Supplemental material: Summary of the HGLM model – (in hierarchical format)
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The outcome variable is HbA1c < 7

Distribution at Level-1: Bernoulli
Level-1 Model

Prob(Y=1|B) = P

log[P/(1-P)] = B0 + B1*(patient_age) + B2*(patient_gender)

Level-2 Model

B0 = G00 + G01*(Q51_1) + G02*(Q51_3) + u0
B1 = G10
B2 = G20

Level-1 variance = 1/[P(1-P)]

Method of estimation: full maximum likelihood via EM-Laplace 2
Mixed Model

eta = G00 + G01*Q51_1 + G02*Q51_3
+ G10*patient_age
+ G20*patient_gender
+ u0

Note: Q51_1 and Q51_3 are dummy variables. Q51_2 is the reference group in this model. These three variables represent the responses to Question 5.1 in the survey (Most patients should strive for HbA1c < 7%). This question 5.1 has a 5-point scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). Thus, Q51_1 variable has the 1-2 responses, Q51_2 has the neutral level and Q51_3 has the 4-5 responses.