



GiViTi

Gruppo Italiano per la Valutazione degli Interventi in Terapia Intensiva



27° Meeting GiViTi

7-8-9 Novembre 2018

Gli esiti del trauma cranico dipendono dalle variabili socio-demografiche?

Dati preliminari dello studio CReACTIVE

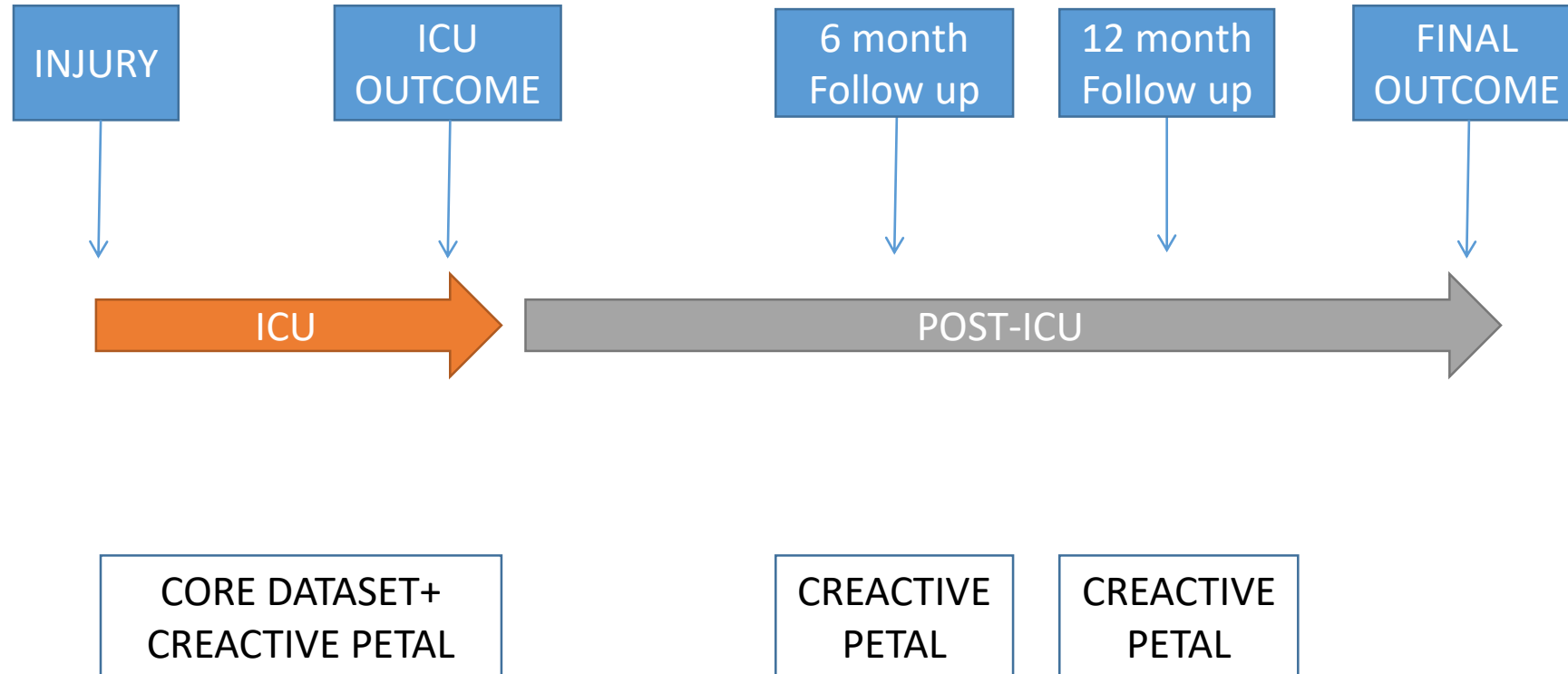
Andrea Montis

SC NeuroRiabilitazione

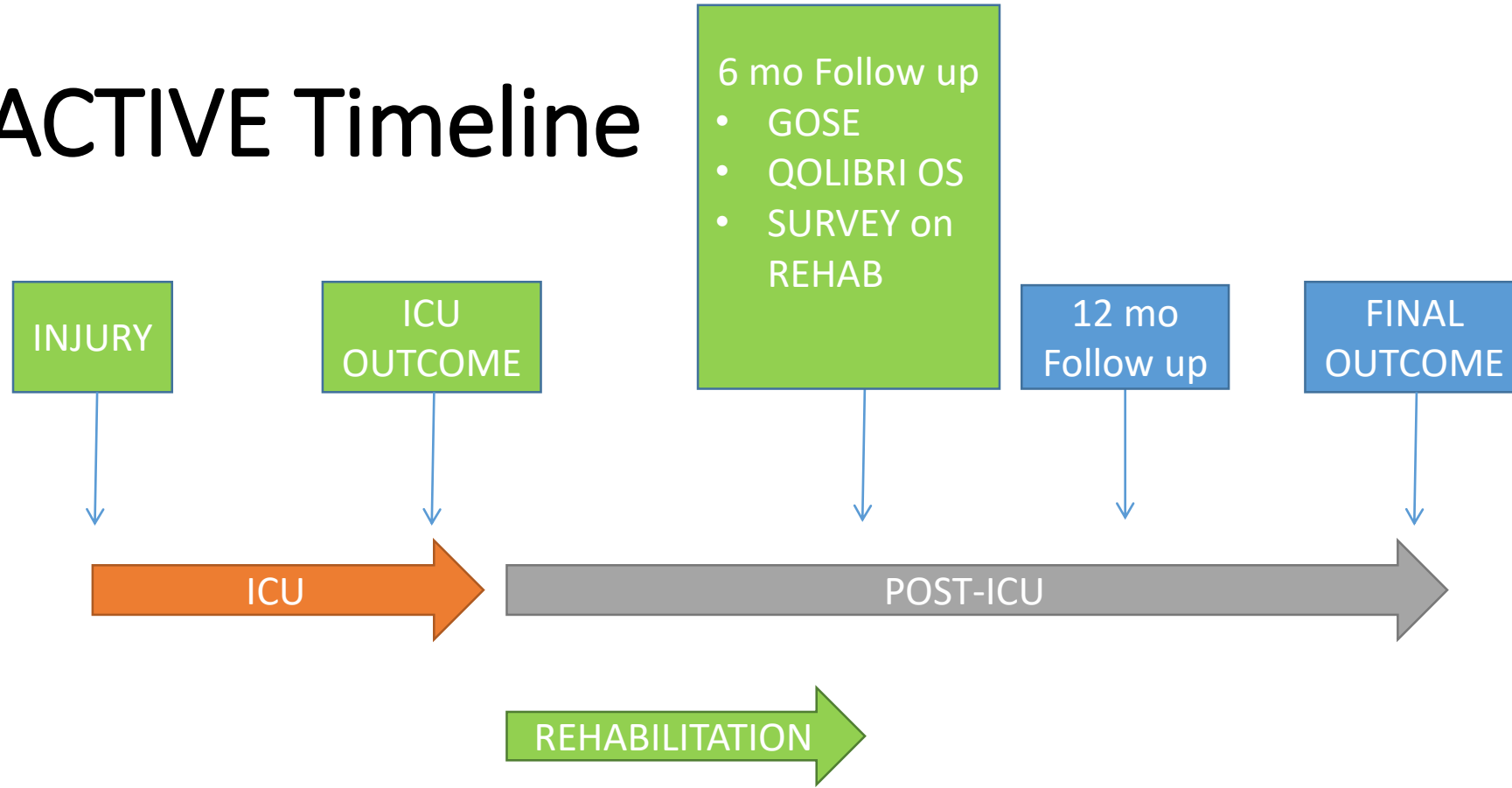
ASSL Oristano ATS Sardegna



CREACTIVE Timeline



CREACTIVE Timeline





Results

- **2015-2016**
- Total number of participants = **2692**
- Number of patients completed follow up at 6 months = **2038 (76%)**

