

From Five MAUI onto HUI3

(1) From 15D to HUI3 (Based on OLS)

$$\text{HUI3 Utility} = 2.611571 \times 15D - 0.556422 \times 15D^2 + 0.0137434 \times \text{Canada}_{15D^2} - 0.0600867 \times \text{Norway}_{15D^2} + 0.0677564 \times \text{Norway} - 1.102123$$

(2) From AQoL-8D to HUI3 (Based on OLS)

$$\begin{aligned} \text{HUI3 Utility} = & 1.307021 \times \text{AQOL8D_IL} + 0.9416 \times \text{AQOL8D_HAP} + 0.7058413 \times \text{AQOL8D_MH} + \\ & 0.0809502 \times \text{AQOL8D_COP} + 0.3527913 \times \text{AQOL8D_REL} + 0.2648487 \times \text{AQOL8D_SW} + \\ & 0.6072733 \times \text{AQOL8D_PAIN} + 0.347552 \times \text{AQOL8D_SEN} - 0.5710451 \times \text{AQOL8D_IL}^2 - \\ & 0.5585104 \times \text{AQOL8D_HAP}^2 - 0.4311468 \times \text{AQOL8D_MH}^2 - 0.1737435 \times \text{AQOL8D_REL}^2 - \\ & 0.153558 \times \text{AQOL8D_SW}^2 - 0.2318192 \times \text{AQOL8D_PAIN}^2 - 0.0177758 \times \text{Male} - 1.523939 \end{aligned}$$

(3) From EQ-5D to HUI3 (Based on GLM)

(STEP1)

$$\begin{aligned} \text{HUI3 Utility}^* = & \exp(4.810657 \times \text{EQ5D} - 2.185667 \times \text{EQ5D}^2 - 1.265368 \times \text{Norway_EQ5D} + \\ & 0.6266718 \times \text{Norway_EQ5D}^2 - 0.0165064 \times \text{Male} + 0.6377188 \times \text{Norway} - 0.0182219 \times \text{UK} - 2.675943) \end{aligned}$$

(STEP2)

$$\text{HUI3 Utility} = (\text{HUI3 Utility}^* + 0.0057864/0.992556) \times 0.992556$$

(4) From QWB to HUI3 (Based on GLM)

(STEP1)

$$\text{HUI3 Utility}^* = \exp(7.477443 \times \text{QWB} - 4.295494 \times \text{QWB}^2 - 0.0334559 \times \text{Male} - 0.0235516 \times \text{UK} - 3.290938)$$

(STEP2)

$$\text{HUI3 Utility} = (\text{HUI3 Utility}^* - 0.0110999/1.014845) \times 1.014845$$

(5) From SF-6D to HUI3 (Based on OLS)

$$\begin{aligned} \text{HUI3 Utility} = & 0.0920163 \times \text{SF6D_GH} + 0.4541032 \times \text{SF6D_PF} + 0.549476 \times \text{SF6D_BP} + \\ & 0.1527503 \times \text{SF6D_VT} + 0.0498157 \times \text{SF6D_SF} + 0.9284028 \times \text{SF6D_MH} - 0.1501341 \times \text{SF6D_PF}^2 - \\ & 0.2399895 \times \text{SF6D_BP}^2 - 0.0792612 \times \text{SF6D_VT}^2 + 0.0140397 \times \text{SF6D_RE}^2 - 0.4965806 \times \text{SF6D_MH}^2 - \\ & 0.0288839 \times \text{Male} + 0.0125102 \times \text{Norway} - 0.2913691 \end{aligned}$$