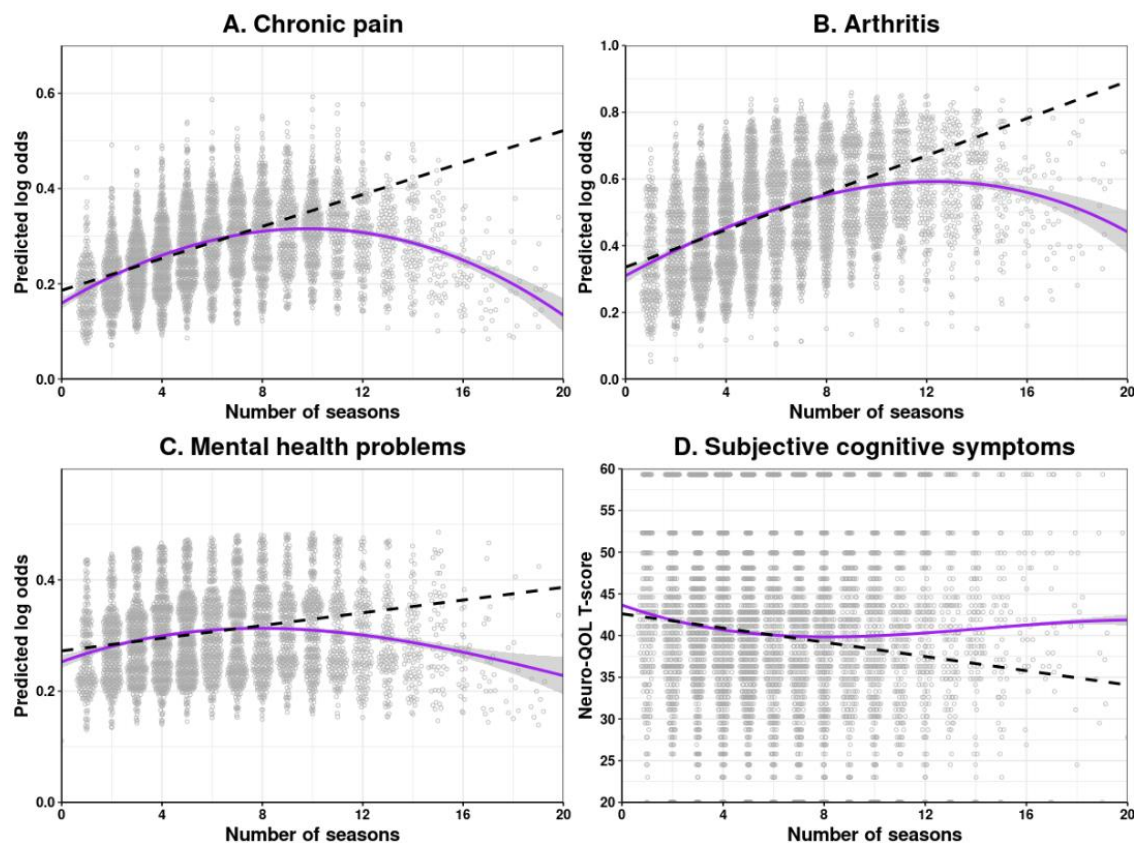
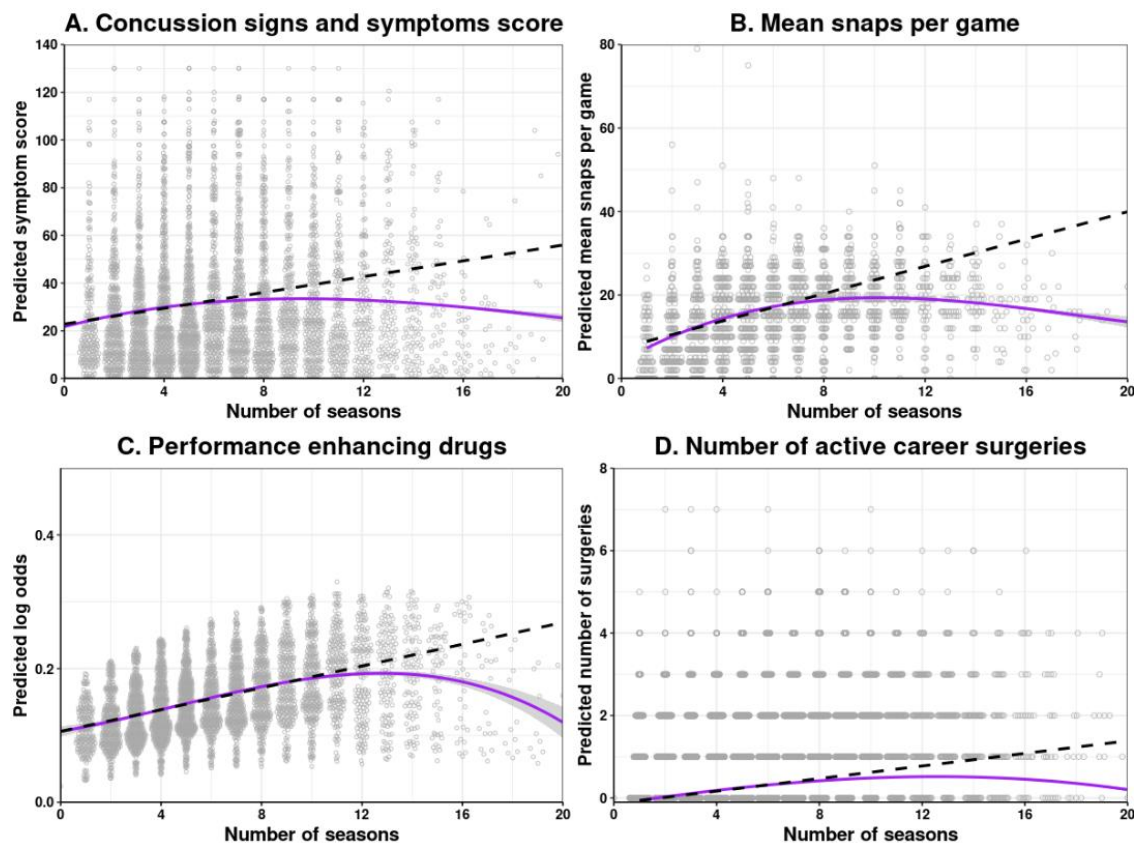


Online Supplementary Material



Supplemental figure 1. Spline regression models of number of professional seasons in relation to (A) chronic pain, (B) arthritis, (C) mental health problems (anxiety or depression), and (D) subjective cognitive symptoms for all positions (purple). Models including all positions adjusted for age, race, and linemen status. Models stratified by linemen status adjusted for age and race. Gray shading indicates 95% confidence intervals. Dashed line extrapolates from the first slope and intercept identified by piecewise linear regression for each outcome out to longer career lengths. X-axis visuals are limited at 20 seasons to protect participant identity.



Supplemental figure 2. Spline regression models of number of professional seasons in relation to (A) concussion signs and symptoms score, (B) mean snaps per game, (C) use of performance enhancing drugs, and (D) number of active career surgeries. Splines shown for all positions (purple). Models including all positions adjusted for age, race, and linemen status. Models stratified by linemen status adjusted for age and race. Gray shading indicates 95% confidence intervals. Dashed line extrapolates from the first slope and intercept identified by piecewise linear regression for each exposure out to longer career lengths. X-axis visuals are limited at 20 seasons to protect participant identity.