

## Frequencies

### Notes

Output Created		28-JUN-2022 18:10:43
Comments		
Input	Data	S:\Quant\data cleaning\V2\KNIV3\Analysis\Analysis 27.06.2022\NERS_NS.sav
	Active Dataset	DataSet1
	Filter	(Cohort_Group = 1   Cohort_Group = 2   Cohort_Group = 3) & Date_of_first_consultation_recorded = 1 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	14401
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=Cohort_Group /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.15

### Statistics

Cohort\_Group

N	Valid	14401
	Missing	0

### Cohort\_Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cohort 1	9347	64.9	64.9	64.9
	Cohort 2	4165	28.9	28.9	93.8
	Cohort 3	889	6.2	6.2	100.0
	Total	14401	100.0	100.0	

### Generalized Linear Mixed Models

#### Notes

Output Created		28-JUN-2022 18:11:52
Comments		
Input	Data	S:\Quant\data cleaning\V2\KN\V3\Analysis\Analysis 27.06.2022\NERS_NS.sav
	Active Dataset	DataSet1
	Filter	(Cohort_Group = 1   Cohort_Group = 2   Cohort_Group = 3) & Date_of_first_consultation_recorded = 1 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	14401

Syntax	<pre> GENLINMIXED   /DATA_STRUCTURE SUBJECTS=Local_Authority   /FIELDS TARGET=Date_of_first_exercise_r ecorded_USE_ME TRIALS=NONE OFFSET=NONE   /TARGET_OPTIONS DISTRIBUTION=BINOMIAL LINK=LOGIT   /FIXED EFFECTS=IMD_Quintile Age_at_ref2 Gender2 Pathways_5 Cohort_two_groups USE_INTERCEPT=TRUE   /RANDOM EFFECTS=IMD_Quintile Age_at_ref2 Gender2 Pathways_5 Cohort_two_groups USE_INTERCEPT=TRUE   SUBJECTS=Local_Authority COVARIANCE_TYPE=VARIANCE _COMPONENTS SOLUTION=FALSE   /BUILD_OPTIONS TARGET_CATEGORY_ORDER= DESCENDING INPUTS_CATEGORY_ORDER=D ESCENDING   MAX_ITERATIONS=100 CONFIDENCE_LEVEL=95 DF_METHOD=RESIDUAL COVB=MODEL PCONVERGE=0.000001(ABSOLU TE)   SCORING=0 SINGULAR=0.000000000001   /EMMEANS_OPTIONS SCALE=ORIGINAL PADJUST=LSD. </pre>
Resources	Processor Time
	00:00:07.42

Elapsed Time	00:00:07.33
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### Case Processing Summary

	N	Percent
Included	13882	96.4%
Excluded	519	3.6%
Total	14401	100.0%

### Model Summary

Target		Date_of_first_exercise_recorded _USE_ME
Probability Distribution		Binomial
Link Function		Logit
Information Criterion	Akaike Corrected	79349.389
	Bayesian	79394.608

Information criteria are based on the -2 log likelihood (79337.383) and are used to compare models. Models with smaller information criterion values fit better.

### Data Structure<sup>a</sup>

	Subjects	Target
	Local Authority	Date_of_first_exercise_recorded_USE_ME
Data for First Subject	1.000	Yes
	1.000	Yes
	1.000	Yes
	1.000	Yes
	1.000	Yes
	1.000	Yes
	1.000	Yes
	1.000	Yes
	1.000	Yes
	1.000	Yes
Total Number of Levels	22	

Only the first 10 records are displayed.<sup>a</sup>

a. Target: Date\_of\_first\_exercise\_recorded\_USE\_ME

### Classification

**Overall Percent Correct = 90.3%<sup>a</sup>**

Observed		Predicted	
		Yes	No
Yes	Count	12467	47
	% within Observed	99.6%	0.4%
No	Count	1306	62
	% within Observed	95.5%	4.5%

