In the result tables you can see some of the factuals that were generated by our model and the model of [1].

Factual Seq.				Our CF Seq.				DiCE4EL CF Seq.		
Amount	Activity	Outcome	Resource	Amount	Activity	Outcome	Resource	Activity	Resource	Amount
	A-SUBMITTED	0	112							
	A-PARTLYSUBMITTED	0	112							
	A-PREACCEPTED	0	112	157	A-SUBMITTED	1	112			
	W-Completeren aanvraag	0	111	15532	A-PARTLYSUBMITTED	1	112			
	A-ACCEPTED	0	111							
	A-FINALIZED	0	111							
	O-SELECTED	0	111		A-PREACCEPTED	1	112			
	O-CREATED	0	111	141	W-Completeren aanvraag	1	138			
	O-SENT	0	111	15154	A-ACCEPTED	1	129			
	W-Completeren aanvraag	0	111	14965	O-SELECTED	1	11289			
	W-Nabellen offertes	0	111	15155	O-CREATED	1	861			
	W-Nabellen offertes	0	111	14744	O-SENT	1	179			
	W-Nabellen offertes	0	11119	15222	W-Completeren aanvraag	1				
	O-SENT-BACK	0	129	15883	W-Nabellen offertes	1	111			
	W-Nabellen offertes	0	129	152	W-Nabellen offertes	1	11181			
	O-DECLINED	0	9		W-Nabellen offertes	1	11119			
	A-DECLINED	0	9	153	O-SENT-BACK	1	109			
	W-Valideren aanvraag	0	9		W-Nabellen offertes	1	129			
				119	W-Valideren aanvraag	1	119			

Table 1: A comparison between the CBI-ES-UC3-SBM-RR and D4EL

Factual Seq.				Our CF Seq.				DiCE4EL CF Seq.		
Amount	Activity	Outcome	Resource	Amount	Activity	Outcome	Resource	Activity	Resource	Amount
	A-SUBMITTED	0	112							
	A-PARTLYSUBMITTED	0	112							
	A-PREACCEPTED	0	112							
	W-Completeren aanvraag	0	111	0	A-SUBMITTED	1	112			
	A-ACCEPTED	0	111	0	A-PARTLYSUBMITTED	1	112			
	A-FINALIZED	0	111	0	A-PREACCEPTED	1	112			
	O-SELECTED	0	111	0	A-ACCEPTED	1	11119			
	O-CREATED	0	111	0	A-FINALIZED	1	11119			
	O-SENT	0	111	0	O-SELECTED	1	11119			
	W-Completeren aanvraag	0	111	0	O-CREATED	1	11119			
	W-Nabellen offertes	0	111	0	O-SENT	1	11119			
	W-Nabellen offertes	0	111	0	W-Completeren aanvraag	1	11119			
	W-Nabellen offertes	0	11119	0	W-Nabellen offertes	1	11119			
	O-SENT-BACK	0	129	0	W-Nabellen offertes	1	111			
	W-Nabellen offertes	0	129	0	W-Nabellen offertes	1	111			
	O-DECLINED	0	9	0	O-SENT-BACK	1	11259			
	A-DECLINED	0	9	0	W-Nabellen offertes	1	11259			
	W-Valideren aanvraag	0	9	0	W-Valideren aanvraag	1	9			
				0	O-ACCEPTED	1	9			

Table 2: A comparison between the CBI-RWS-OPC-SBM-FSR and D4EL

In this section we show how both models (*CBI-ES-UC3-SBM-RR* and *CBI-RWS-OPC-SBM-FSR*), that the models are capable of changing the outcome of the outcome. Both models also return reasonable counterfactuals. However, *CBI-ES-UC3-SBM-RR* appears to be more consistent with the counterpart of [1]. Especially in terms of the activity sequence. For instance, both, our counterfactual and the D4EL counterfactual recognize that after O-SENT, there has to be an O-SENT-BACK that wil eventually lead to an accpetance of the counterfactual.Both evolutionary algorithms also manage to start the process with the correct sequence of A-SUBMITTED, A-PARTLYSUBMITTED and A-PREACCEPTED. Furthermore, our model appears to be much closer in terms of sequences than the model by Hsieh et al. *CBI-RWS-OPC-SBM-FSR* (the model that only chooses the fittest survivors) has gaps. These gaps are an indication that the model also attempts to align towards the correct structure of the factual model. We do not see that in *CBI-ES-UC3-SBM-RR*, as it ranks feasibility above similarity and sparcity. Introducing gaps automatically reduces the feasibility of the model. In the attachment you will find more examples.

We also see, that the value for *Amount* fluctuates for the evolutionary generators. Similar, holds for the resource field. Hence, the model tends to focus on event structure first and the event attributes second. However, we cannot be certain, as those values are drawn from a probability distribution. Hence, this might be a limitting factor when it comes to event attributes. However, one could argue that the most reveling information the counterfactuals provide for sequences are within the sequence structure and less the event attributes.