NATION	
ITALY	1275 (62.6%)
HUNGARY	352 (17.3%)
SLOVENIA	241 (11.8%)
GREECE	63 (3.1%)
CYPRUS	50 (2.4%)
POLAND	57 (2.8%)



Demographics

Male gender – N° (%)	1508 (74%)
Age (years)	
Mean (SD)	56.2 (21)
Median (IQR)	58 (39-75)
Min - Max	17 - 97
Age – N° (%)	
17-45	662 (32.5%)
46-65	576 (28.3%)
66-75	307 (15.1%)
>75	493 (24.2%)



Demographics

RACE	
White European	1936 (95.1%)
White African	14 (0.7%)
Black Afro-american	10 (0.5%)
Asian	18 (0.9%)
Arab	7 (0.3%)
Nomad	0
Unknown	50 (2.5%)
Missing	3

MARITAL STATUS	
Married	759 (37.3%)
Single < 30 years old	227 (11.1%)
Single >= 30 years old	167 (8.2%)
Separated / Divorced	59 (2.9%)
Cohabiting	63 (3.1%)
Widowed	156 (7.7%)
Unknown	603 (29.6%)
Missing	4

RACE	
White European	1936 (95.1%)
Non White European	99 (4.9%)

COHABITING	
Cohabiting	1049 (48.4%)
Non Cohabiting	323 (15.9%)
Unknown	662 (32.5%)



Demographics

EDUCATIONAL LEVEL	
No schooling	49 (2.4%)
Primary school/ Elementary school	469 (23%)
High school diploma	396 (19.5%)
University degree	79 (3.9%)
Unknown	1042 (51.2%)
Missing	3

OCCUPATIONAL STATUS	
Worker	566 (27.9%)
Student	106 (5.2%)
Retired	639 (31.4%)
Unemployed / Looking for work	55 (2.7%)
Disabled / Not applicable / Sheltered employment	41 (2%)
Unknown	625 (30.8%)
Missing	6

EDUCATIONAL LEVEL	
Low educational level	518 (25.4%)
High educational level	475 (23.4%)
Unknown	1042 (51.2%)

OCCUPATIONAL STATUS	
Active	672 (33.1%)
Non active	735 (36.1%)
Unknown	625 (30.8%)



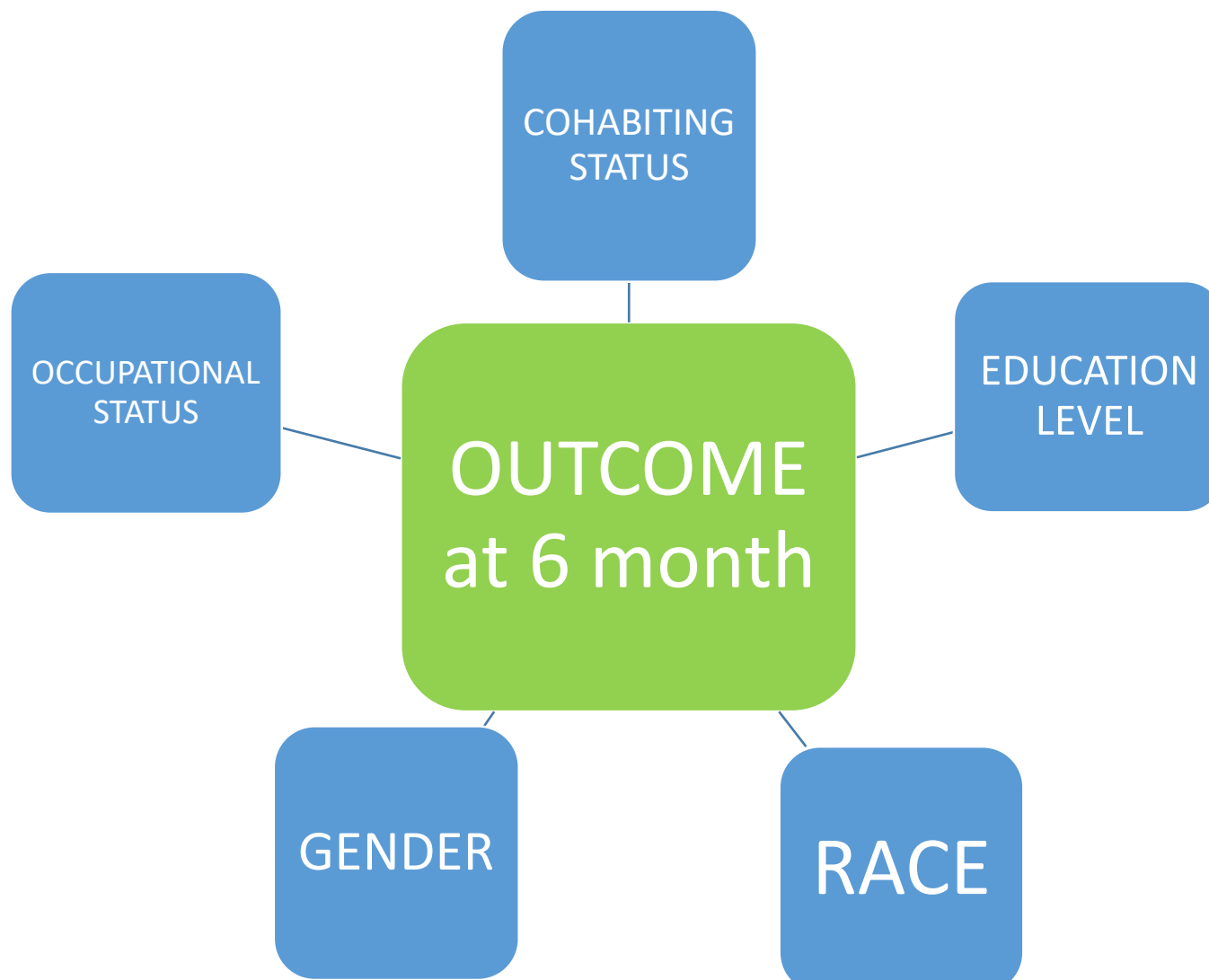
Outcome measure at 6 month

GOS-E	
Death	846 (41.5%)
Vegetative state	65 (3.1%)
Severe disability lower level	275 (13.4%)
Severe disability upper level	175 (8.5%)
Moderate disability lower level	114 (5.5%)
Moderate disability upper level	158 (7.7%)
Good recovery lower level	184 (9.0%)
Good recovery upper level	221 (10.8%)

OUTCOME	
Unfavourable outcome	1186 (58.3%)
Moderate disability	447 (21.9%)
Good recovery	405 (19.8%)



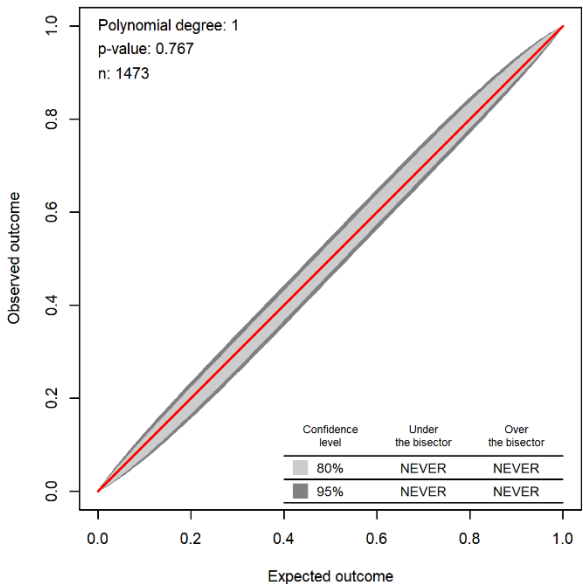
How do demographics influence **outcome** at 6 month?



