

The attached article shows an example of how to set up data in "long" format for time varying covariates.

All you really need to look at is Table 4 in the article. **Only the first 5 columns of the data are relevant.**

1. Each subject has multiple records.
2. Each record has a start period and stop period.
3. Everyone starts at the same time period (0 for this example). Note that time period does not necessarily correspond to a calendar date. 0 is when the person enters the study. Time 0 for subject 1 could be May 2017 while time 0 for subject 2 could be September 2018.
4. In this example, hyper (person has hypertension) is the time varying covariate.
5. Every time hyper changes value, a new record is created for the subject.
6. The data looks at the time until a person develops coronary heart disease.
7. The censor variable is 0 if the person does **not** have coronary heart disease at the end of the period and 1 if the person does have CHD.
8. If the person still has not developed CHD by the end of the study, the last value for censored is 0.

How is this related to our data?

1. We can use month as a period for our data. Month 1 is the month that the person enters the Oklahoma data.
2. In the example in the article, a person gets a new record only when a time varying value changes. For our data, there are many time varying covariates, so we will give the person a new record for each month. I don't think this affects the estimates. But I will verify.
3. We will create data months for all time periods **from 1 to 130**. the months correspond to different dates for different people.
4. We will delete all records dated after October 2020.
5. We also will delete records where the child is over age 18.5
6. the default value of censored is 0. Censored changes to 1 when the child goes into foster care.
7. We delete all records for time periods after the child has transitioned to foster care. The last record for children who have entered foster care has a censored value of 1 and a calendar month corresponding to the month of foster care entry.