$$q^{(k+1)}(\mathbf{z} \mid \boldsymbol{\theta}^{(k)}) = \arg\max_{q} F(q, \boldsymbol{\theta}^{(k)}) = \arg\min_{q} D_{KL} \left(q \left(\mathbf{z} \mid \boldsymbol{\theta}^{(k)} \right) \mid | \tilde{p}(\mathbf{z} \mid \boldsymbol{\theta}^{(k)}) \right)$$