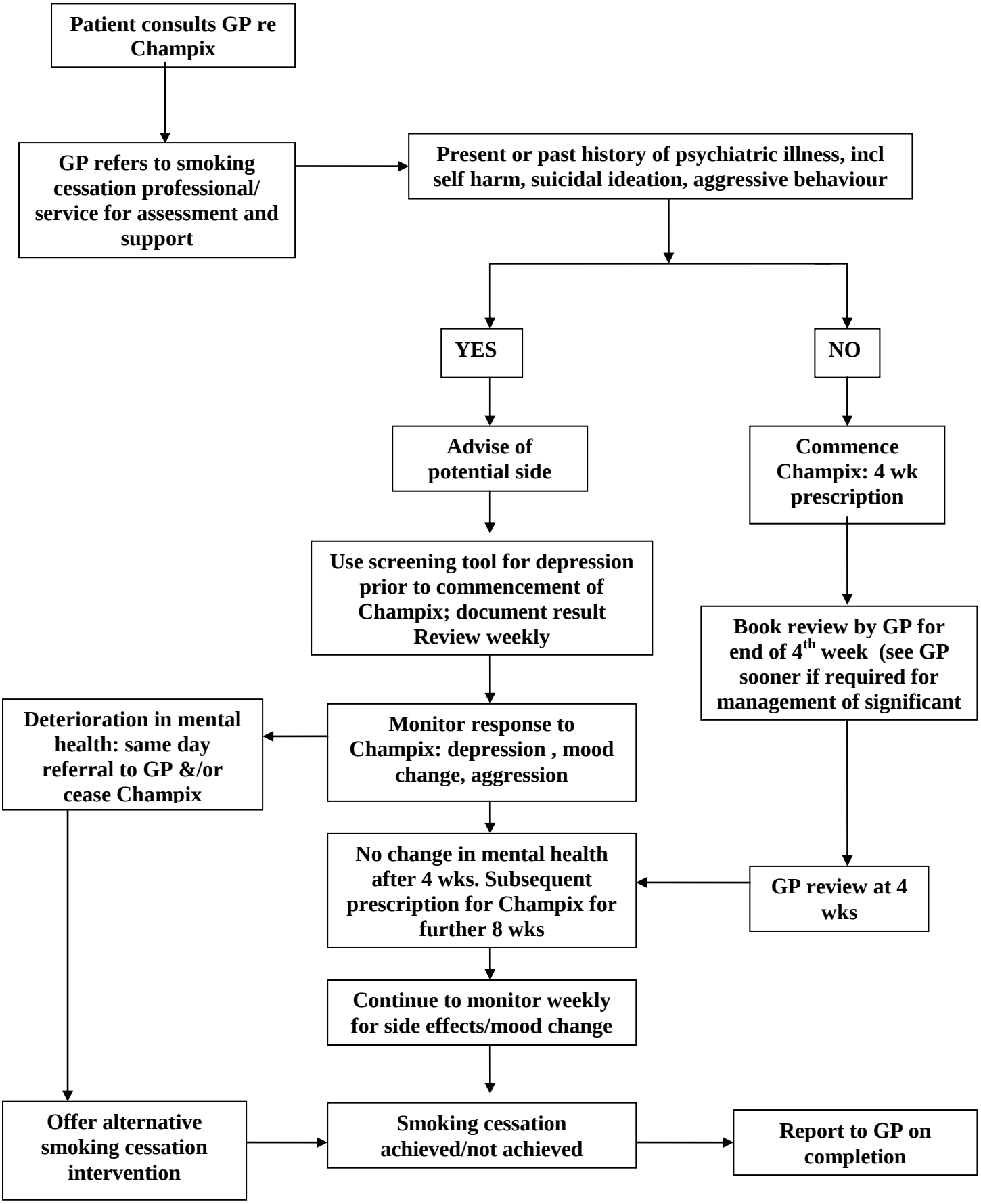CHAMPIX ALGORITHM