

**Supplemental Figure 1:** Quintiles of predicted probability and observed outcomes in the entire SCD-HeFT external validation cohort at 1, 2 and 5 years of follow up.

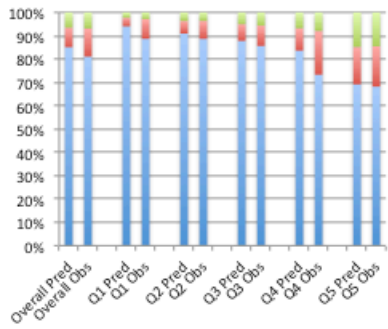
**Supplemental Figure 2:** Quintiles of predicted probability and observed outcomes in the non-ICD medical therapy arms of the SCD-HeFT external validation cohort at 1, 2 and 5 years of follow up with the states of “death without HF hospitalization” and “death after HF hospitalization” combined into one “death” state

**Supplemental Figure 3:** Quintiles of predicted probability and observed outcomes in the ICD arm of the SCD-HeFT external validation cohort at 1, 2 and 5 years of follow up with the states of “death without HF hospitalization” and “death after HF hospitalization” combined into one “death” state

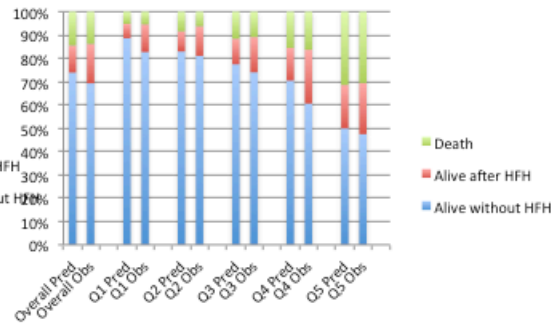
**Supplemental Figure 4:** Updated prediction model with ICD effect with quintiles of predicted probability using updated model and observed outcomes in the ICD arm of the SCD-HeFT external validation cohort at 1, 2 and 5 years of follow up.

# Supplemental Figure 1:

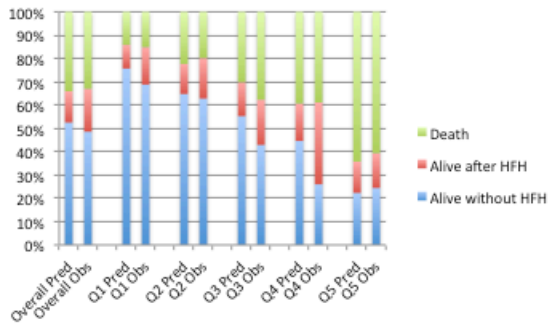
## A. 1 year outcomes: entire validation cohort



## B. 2 year outcomes: entire validation cohort



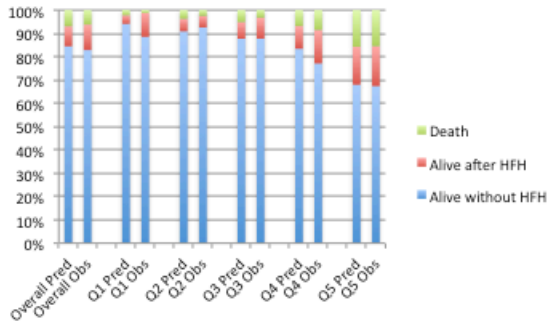
## C. 5 year outcomes: entire validation cohort



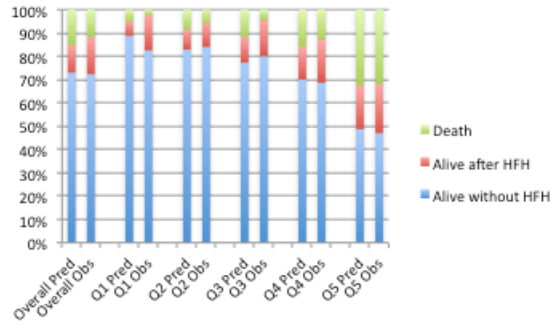


### Supplemental Figure 3:

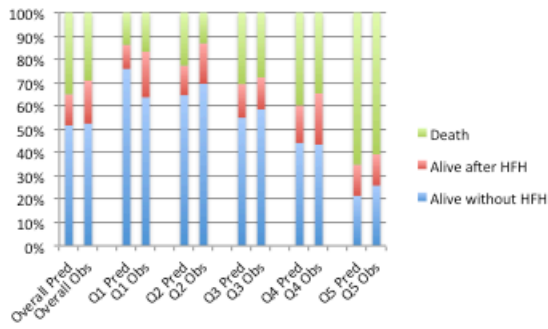
A. 1 year outcomes: ICD arm validation cohort



B. 2 year outcomes: ICD arm validation cohort

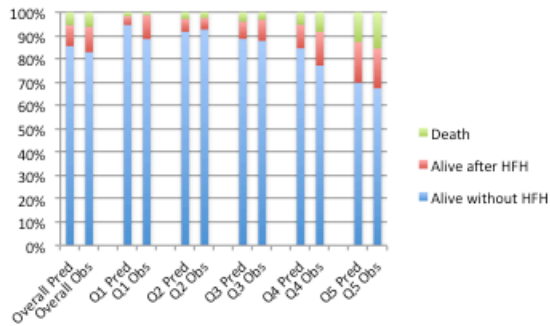


C. 5 year outcomes: ICD arm validation cohort

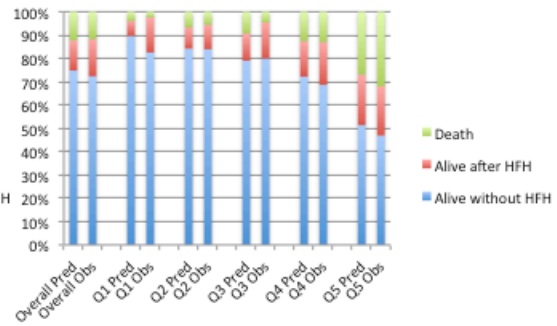


### Supplemental Figure 4:

A. 1 year outcomes: ICD arm validation cohort  
Prediction model updated with ICD effect



B. 2 year outcomes: ICD arm validation cohort  
Prediction model updated with ICD effect



C. 5 year outcomes: ICD arm validation cohort  
Prediction model updated with ICD effect

