

The NLMIXED Procedure

Specifications	
Data Set	HC.DAT
Dependent Variable	pid
Distribution for Dependent Variable	General
Random Effects	alpha
Distribution for Random Effects	Normal
Subject Variable	pid
Optimization Technique	Double Dogleg
Integration Method	Gaussian Quadrature

Dimensions	
Observations Used	4133
Observations Not Used	0
Total Observations	4133
Subjects	4133
Max Obs per Subject	1
Parameters	21
Quadrature Points	30

Initial Parameters																	
mu1	mu2	mu3	mu4	mu5	mu6	mu7	gamma1	gamma2	gamma3	gamma4	gamma5	gamma6	gamma7	err1	err2	err3	err4
0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1

Initial Parameters			
err5	err6	err7	Negative Log Likelihood
1	1	1	27219.3696

Iteration History					
Iteration	Calls	Negative Log Likelihood	Difference	Maximum Gradient	Slope
1	5	26773.0586	446.311	766.397	534.655
2	7	26572.8093	200.2492	446.630	262.885
3	9	26452.1851	120.6243	618.771	162.532
4	11	26344.2998	107.8853	824.323	131.359
5	13	26144.0315	200.2683	423.216	313.861
6	16	26097.6495	46.38194	610.391	89.4218
7	18	26077.4883	20.16125	534.996	93.6026

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Iteration History					
Iteration	Calls	Negative Log Likelihood	Difference	Maximum Gradient	Slope
8	21	26046.7020	30.78628	67.1813	30.4038
9	23	26046.0546	0.647397	222.371	11.6562
10	25	26040.6587	5.395907	87.1785	7.32825
11	27	26039.7826	0.876095	78.0242	3.12831
12	30	26038.9761	0.806524	33.4784	1.11076
13	33	26038.8792	0.096907	27.2061	0.24745
14	35	26038.8070	0.072164	13.1250	0.16806
15	38	26038.7683	0.038657	5.76572	0.058057
16	40	26038.7659	0.002402	11.5094	0.023846
17	42	26038.7544	0.011535	10.4221	0.030298
18	45	26038.7456	0.008782	2.93694	0.013859
19	47	26038.7454	0.000206	4.66213	0.005459
20	49	26038.7426	0.002836	1.43411	0.003356
21	52	26038.7422	0.000383	0.98453	0.000612
22	54	26038.7420	0.00017	1.39540	0.000300
23	56	26038.7418	0.000249	0.38786	0.000356
24	58	26038.7417	0.000083	0.67363	0.000214

NOTE: GCONV convergence criterion satisfied.

Fit Statistics	
-2 Log Likelihood	52077
AIC (smaller is better)	52119
AICC (smaller is better)	52120
BIC (smaller is better)	52252

Parameter Estimates								
Parameter	Estimate	Standard Error	DF	t Value	Pr > t	95% Confidence Limits		Gradient
mu1	0.1324	0.02194	4132	6.04	<.0001	0.08942	0.1755	-0.09604
mu2	0.09280	0.03109	4132	2.98	0.0029	0.03184	0.1538	-0.19128
mu3	0.000107	0.01835	4132	0.01	0.9953	-0.03588	0.03609	-0.11792
mu4	0.1051	0.01839	4132	5.71	<.0001	0.06900	0.1411	-0.12421
mu5	-0.00587	0.01655	4132	-0.35	0.7230	-0.03832	0.02659	0.10917
mu6	-0.02274	0.02059	4132	-1.10	0.2694	-0.06310	0.01762	-0.06408

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Parameter Estimates								
Parameter	Estimate	Standard Error	DF	t Value	Pr > t	95% Confidence Limits		Gradient
mu7	-0.05440	0.02514	4132	-2.16	0.0305	-0.1037	-0.00511	-0.02327
gamma1	0.4726	0.02079	4132	22.73	<.0001	0.4318	0.5133	0.10154
gamma2	0.3550	0.02795	4132	12.70	<.0001	0.3002	0.4098	0.21749
gamma3	0.6170	0.01767	4132	34.92	<.0001	0.5824	0.6517	0.35935
gamma4	0.7393	0.01684	4132	43.89	<.0001	0.7063	0.7723	0.26866
gamma5	0.6580	0.01617	4132	40.69	<.0001	0.6263	0.6897	-0.19740
gamma6	0.5111	0.01943	4132	26.31	<.0001	0.4730	0.5492	-0.08722
gamma7	0.2880	0.02312	4132	12.45	<.0001	0.2427	0.3333	0.11735
err1	0.9606	0.01508	4132	63.72	<.0001	0.9311	0.9902	0.015917
err2	0.9576	0.02174	4132	44.04	<.0001	0.9150	1.0002	-0.01822
err3	0.8608	0.01272	4132	67.69	<.0001	0.8358	0.8857	0.63723
err4	0.7013	0.01490	4132	47.07	<.0001	0.6721	0.7305	0.087581
err5	0.7390	0.01273	4132	58.04	<.0001	0.7140	0.7639	-0.67363
err6	0.9268	0.01420	4132	65.26	<.0001	0.8989	0.9546	-0.44201
err7	1.0237	0.01741	4132	58.81	<.0001	0.9896	1.0579	-0.10461