

**Title:** Neural correlates of longitudinal changes in articulation rate across subtypes of primary progressive aphasia

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Primary progressive aphasia (PPA) is a neurodegenerative aphasic syndrome that can be classified into three main subtypes: agrammatic/non-fluent (nfvPPA), logopenic (lvPPA), and semantic (svPPA). Emerging evidence suggests that subcomponent measures of speech rate, especially articulation rate, are effective at differentiating PPA subtypes; however, to our knowledge, no research has looked at longitudinal changes in articulation rate across the three subtypes of PPA. In this study, we model the longitudinal decline of articulation rate across three subtypes of PPA in order to identify group differences in rates of progression. We use results from this first level of analysis to calculate individual rates of change in articulation rate, which we then correlate with MRI-based cortical thickness biomarkers in order to relate baseline cortical thickness in hypothesized regions of interest to behavioral outcome on a quantitative speech measure.