Length of therapy can affect clinical outcomes as well as total healthcare costs that patients incur. Understanding which factors influence length of therapy can be a major step in managing treatment. OBJECTIVE: To identify factors affecting length of antidepressant pharmacotherapy for depression patients. METHODS: Using an employer claims database, antidepressant prescription claims of 2,830 depression patients were analyzed for 18 months following their initial prescription for a SSRI/ SNRI, Newer Generation Antidepressant, or Tricyclic/Tetracyclic in 1996. A wide range of demographic, patient- and prescription-level data were reviewed. Linear regression modeling was implemented to model length of antidepressant pharmacotherapy as a function of explanatory variables. RESULTS: The linear regression model estimated length of prescription therapy as f (age, physician specialty prescribing medication, number of unique drugs prescribed, starting drug therapy class, switch in drug therapy class [yes/no], and number of gaps in therapy). The model was significant (P < 0.05) overall, as was each regressor. Based on findings, the following inferences can be made: (1) older patients underwent longer therapy; (2) patients treated by a psychologist/neurologist or both a primary care physician and a psychologist/neurologist underwent longer therapy than patients treated by primary care physicians exclusively; patients treated by other physician specialties underwent shorter therapy; (3) each additional, unique drug prescribed resulted in longer total therapy; (4) patients initially treated with SSRIs/SNRIs had longer therapy than patients initially treated with other antidepressant categories; and (5) each additional gap in therapy resulted in progressively longer therapy. CONCLUSION: A positive relationship was observed between the length of patient’s antidepressant pharmacotherapy and a number of factors. A thorough understanding and management of these factors could lead to improved patient outcomes.