OCL serves as a language for specification of integrity constraints on UML models, Code Contract allow the integrity constraints to be expressed in programming languages targeting Microsoft .NET Framework. The goal of the thesis is to find and implement a translation of integrity constraints form the OCL language to C#, using Code Contracts. The features of Code Contracts and OCL are presented, then individual language constructs and standard library operations are compared with syntactic and semantic equivalents in C#. The chosen translation aims to match the semantics of OCL where possible. Code generation of C# sources is implemented in the eXolutio application, which provides a class diagram editor and an OCL parser.