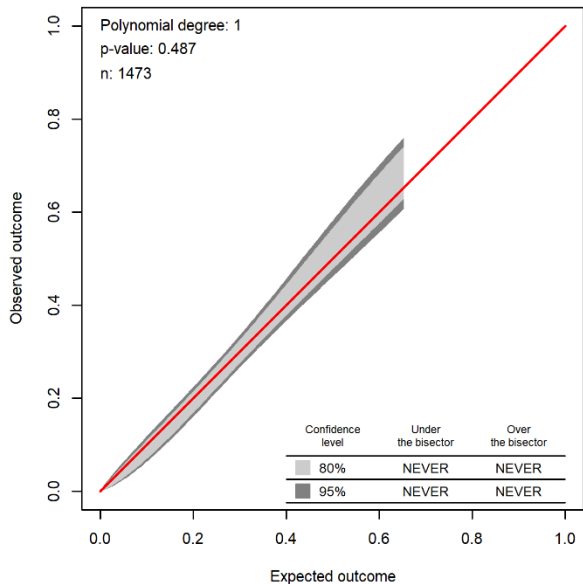
Gender/ Outcome

MALE

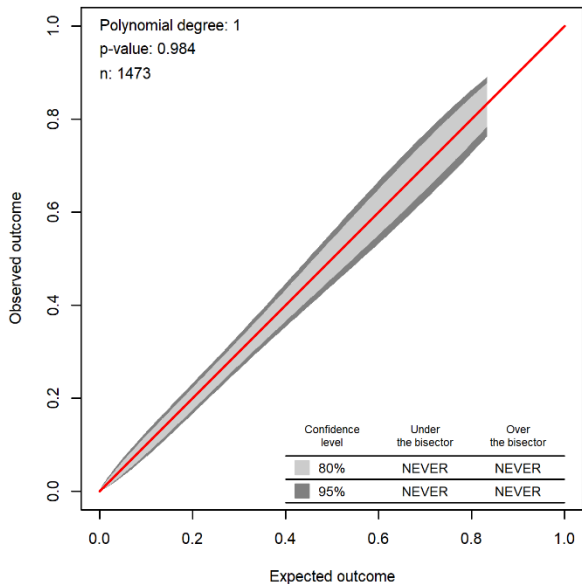
UNFAVOURABLE OUTCOME



MODERATE DISABILITY

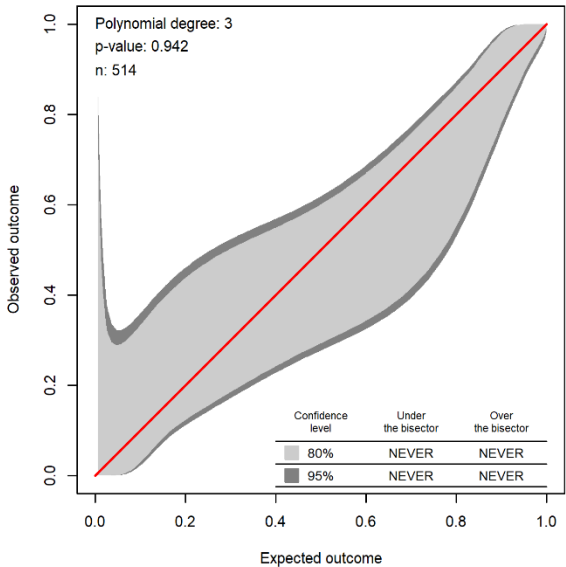


GOOD RECOVERY

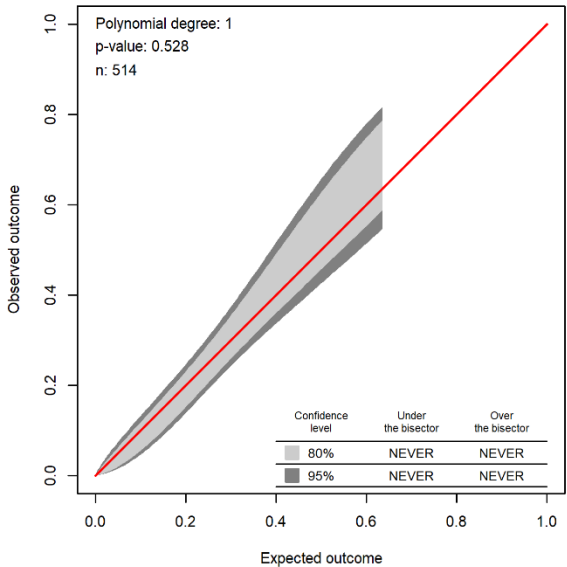


FEMALE

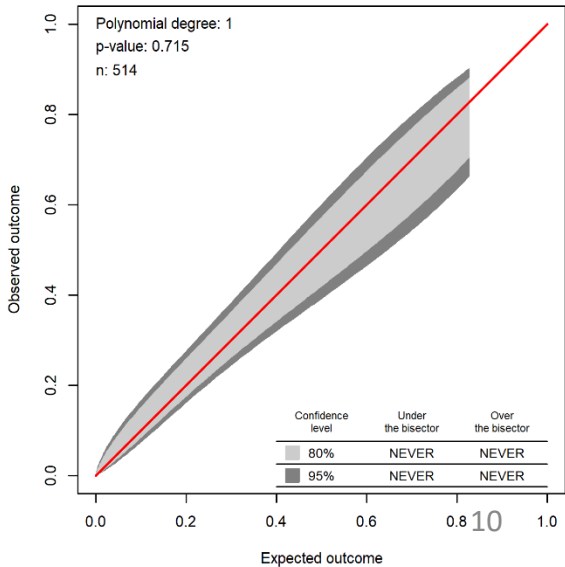
UNFAVOURABLE OUTCOME



