Details of the study samples

Barcelona, Spain

The database provided exact dates of admission to and cessation of treatment between 1996 and 2012 of 33714 episodes of 8602 clients. 5 patients (0.06%) where younger than 18 years at first treatment entry. Data cleaning (exclusion of implausible or multiple entries of identical OAT episodes of the same individual and pooling overlapping OAT episodes) reduced the number of episodes by 48.8% (N=16468 episodes).

Czech Republic

The database provided exact dates of admission to and cessation of treatment between 2000 and 2014 of 10163 episodes of 4405 clients. 11 patients (0.25%) where younger than 18 years at first treatment entry. Data cleaning (exclusion of implausible or multiple entries of identical OAT episodes of the same individual and pooling overlapping OAT episodes) reduced the number of episodes by 7.8% (N=790 episodes).

The Netherlands

By combining the annually delivered datasets through collapsing identical admission dates (i.e. date of first treatment contact) to episodes of a given patient and using the most recent cessation date (i.e. last date of treatment contact) of respective episodes, some incompleteness of data delivery could be corrected. The treatment duration obtained in this way is probably overestimated compared with the number of daily methadone doses: between 1994 and 2014 the sum of daily methadone doses (44774081) was 72.5% of the sum of treatment days (61792557). As the annual number of daily methadone doses varied between 1 and 921 days and the Pearson correlation between those variables was at 0.635 rather low, we decided not to include the information from the variable annual daily methadone doses in computing the duration of the methadone episode.

For annual treatment participation we additionally produced a dataset that used the information of the variable ‘LJ’ (indicating the reporting year of the dataset delivered by the treatment centres) instead of the date of the first and date of the last treatment contact, in order to have a lower estimate of treatment participation. Finally, as we expect the true value to lie between those extremes, we chose the respective values randomly (Bernoulli distribution with p=0.5) for each patient, year and imputation.

The database provided included 210598 records of 33427 clients who were in treatment between 1994 and 2016. 94 patients (0.28%) where younger than 18 years at first treatment entry. Data cleaning (exclusion of implausible or multiple entries of identical OAT episodes of the same individual and pooling overlapping OAT episodes) reduced the number of episodes by 71.5% (N=150476 episodes). This procedure led to 89 percent (range 74-105 percent) of patients in methadone treatment compared to patients with opioid use as a primary problem between 1994 and 2014.

Canton of Zurich, Switzerland

Until March 16, 2016, 35003 treatment episodes defined as uninterrupted OAT by the same provider using the same kind of opioid (methadone, buprenorphine or morphine), of 11909 patients were registered. 111 patients (0.93%) where younger than 18 years at first treatment entry. Data cleaning (exclusion of implausible or multiple entries of identical OAT episodes of the same individual and pooling overlapping OAT episodes) reduced the number of episodes by 14.6% (N=5133 episodes).