a. Target: Date\_of\_first\_exercise\_recorded\_USE\_ME

### Fixed Effects<sup>a</sup>

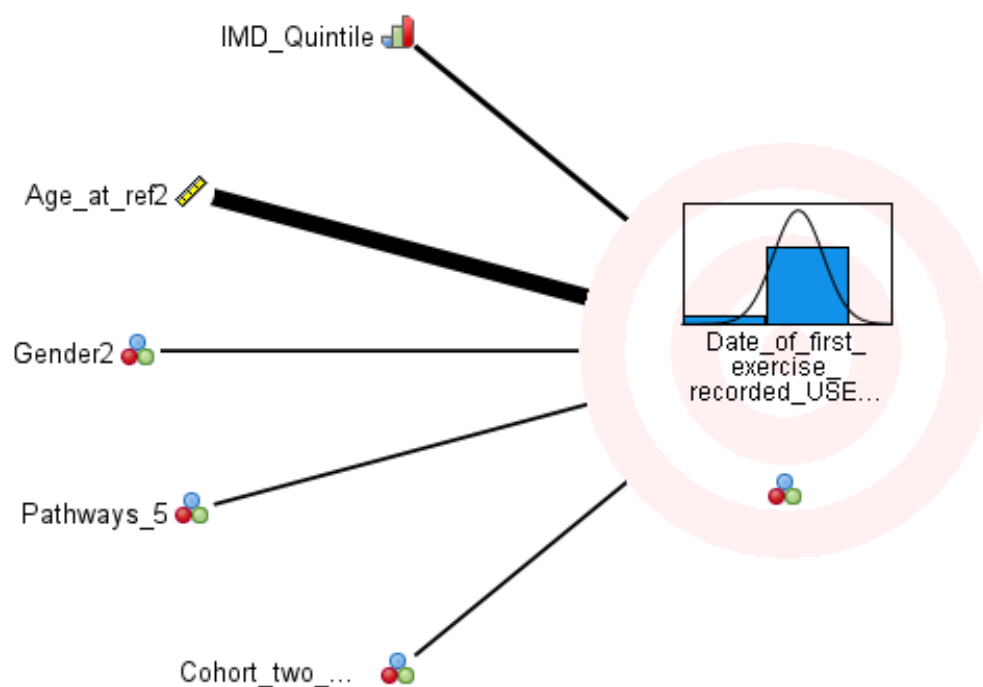
Source	F	df1	df2	Sig.
Corrected Model	3.660	11	13870	<.001
IMD_Quintile	1.565	4	13870	.181
Age_at_ref2	22.163	1	13870	<.001
Gender2	1.623	1	13870	.203
Pathways_5	.794	4	13870	.529
Cohort_two_groups	.051	1	13870	.821

Probability distribution: Binomial

Link function: Logit<sup>a</sup>

a. Target: Date\_of\_first\_exercise\_recorded\_USE\_ME

## Fixed Effects



## Fixed Coefficients<sup>a</sup>

Model Term	Coefficient	Std. Error	t	Sig.	95% Confidence Interval		Exp
					Lower	Upper	
Intercept	1.870	.3223	5.801	<.001	1.238	2.502	
IMD_Quintile=5	.246	.1444	1.703	.089	-.037	.529	
IMD_Quintile=4	.207	.1371	1.512	.131	-.061	.476	
IMD_Quintile=3	.270	.1364	1.979	.048	.003	.537	
IMD_Quintile=2	.048	.1333	.361	.718	-.213	.309	
IMD_Quintile=1	0 <sup>b</sup>	.	.	.	.	.	
Age_at_ref2	.013	.0027	4.708	<.001	.007	.018	
Gender2=2	.111	.0874	1.274	.203	-.060	.283	

