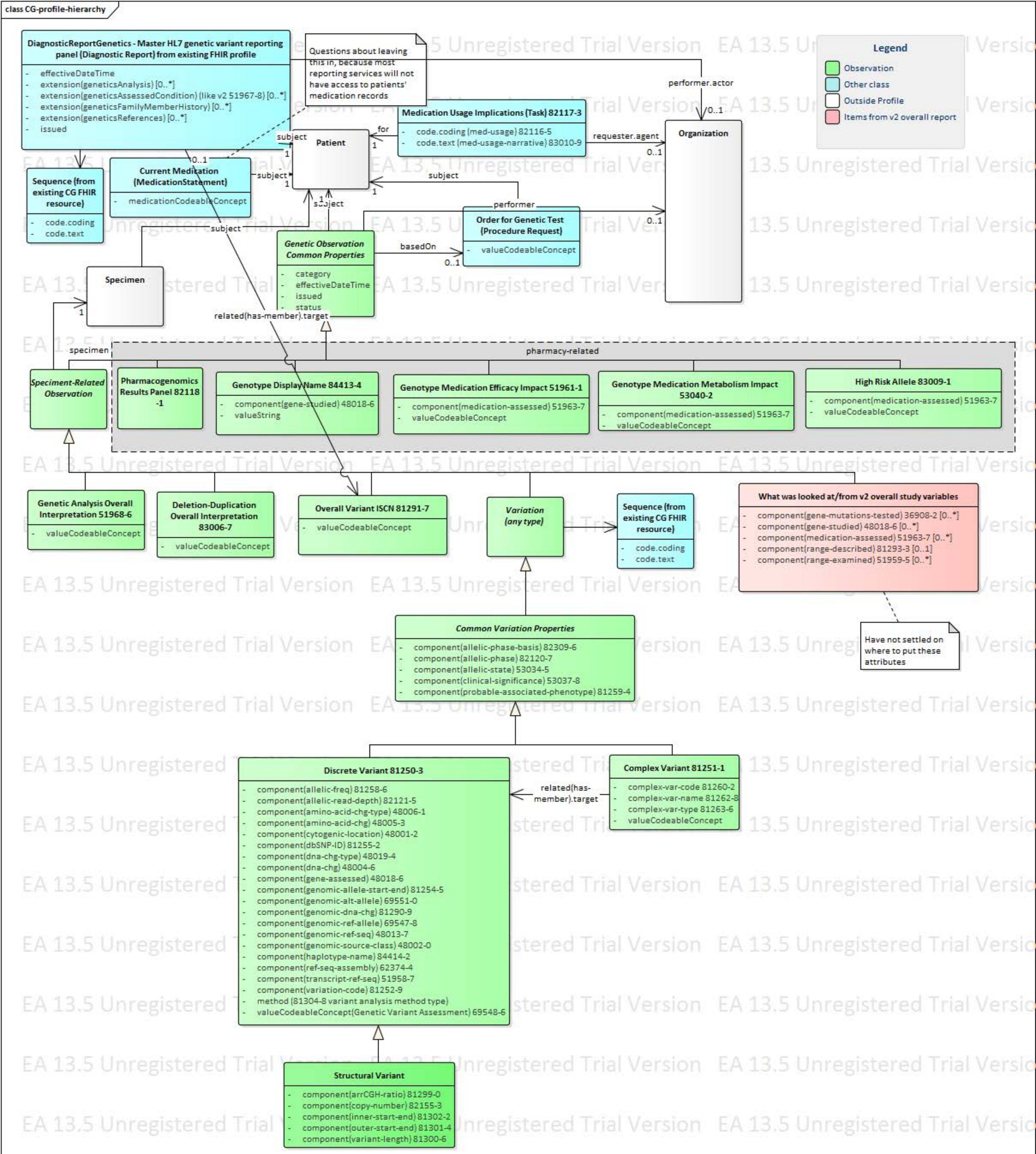class CG-profile-hierarchy