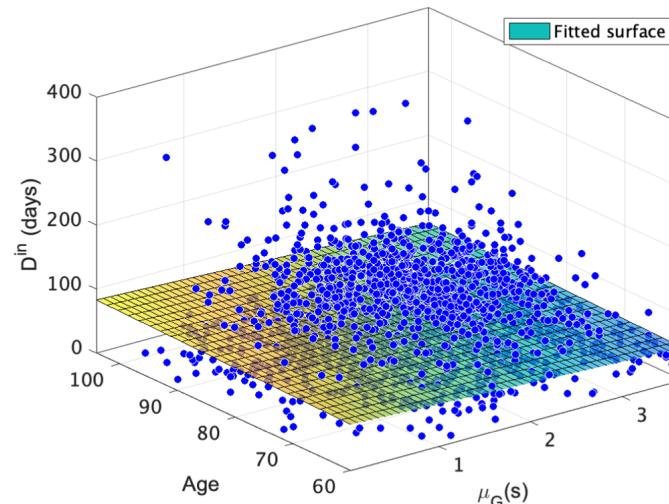
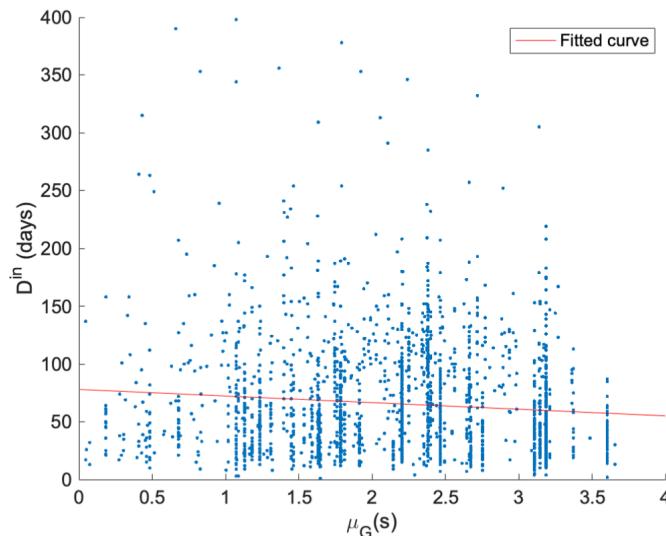


- The relationship between the network centrality of the medical provider and the duration of hospital stay



$\mu_G(s)$ : geometric mean of centrality (strength) of medical providers,  $D^{in}$ : duration of hospital stay

- Improvement of the explanatory ability of statistical models using node embedding and machine learning

	Input variables	Statistical model	$R^2$ (5-fold CV)	Adjusted $R^2$ (5-fold CV)
Model1	Strength	Linear regression	0.0075	0.0071
Model2	Strength, Age	Linear regression	0.01	0.0088
Model3 (Best)	Node embedding	Linear regression	0.17	0.15
Model4 (Best)	Node embedding	Machine learning	0.24	0.21

