Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.

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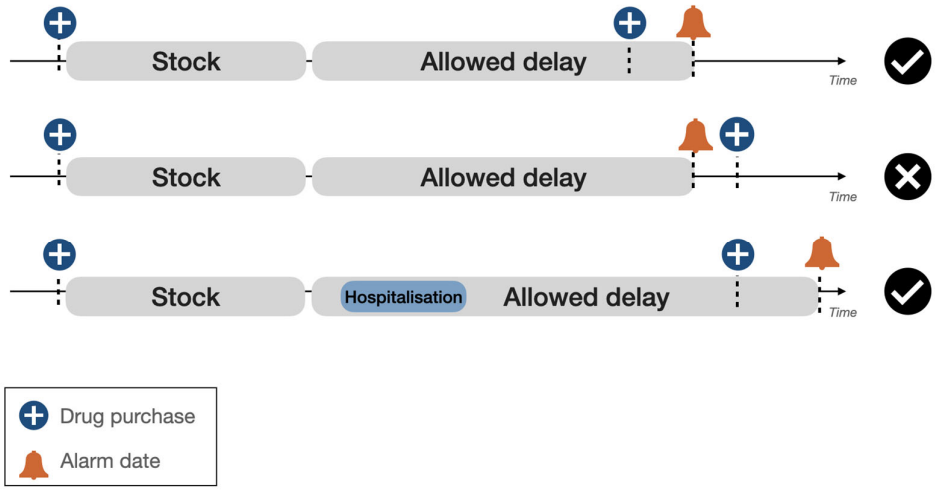
eFigure 1. Labeling of Pharmacy Visits for Persistence



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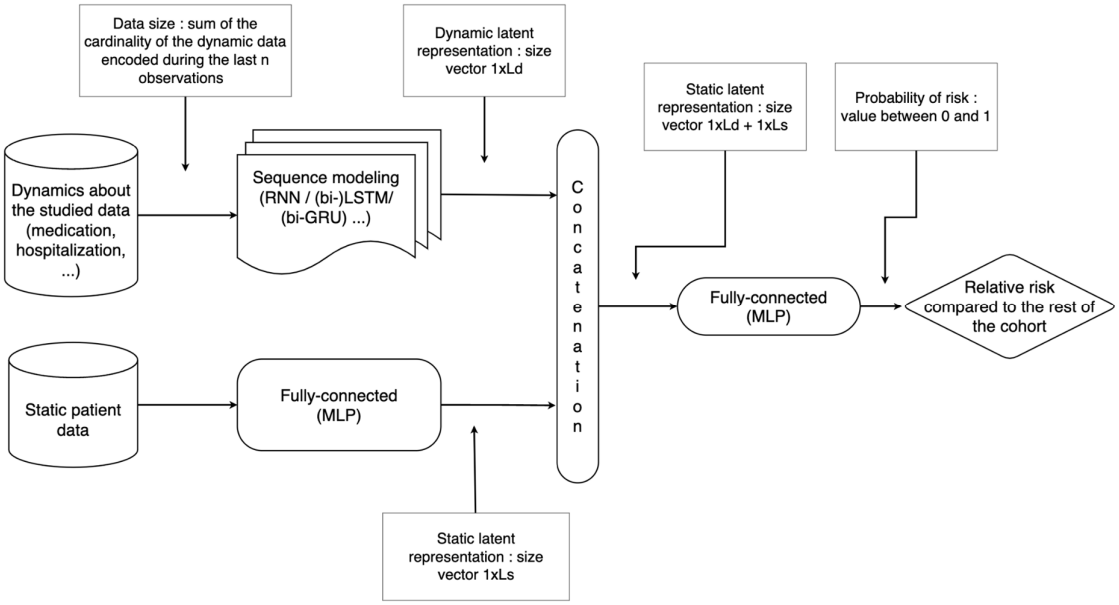
eFigure 2. Model Architecture



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eTable 1. Training Parameters for Persistence and Observance Models

