







## Abstract

Classical statistical methods have traditionally been used in settings where data storage and computational resources are in the same location. However, as both data storage and computational resources become increasingly distributed, the need to adapt statistical methods to these settings arises. Many such adaptations have been developed. However, in the biomedical space - for example, when trying to combine and analyze data from many different electronic health records - the need to both preserve individual privacy and minimize iterative communication between data sites makes such adaptions impractical to implement. Jordan, Lee, and Yang (JASA 2018) proposed a surrogate likelihood framework that addresses the additional needs of privacy and communication-efficiency. We propose further extensions of the surrogate likelihood framework to allow for time-to-event models to be used in distributed settings while preserving privacy and minimizing communication.

※ 實體與線上視訊同步進行。