

## Supplemental Materials

**Supplemental Table 1. Analytic Predictors Variables**

Fixed-Predictors		
	Definition	Response Options
Sociodemogrphics	Sex	1 = Male; 2 = Female
	RaceW	0 = Not selected; 1= Selected
Time-Varying Predictors		
	Definition	Response Options
Sociodemogrphics	WeightLbs	1= < Highschool; 2 = Highschool or equivalent; 3 = Some college; 4 = Associate's; 5 = Bachelor's; 6 = Master's; 7 = Professional school; 8 = Doctorate
	Education	1 = < \$20,000; 2 = \$20,000 to \$34,999; 3 = \$35,000-\$49,000; 4 = \$50,000-\$74,999; 5 = \$75,000-\$99,999; 6 = > \$100,000
	Income	
	What is your yearly household income?	

<b>PDQ-8</b>	Employment Veteran	What is your employment status? Are you a verteran of the military?	1= Employed, full-time; 2 = Employed, part-time; 3 = Retired; 4 = Unemployed  0 = No; 1 = Yes
	<b>Family History of Depression</b>		
	FamDepressionHx	Do you have a family history of depression?	0 = No; 1 = Yes; 2 = Unknown
	<b>PD Medications</b>		
	sum_pdmeds*		
<b>PDQ-8</b>	MedsCurrPD	Are you currently taking prescription medication for treating the symptoms of Parkinson's disease?	0 - No; 1 = Yes
	LivePDMove	Due to having Parkinson's disease, how often during the last month have you had difficulty getting around in public?	0 = Never; 1= Occasionally; 2 = Sometimes; 3 = Often; 4 = Always or cannot do at all
	LivePDDress	Due to having Parkinson's disease, how often during the last month have you had difficulty dressing yourself?	0 = Never; 1= Occasionally; 2 = Sometimes; 3 = Often; 4 = Always or cannot do at all

LivePDDepress	Due to having Parkinson's disease, how often during the last month have felt depressed?	0 = Never; 1 = Occasionally; 2 = Sometimes; 3 = Often; 4 = Always or cannot do at all
LivePDRelate	Due to having Parkinson's disease, how often during the last month have you had problems with your close personal relationships?	0 = Never; 1 = Occasionally; 2 = Sometimes; 3 = Often; 4 = Always or cannot do at all
LivePDConcen	Due to having Parkinson's disease, how often during the last month have you had concentrating, e.g. when reading or watching TV?	0 = Never; 1 = Occasionally; 2 = Sometimes; 3 = Often; 4 = Always or cannot do at all
LivePDComm	Due to having Parkinson's disease, how often during the last month have you had felt unable to communicate with people properly?	0 = Never; 1 = Occasionally; 2 = Sometimes; 3 = Often; 4 = Always or cannot do at all
LivePDPain	Due to having Parkinson's disease, how often during the last month have you had painful muscle cramps or spasms?	0 = Never; 1 = Occasionally; 2 = Sometimes; 3 = Often; 4 = Always or cannot do at all

EQ-5D-5L	LivePDEmbar	Due to having Parkinson's disease, how often during the last month have you had felt embarrassed in public?	0 = Never; 1 = Occasionally; 2 = Sometimes; 3 = Often; 4 = Always or cannot do at all
	Mobility	Select the item that best describes your health today	0 = I have no problems in walking about; 1 = I have slight problems in walking about; 2 = I have moderate problems in walking about; 3 = I have severe problems in walking about; 4 = I am unable to walk about

		0 = I have no problems washing or dressing myself; 1 = I have slight problems washing or dressing myself; 2 = I have moderate problems washing or dressing myself; 3 = I have severe problems washing or dressing myself; 4 = I am unable to wash or dressmyself
Care	Select the item that best describes your health today	0 = I have no problems doing my usual activities; 1 = I have slight problems doing my usual activities; 2 = I have moderate problems doing my usual activities; 3 = I have severe problems doing my usual activities; 4 = I am unable to do my usual activities
Active	Select the item that best describes your health today	

<b>Living Situation</b>	Pain	Select the item that best describes your health today	0 = I have no pain or discomfort; 1 = I have slight pain or discomfort; 2 = I have moderate pain or discomfort; 3 = I have severe pain or discomfort; 4 = I have extreme pain or discomfort
	Anxious	Select the item that best describes your health today	0 = I have not anxious or depressed; 1 = I am slightly anxious or depressed; 2 = I am moderatley anxious or depressed; 3 = I am severely anxious or depressed; 4 = I am extremely anxious or depressed
	Health	We would like to know how good or bad your health is TODAY. Think about your health on a scale numbered from 0 to 100. Now, please write the number that best represents your health TODAY in the box below.	0-100
	LiveAlonePD	Which best describes your living situation: Living alone	0 = Not selected; 1= Selected
	LiveAsstPD	Which best describes your living situation: Living in assisted living facility	0 = Not selected; 1= Selected
	LiveSpousePD	Which best describes your living situation: Living with spouse/partner/significant other	0 = Not selected; 1= Selected