MODERATE DISABILITY



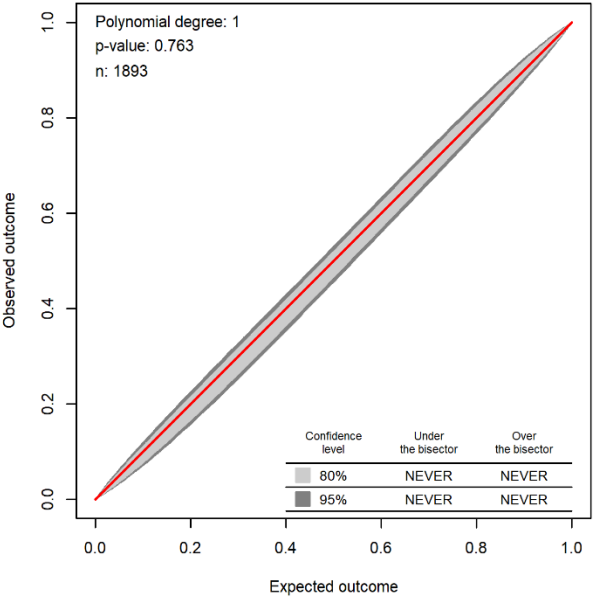
GOOD RECOVERY



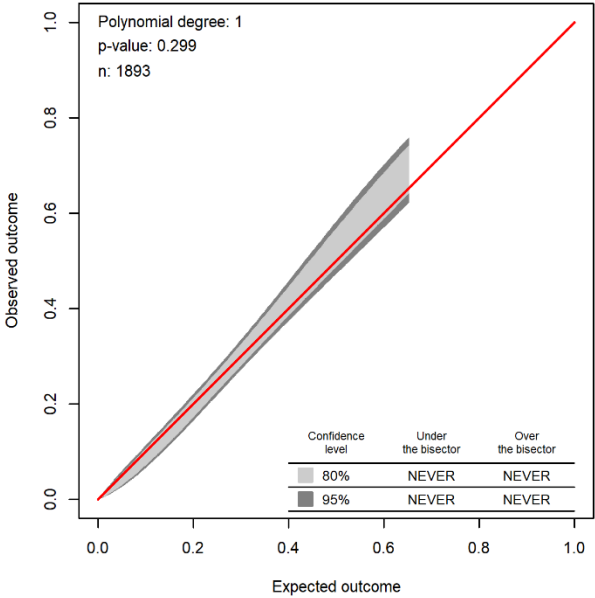
Race/ Outcome

WHITE

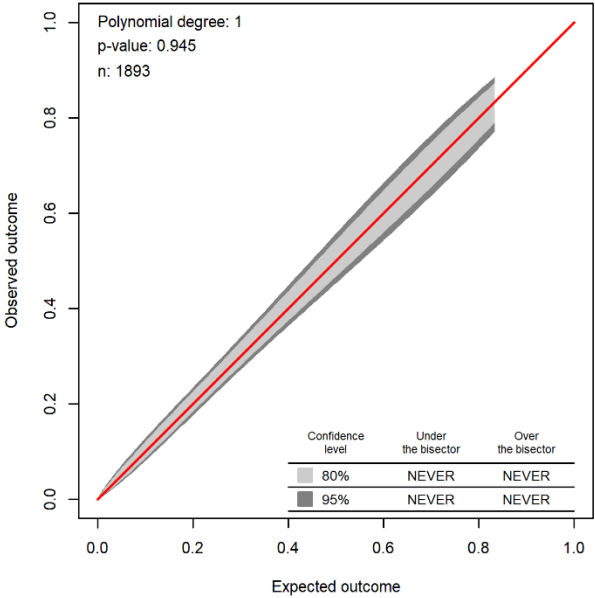
UNFAVOURABLE OUTCOME



MODERATE DISABILITY

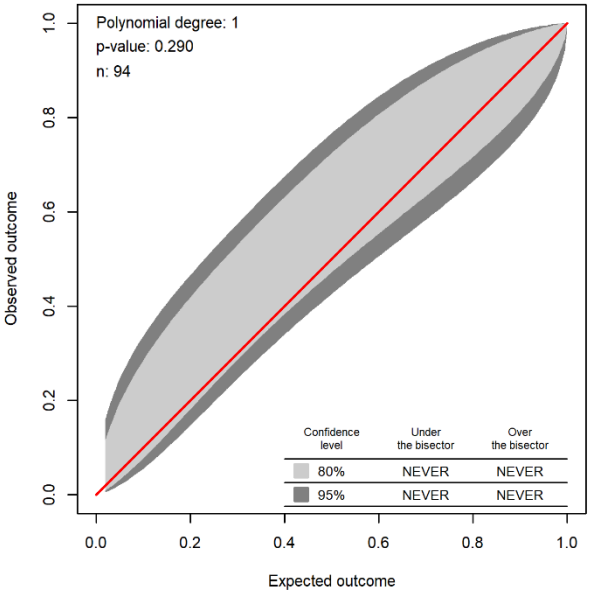


GOOD RECOVERY

