

Supplementary Figures and Tables

Figure S2. Combination of the natural history trajectory classes (panels) and the trial view trajectory classes (colors)

Individual patient trajectories are grouped into panels based on assignment to latent trajectory classes of function vs. age (as in Figure 2) and color coded based on assignment to latent trajectory classes based on function vs. time from enrollment (as in Figure 4; red=fast decline, orange=moderate decline, blue=stable, green=improvement). The figure illustrates progression with age through periods of improvement, stability, moderate decline and fast decline. The rate of progression through these phases appears to decrease from Class 1 (fastest progression vs. age) to Class 4 (slowest progression vs. age). No periods classified as improvement were observed in Classes 1 and 2.

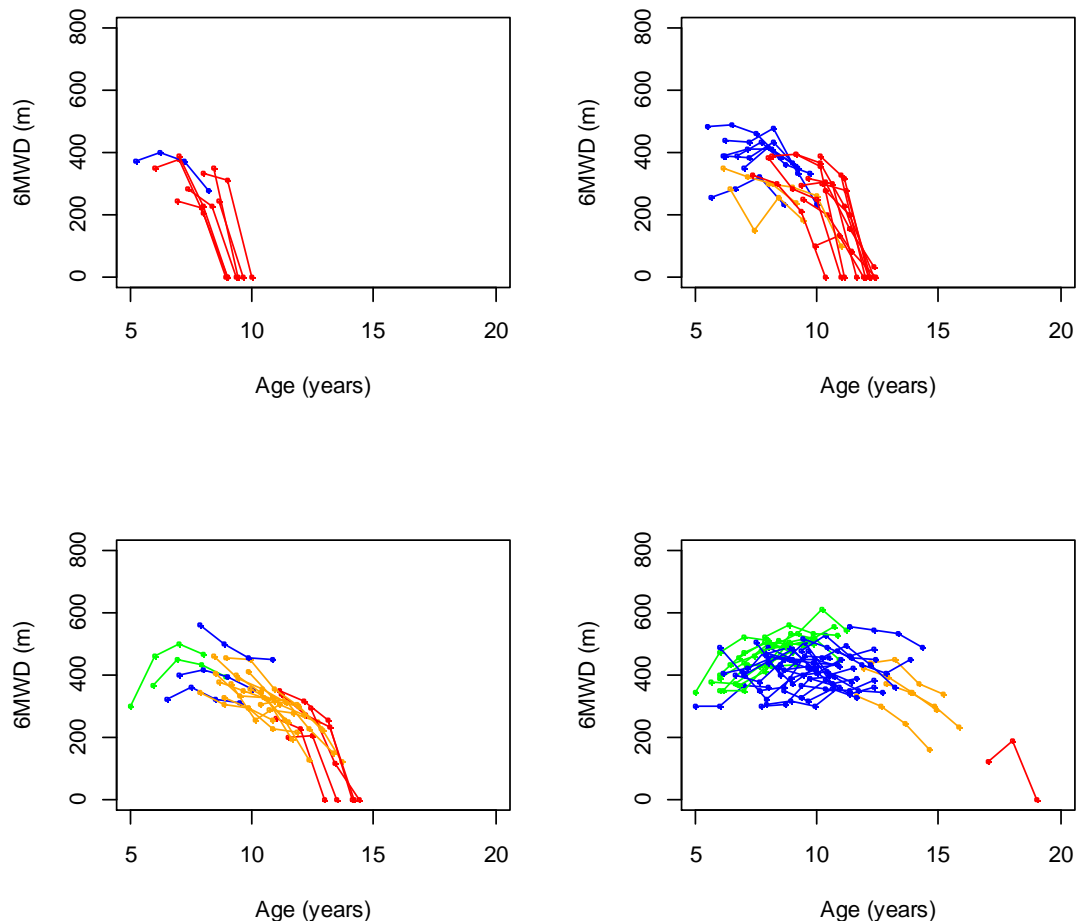


Figure S1. Normal quantile-quantile plot for the 4-class model of 6MWD vs age
The residuals of the latent class model are approximately normally distributed, consistent with modeling assumptions. There is evidence of slight over-dispersion.