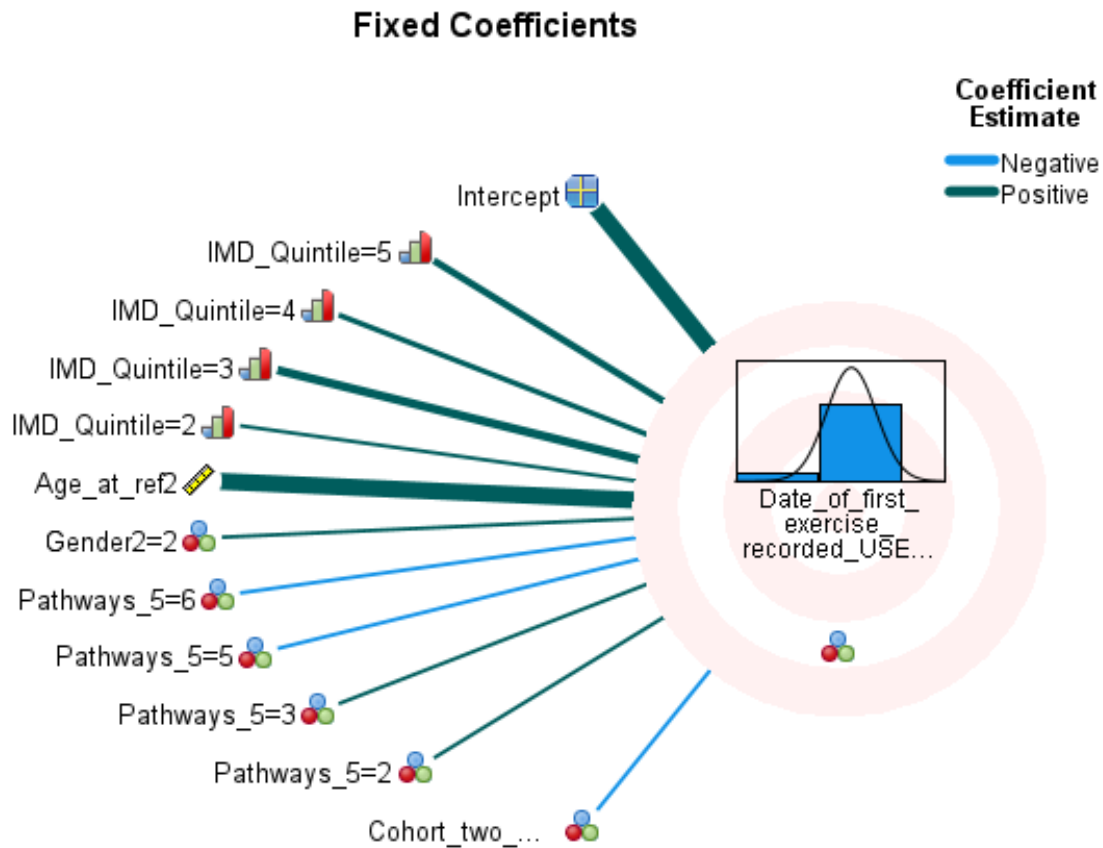
Gender2=1	0 <sup>b</sup>	.	.	.	.	.	.
Pathways_5=6	-.196	.1582	-1.237	.216	-.506	.114	.
Pathways_5=5	-.106	.1891	-.559	.576	-.476	.265	.
Pathways_5=3	.054	.2217	.242	.809	-.381	.488	.
Pathways_5=2	.094	.1500	.625	.532	-.200	.388	.
Pathways_5=1	0 <sup>b</sup>	.	.	.	.	.	.
Cohort_two_groups=2	-.067	.2967	-.226	.821	-.649	.515	.
Cohort_two_groups=1	0 <sup>b</sup>	.	.	.	.	.	.

Probability distribution: Binomial

Link function: Logit<sup>a</sup>

a. Target: Date\_of\_first\_exercise\_recorded\_USE\_ME

b. This coefficient is set to zero because it is redundant.



Random Effect Covariances

Random Effect Block	Intercept	IMD_ Quintile=5	IMD_ Quintile=4	IMD_ Quintile=3	IMD_ Quintile=2
Intercept	.951	.000	.000	.000	.000
IMD_ Quintile=5	.000	.049	.000	.000	.000
IMD_ Quintile=4	.000	.000	.049	.000	.000
IMD_ Quintile=3	.000	.000	.000	.049	.000
IMD_ Quintile=2	.000	.000	.000	.000	.049
IMD_ Quintile=1	.000	.000	.000	.000	.000
Age_at_ref2	.000	.000	.000	.000	.000
Gender2=2	.000	.000	.000	.000	.000
Gender2=1	.000	.000	.000	.000	.000
Pathways_ 5=6	.000	.000	.000	.000	.000
Pathways_ 5=5	.000	.000	.000	.000	.000
Pathways_ 5=3	.000	.000	.000	.000	.000
Pathways_ 5=2	.000	.000	.000	.000	.000
Pathways_ 5=1	.000	.000	.000	.000	.000
Cohort_two_groups=2	.000	.000	.000	.000	.000
Cohort_two_groups=1	.000	.000	.000	.000	.000

Covariance Structure: Variance components

Subject Specification: Local\_Authority

Covariance Parameters

Covariance Parameters Summary		
Covariance Parameters	Residual Effect	0
	Random Effects	6
Design Matrix Columns	Fixed Effects	16
	Random Effects	16 <sup>a</sup>



Common Subjects	22
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Common subjects are based on the subject specifications for the residual and random effects and are used to chunk the data for better performance.

a. This is the number of columns per common subject.

Residual Effect						
Residual Effect	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
					Lower	Upper
Variance	1.000	.	.	.	.	.

Covariance Structure: Scaled Identity

Subject Specification: (None)

Random Effect						
Random Effect Covariance	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
					Lower	Upper
Var(Intercept)	.951	.509	1.870	.061	.334	2.713
Var(IMD_Quintile)	.049	.028	1.767	.077	.016	.149
Var(Age_at_ref2)	3.892E-5	3.631E-5	1.072	.284	6.253E-6	.000
Var(Gender2)	.024	.034	.705	.481	.001	.389
Var(Pathways_5)	.114	.046	2.467	.014	.052	.253
Var(Cohort_two_groups)	.544	.253	2.149	.032	.218	1.354

Covariance Structure: Variance components

Subject Specification: Local\_Authority