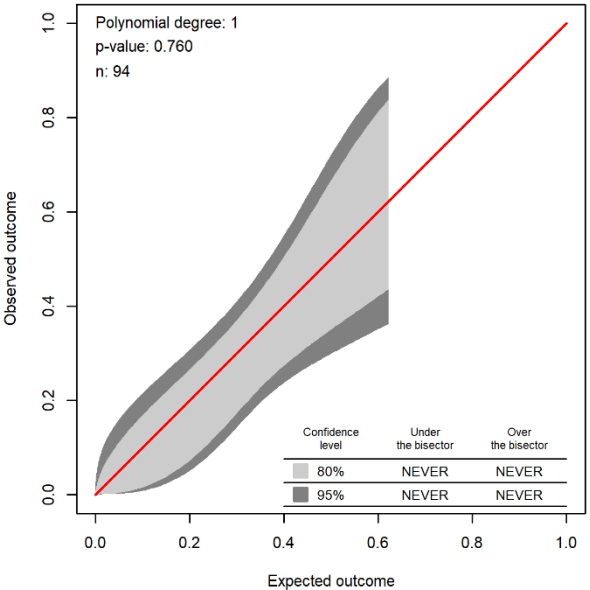


NON WHITE

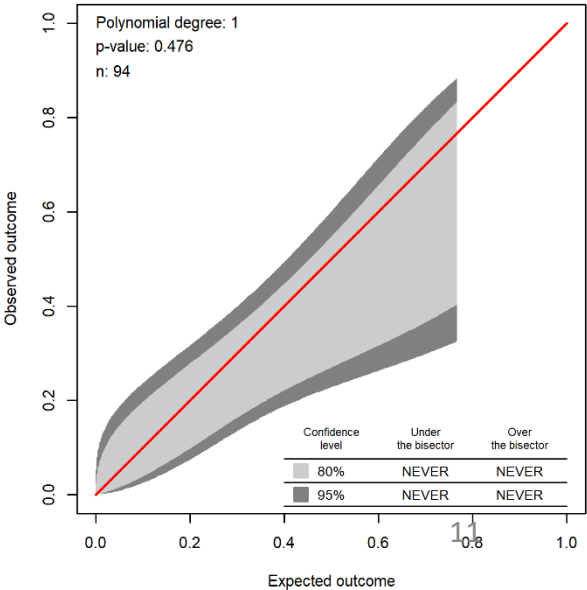
UNFAVOURABLE OUTCOME



MODERATE DISABILITY



GOOD RECOVERY

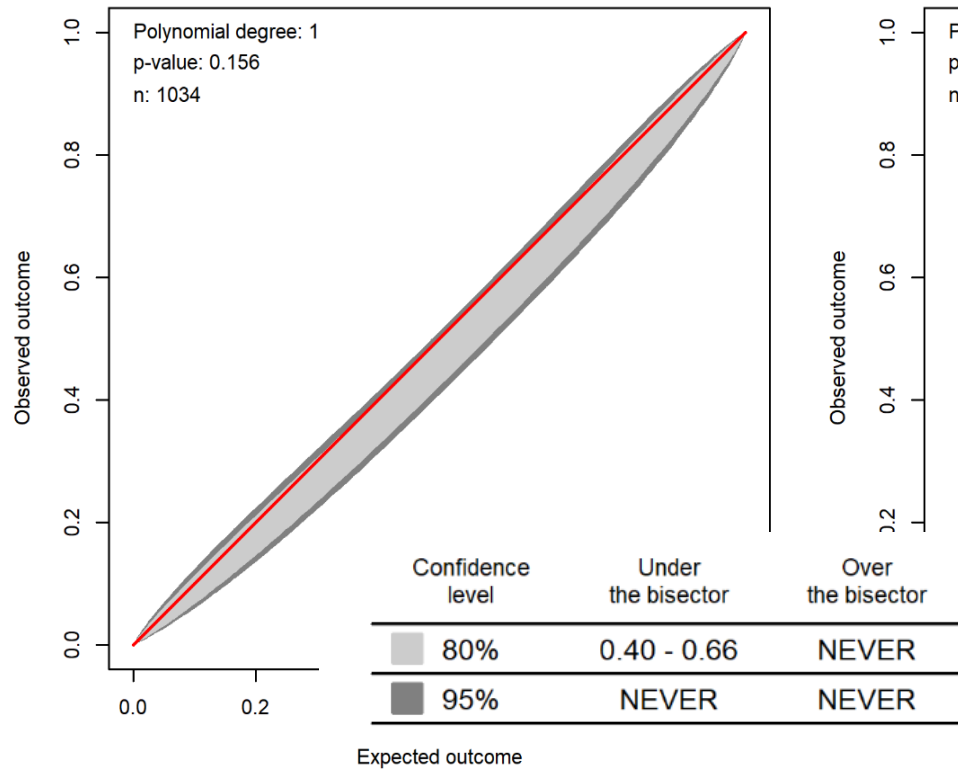


Cohabiting/Outcome

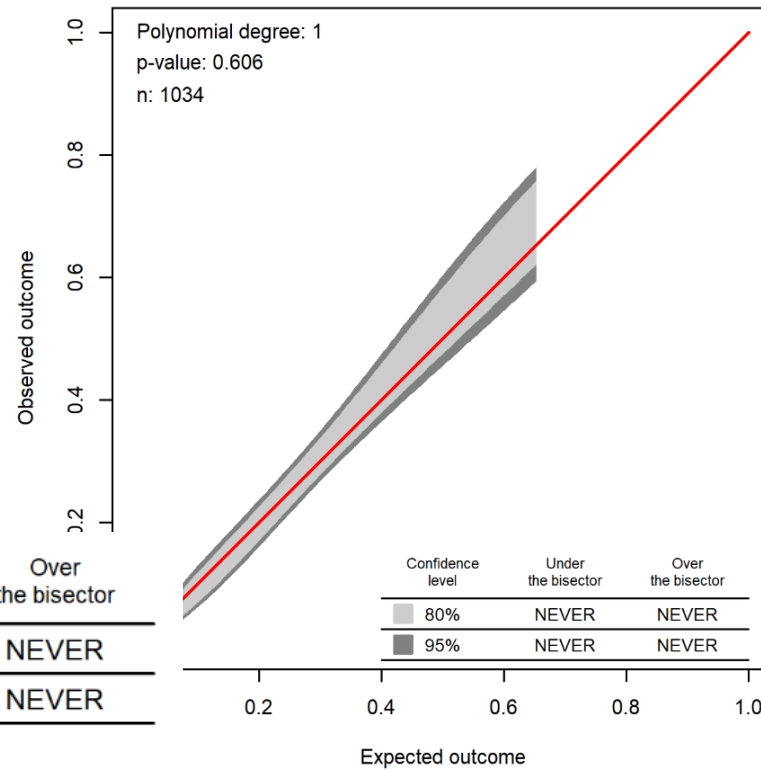


COHABITING

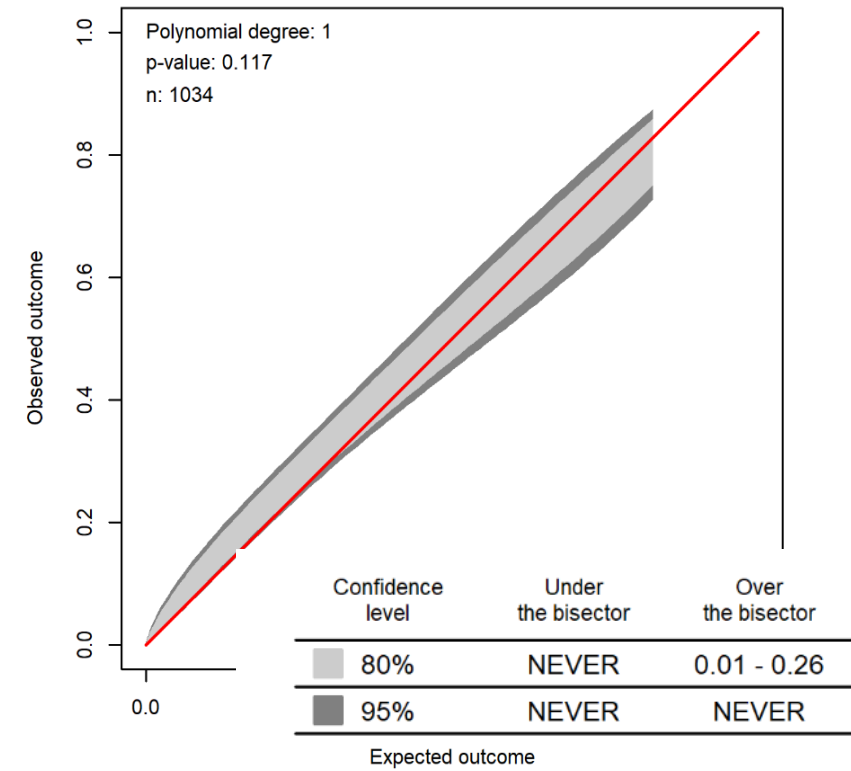
UNFAVOURABLE OUTCOME