Training parameters	
Epochs	150
Batch size	128
Loss	Binary Cross Entropy (BCE) Loss
Principal metric	Accuracy
GPU use	False
PyTorch Lightning Parameters	
Optimizer	<class 'torch.optim.adam.Adam>
Optimizer learning rate (*persistence*)	9.9×10^{-5}
Optimizer learning rate (*observance*)	8.4×10^{-5}
Weight decay	0.001
Optimizer monitor	val_accuracy

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eTable 2. Persistence and Observance Model Parameters

Persistence Model	
Static Module	
Number of neurons in first layer	338
Dropout	0.49
Dynamic module	
Number of neurons in first layer	226
Dropout	0.26
Concatenation module	
Number of neurons in first layer	399
Dropout	0.55
Observance Model	
Static Module	
Number of neurons in first layer	464
Dropout	0.60
Dynamic module	
Number of neurons in first layer	215
Dropout	0.23
Concatenation module	
Number of neurons in first layer	161

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Dropout	0.17

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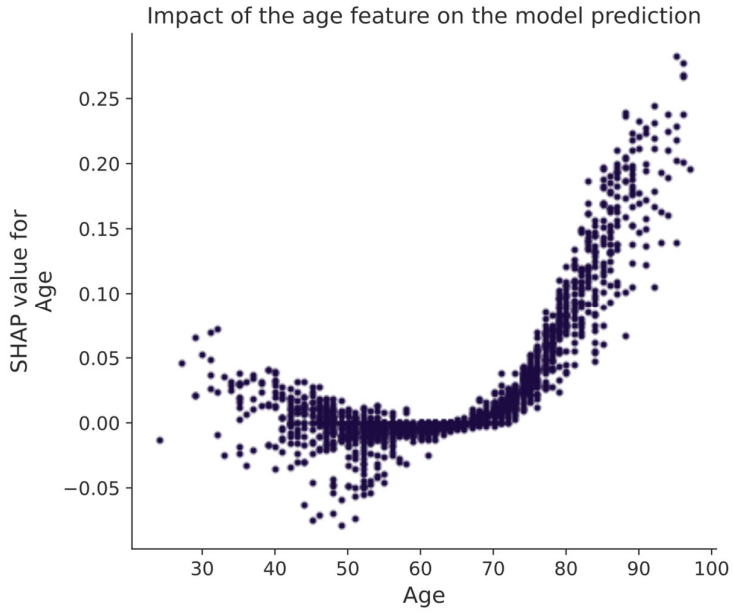
eFigure 3. SHAP Evaluation of the Contribution of Age Over the Decision of the Persistence Model



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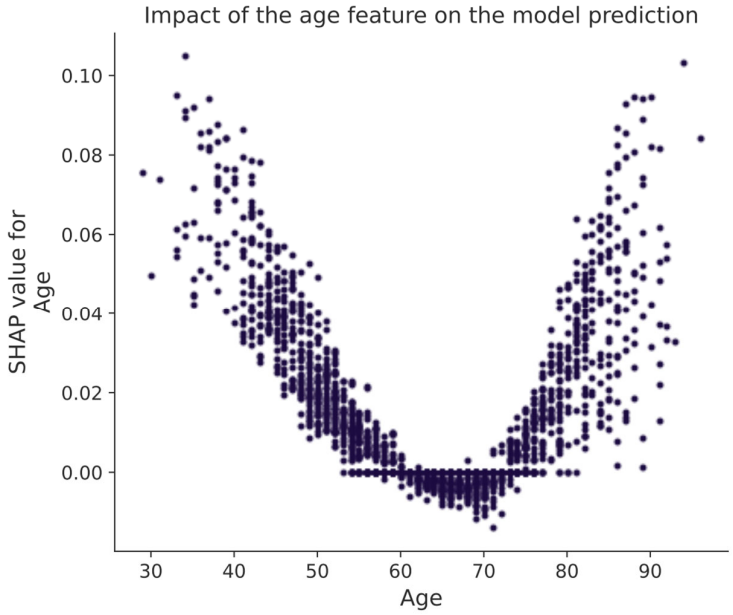
eFigure 4. SHAP Evaluation of the Contribution of Age Over the Decision of the Adherence Model



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