for the analysis and the OR was equal to 3.3 (0.6 to 18.3). Stratified matching on age group kept 41 pairs and gave us the OR of 0.9 (0.5 to 1.7). Frequency matching kept 88 subjects for the analysis and led to the OR of 3.0 (1.2 to 7.4). By propensity matching, 27 pairs remained which gave the OR of 3.5 (1.1 to 14.6).

**Conclusion** Matching techniques influence effect size and precision, seriously. Although the most bias reduction happened in pair matched techniques, a large reservoir of controls would be needed to prohibit immense decrease in precision. These findings should be considered at both protocol development and analysis phases of observational studies with caution.

**SP2-9 DIAGNOSTIC CRITERIA OF LIPODYSTROPHY IN HIV-INFECTED PATIENTS**

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**Introduction** Spatial distribution of health indicators and health services use are important for the evaluation of population health and managers actions. In urban areas, to build small areas is not trivial, because there are different travelling possibilities for treatment. The aim of this paper is to present methods for building different types of areas for different applications in public health in a big city in Brazil.

**Metodology** We used the (x, y) coordinates of health services and tuberculosi cases. The indicators of population characteristics were located at census tract centroids. Tuberculosis rates were mapped using the ratio between the spatial smoothing of tuberculosis cases and the spatial smoothing of population. Catchment area of a health service was mapped based on the spatial smoothing of the tuberculosis cases treated in this service. The health service market was built using the ratio between the spatial smoothing of the cases treated in this service and the spatial smoothing of all disease cases. For risk areas, we mapped the spatial smoothing for each population feature. We sum all maps to elaborate a resultant one.

**Results** Influence areas differed from health service markets. Health service regionalisation was only partially similar to coverage areas defined by the Tuberculosis Control Program. The tuberculosis rates and risk areas showed some correlation.

**Conclusion** Different area types shows different types of information for the diagnosis of health conditions, population and health service resources profile, indicating the relation between the population, the health services and the territory.