This work concerns the problems of prescription of antibiotics in the out-patient care. It analyzes the possibility to use pharmaceutical database for monitoring and evaluation of medical prescription at regional level.

It is well known that the portion of antibiotics in the total prescription in Czech Republic is higher than would be optimal and therefore methods for minimization of excessive prescription of antibiotics are now intensively being searched.

In this work we focused on the evaluation of prescription of antibiotics during years 1995 to 2008 for 35 general practitioners for adults and for 20 general practitioners for children. The data for prescription analysis was taken from the pharmaceutical database Medico, from 15 pharmacies in Vysocina region. For evaluation of the prescription patterns we used so called prescribing indicators.

We have found out that during years 1995 to 2008 the drugs of the first choice in the treatment was gradually substituted by the alternative drugs. The consumption of penicillins especially that of narrow spectrum decreased while the consumption of macrolides and cephalosporins rapidly increased. The increase in consumption of chinolones and combinations of penicillins was surprisingly low. Prescription of tetracyclines and sulfonamides with trimethoprim has significantly decreasing tendency. Furthermore, we have found out that antibiotics are more frequently prescribed during winter season when compared with summer season although number of bacterial infections should be constant during the whole year. This unfortunately indicates that antibiotics are often used for treatment of virus diseases whose occurrence during winter season is more frequent.