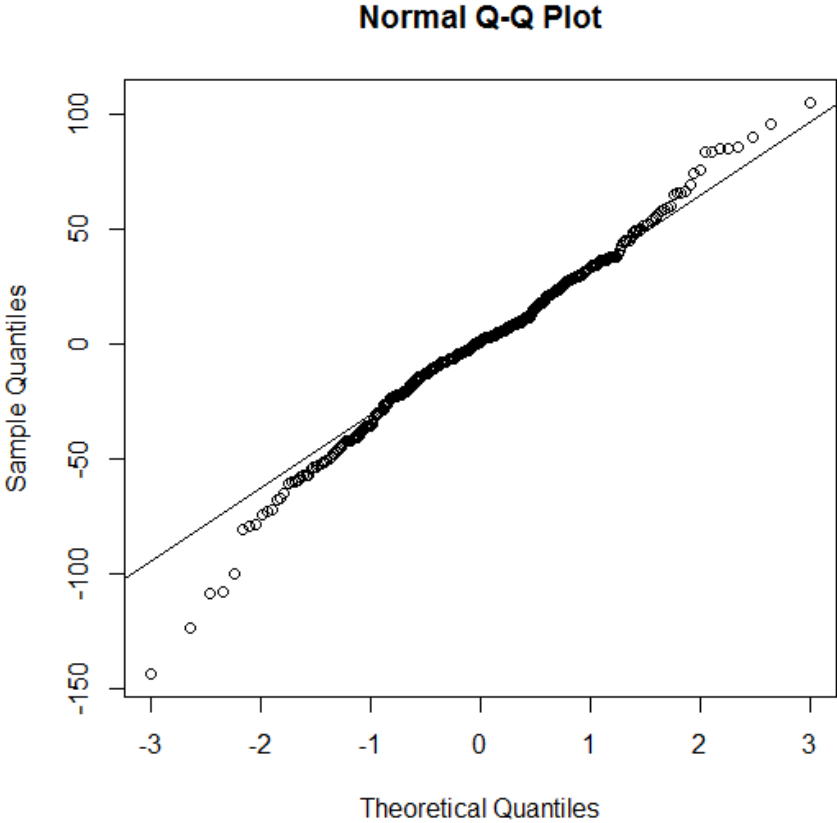


Table S1. Posterior probabilities of classification based on 6MWD vs. age

Numbers on the diagonal (shown in bold) indicate the level of confidence in class assignments relative to a maximum value of 100%. Numbers off the diagonal represent the overlap between classes and the potential for misclassification.

	Class assignment (most likely class)			
	class 1	class 2	class 3	class 4
Probability of class assignment	N=8	N=22	N=22	N=44
Class 1	98.2%	0.9%	0.0%	0.0%
Class 2	1.4%	84.4%	6.9%	2.1%
Class 3	0.2%	10.5%	81.3%	16.6%
Class 4	0.2%	4.3%	11.8%	81.3%
	100.0%	100.0%	100.0%	100.0%

Table S2. Posterior probabilities of classification based on 6MWD vs. time from enrollment

Numbers on the diagonal (shown in bold) indicate the level of confidence in class assignments relative to a maximum value of 100%. Numbers off the diagonal represent the overlap between classes and the potential for misclassification.

	Class assignment (most likely class)			
	Fast decline	Moderate decline	Stable	Improvement
Probability of class assignment	N=25	N=19	N=37	N=15
Fast decline	98.1%	1.7%	0.0%	0.0%
Moderate decline	1.9%	90.8%	2.0%	0.0%
Stable	0.0%	7.5%	93.4%	15.8%
Improvement	0.0%	0.0%	4.6%	84.2%
	100.0%	100.0%	100.0%	100.0%