MODERATE DISABILITY



GOOD OUTCOME

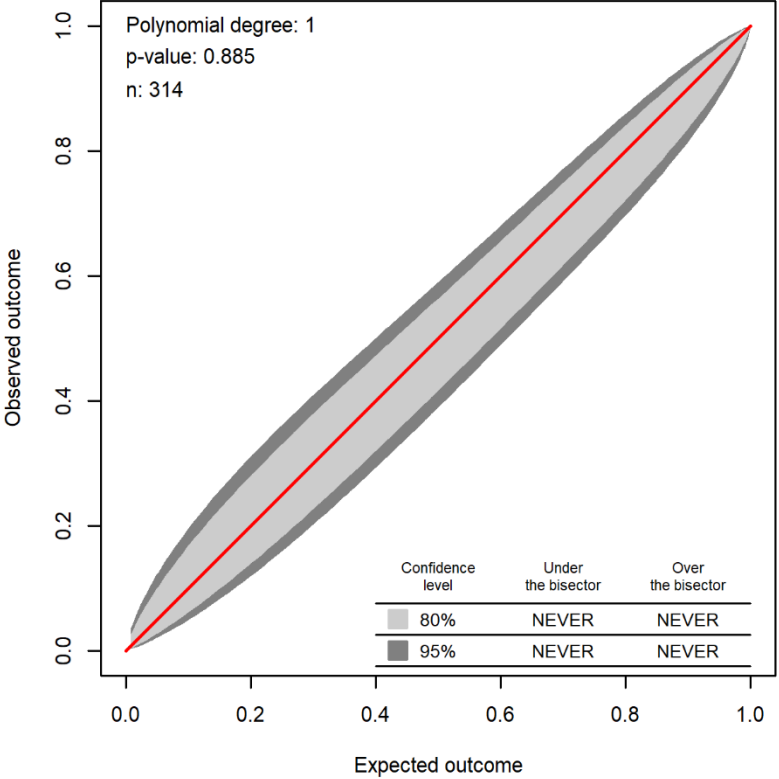




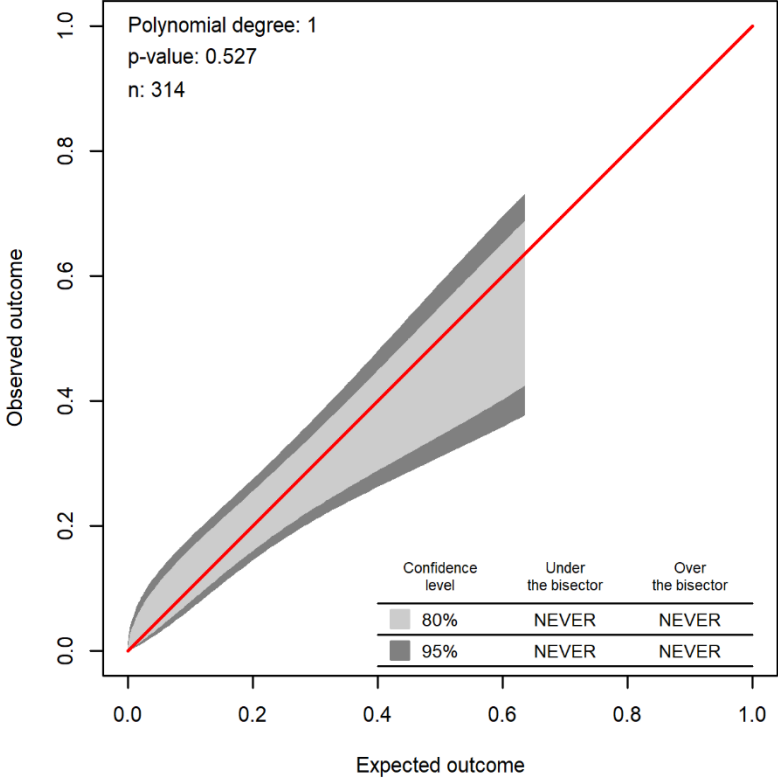
Non cohabiting/Outcome

NON COHABITING

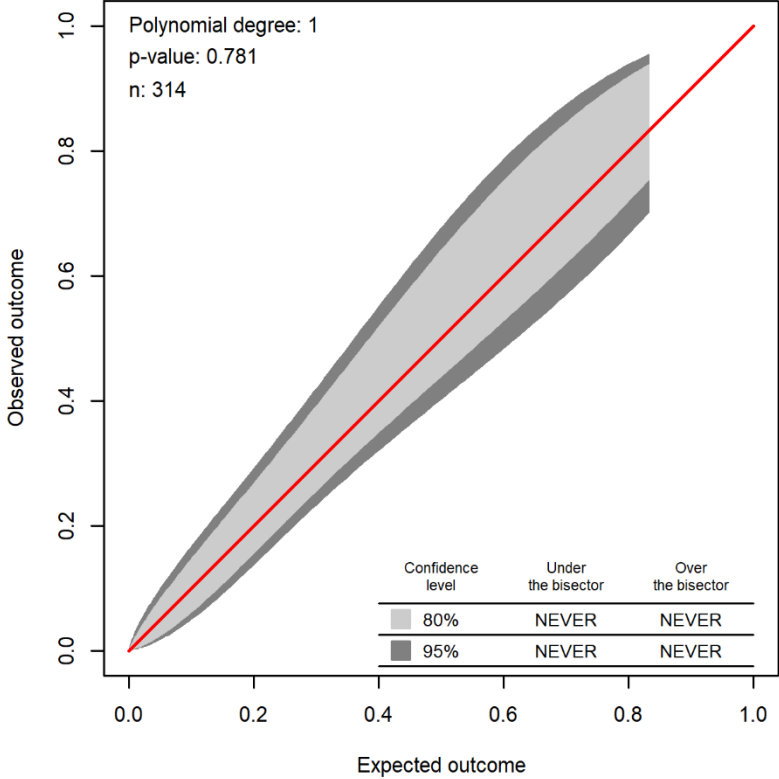
UNFAVOURABLE OUTCOME



MODERATE DISABILITY



GOOD OUTCOME

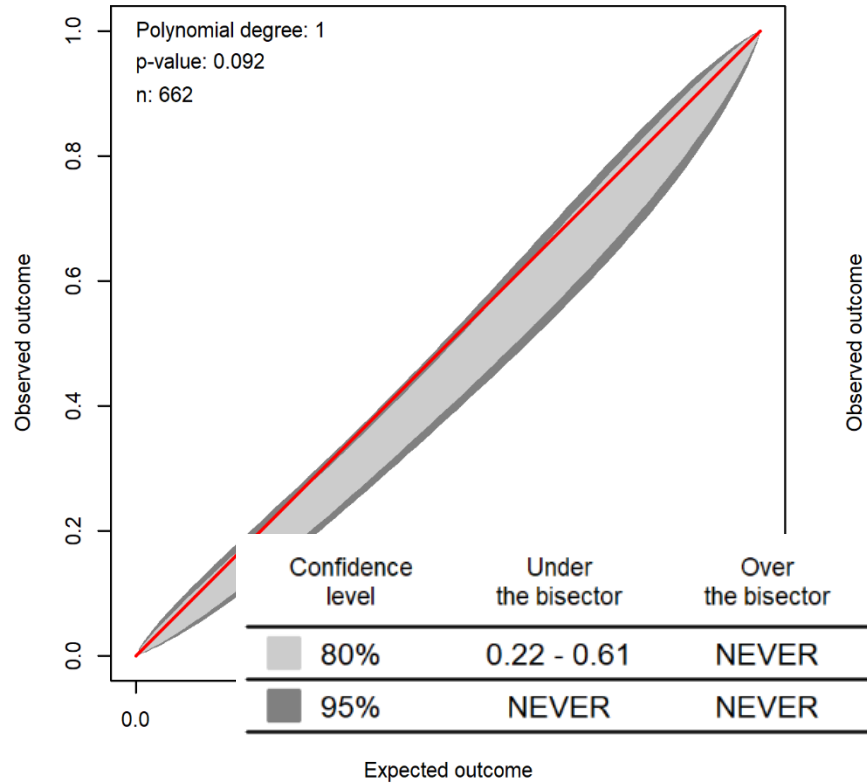


