Quantitative magnetization transfer (qMT) requires several additional measurements to correct for instrumental biases (B0, B1) and to constrain parameters in the fitting model (T1). When using variable flip angle (VFA) T1 maps, B1 is used twice before fitting the qMT parameters: to correct T1, and the MT saturation powers. Inaccuracies in B1 would propagate to the fitting of the qMT parameters through two pathways – through errors in T1 and MT saturation powers. This work demonstrates that for the Sled and Pike qMT model, certain qMT parameters (F, T2f) are insensitive to a large range of B1 inaccuracies when using VFA.