<b>PD Treatment</b>	LiveAdultPD	Which best describes your living situation: Living with adult child/children	0 = Not selected; 1= Selected
	LiveMinorPD	Which best describes your living situation: Living with minor child/children	0 = Not selected; 1= Selected
	LiveOthFamPD	Which best describes your living situation: Living with other family	0 = Not selected; 1= Selected
	LiveCarePD	Which best describes your living situation: Living with paid in-home care provider/aide	0 = Not selected; 1= Selected
	PDTreatSpecPD	My Parkinson's disease is currently being treat by a: Movement Disorder Specialist	0 = Not selected; 1= Selected
	PDTreatNeurPD	My Parkinson's disease is currently being treat by a: General Neurologist	0 = Not selected; 1= Selected
	PDTreatDocPD	My Parkinson's disease is currently being treat by a: Doctor/Primary Care Doctor	0 = Not selected; 1= Selected
	PDTreatNursPD	My Parkinson's disease is currently being treat by a: Nurse Practitioner/Physical Assistant	0 = Not selected; 1= Selected
	PDTreatOthPD	My Parkinson's disease is currently being treat by a: Other	0 = Not selected; 1= Selected
<b>PASE</b>	LeisureDay	Leisure time activity: activity: Over the past 7 days, how often did you participate in activities such as reading, watching TV or doing handcrafts?	0 = Never; 1 = Seldom (1-2 days); 2 = Sometimes (3-4 days); 3 = Often (5-7 days)
	WalkDay	Walking activities: Over the past 7 days, how often did you take a walk outside your home or yard for any reason? For example, for fun or exercise, walking to work, walking the dog etc.?	0 = Never; 1 = Seldom (1-2 days); 2 = Sometimes (3-4 days); 3 = Often (5-7 days)

LightSportDay	Light sport and recreational activities: Over the past 7 days, how often did you engage in light sport or recreational activities such as bowling, golf with a cart, shuffleboard, fishing from a boat or pier or other similar activities?	0 = Never; 1 = Seldom (1-2 days); 2 = Sometimes (3-4 days); 3 = Often (5-7 days)
ModSportDay	Moderate sport and recreational activities: Over the past 7 days, how often did you engage in moderate sport recreational activities such as doubles tennis, ballroom dancing, hunting, ice skating, golf without a cart, softball or other similar activities?	0 = Never; 1 = Seldom (1-2 days); 2 = Sometimes (3-4 days); 3 = Often (5-7 days)
StrenSportDay	Strenuous sport and recreational activities: Over the past 7 days, how often did you engage in strenuous sport activities such as jogging, swimming, cycling, singles tennis, aerobic dance, skiing (downhill or cross country) or other similar activities?	0 = Never; 1 = Seldom (1-2 days); 2 = Sometimes (3-4 days); 3 = Often (5-7 days)
StrengthDay	Muscle Strength: Over the past 7 days, how often did you do exercise specifically to increase muscle strength and endurance, such as lifting weights or push-ups etc.?	0 = Never; 1 = Seldom (1-2 days); 2 = Sometimes (3-4 days); 3 = Often (5-7 days)
HouseLight	Household activity: During the past 7 days, have you done any light housework, such as dusting or washing dishes?	0 = No; 1 = Yes
HouseHeavy	Household activity: During the past 7 days, have you done any heavy housework or chores such as vacuuming, scrubbing floors, washing windows, or carrying wood?	0 = No; 1 = Yes
HouseRepair	Household activity: During the past 7 days, did you engage in home repairs like painting, wallpapering, electrical work etc.?	0 = No; 1 = Yes



<b>Nonmotor Symptoms</b>  non_move_sum*	HouseLawn	Household activity: During the past 7 days, did you engage in lawn work or yard care, including snow or leaf removal, wood chopping, etc.?	0 = No; 1 = Yes
	HouseGarden	Household activity: During the past 7 days, did you engage in outdoor gardening?	0 = No; 1 = Yes
	HouseCare	Household activity: During the past 7 days, did you engage in caring for another person, such as children, dependent, spouse, or another adult?	0 = No; 1 = Yes
	AcuteSurgery	In the past year, did you have any surgeries that required anesthesia?	0 = No; 1 = Yes

\* = Derived variable

Supplemental Figure 1. All Model Results for Predicting Stable Depression