Occupational status/Outcome

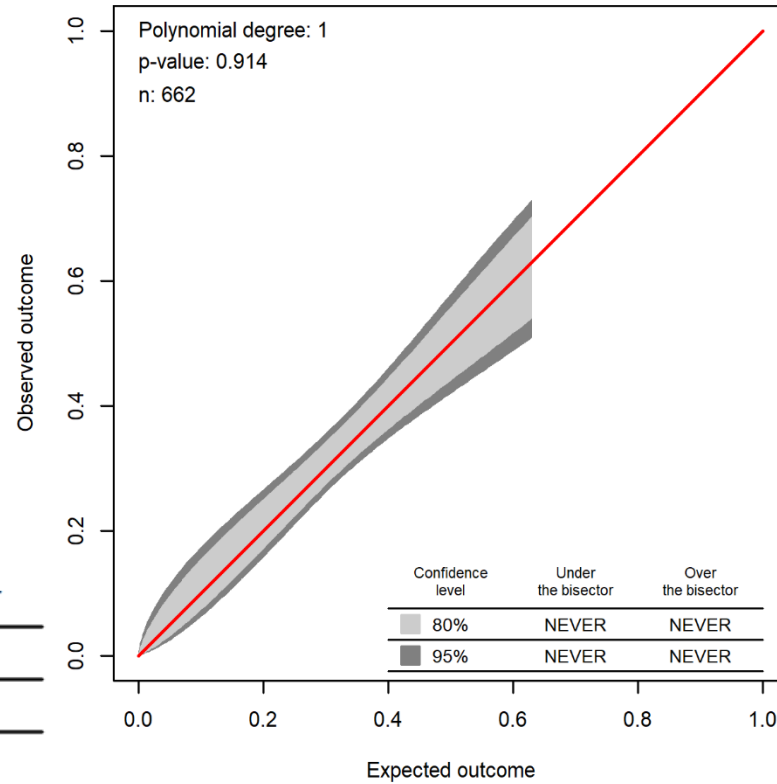


ACTIVE

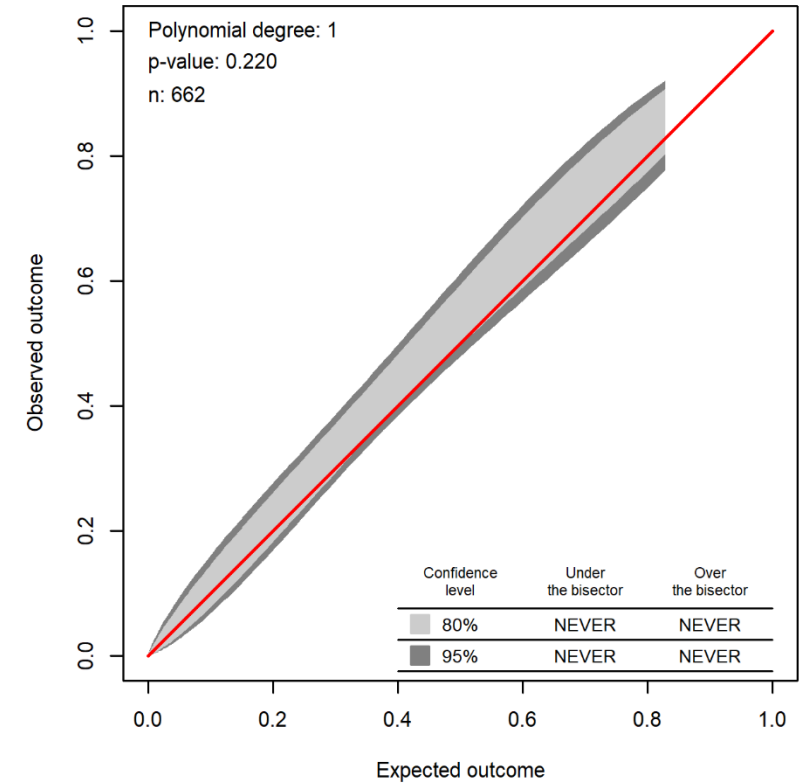
UNFAVOURABLE OUTCOME



MODERATE DISABILITY



GOOD OUTCOME

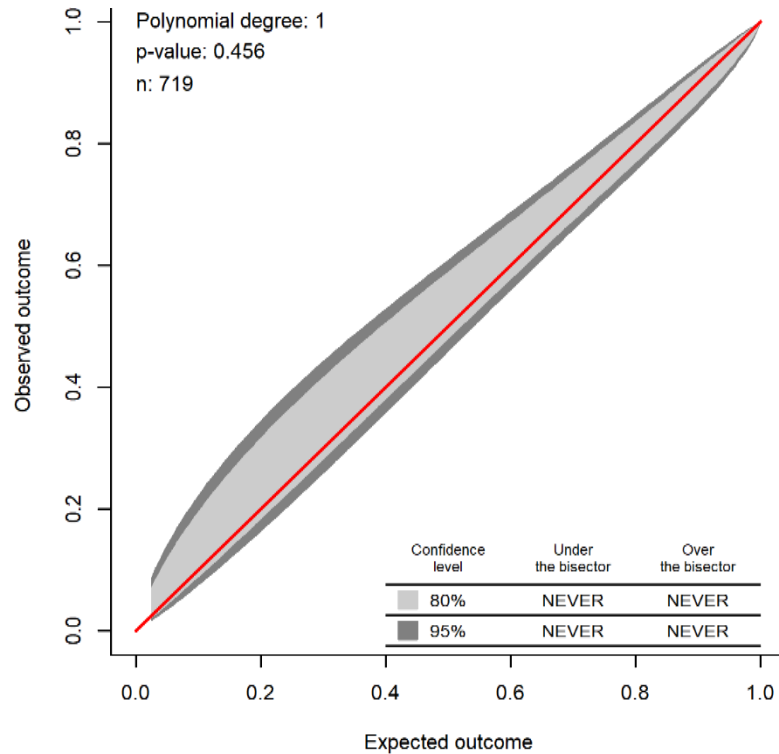


Occupational status/Outcome

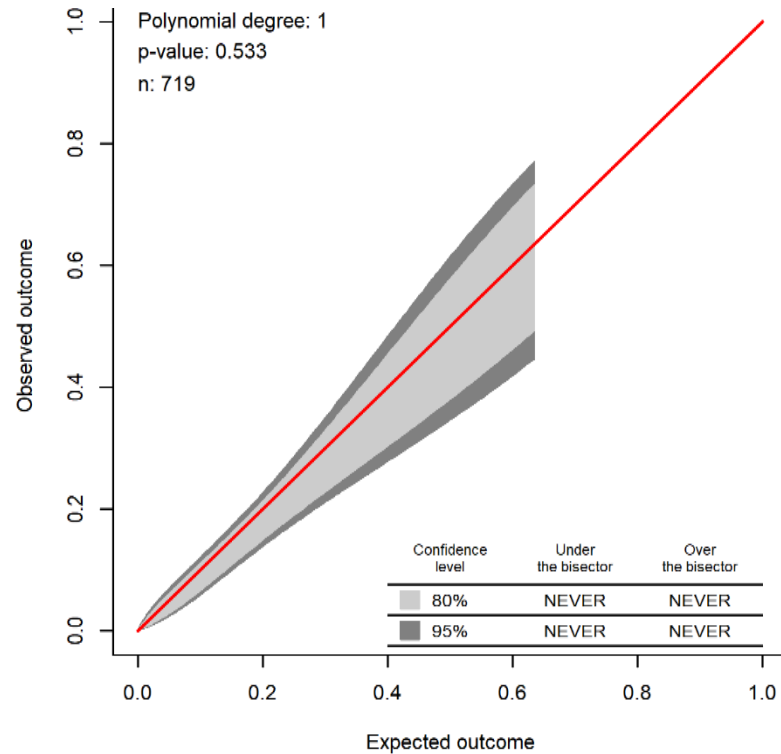


NON ACTIVE

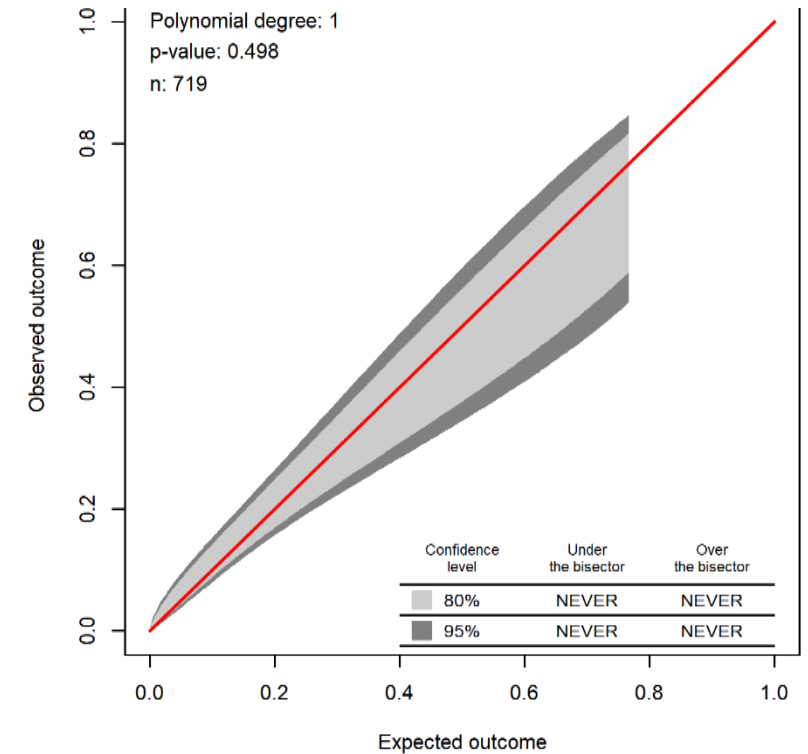
UNFAVOURABLE OUTCOME



MODERATE DISABILITY



GOOD OUTCOME

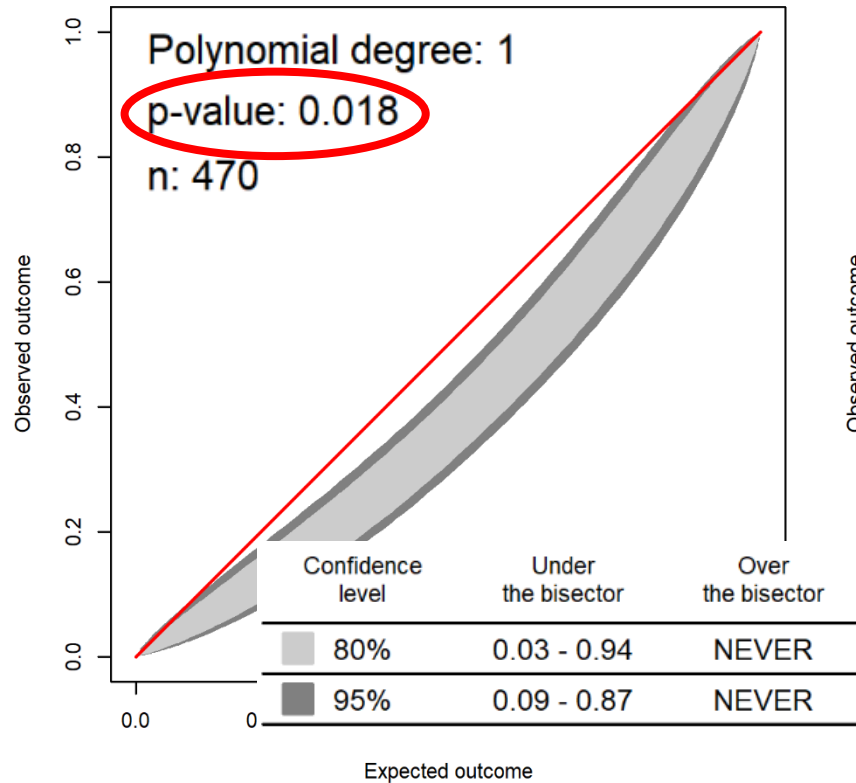


High education/Outcome

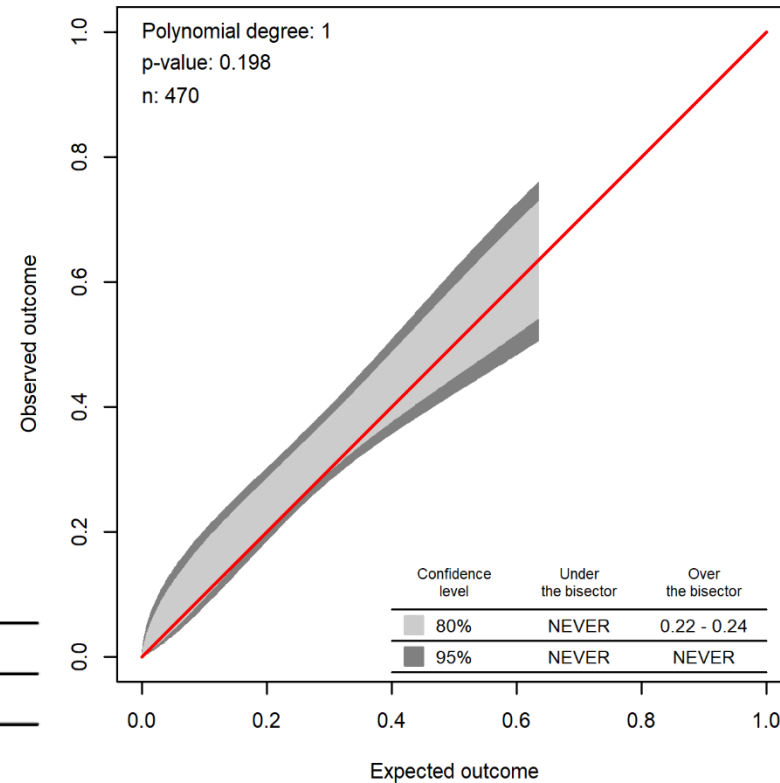


HIGH EDUCATION

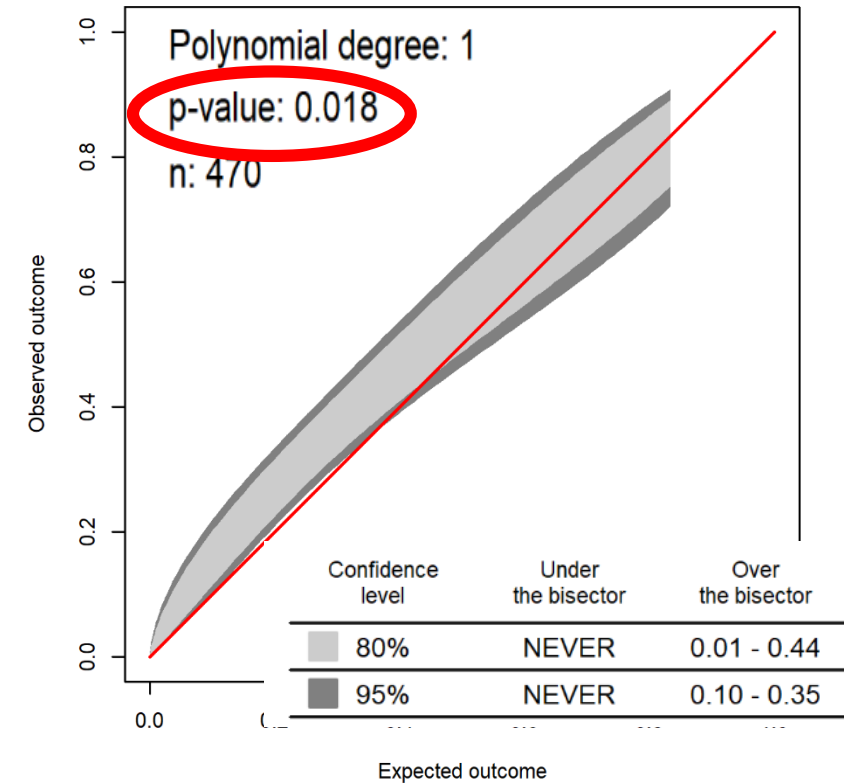
UNFAVOURABLE OUTCOME



MODERATE DISABILITY



GOOD OUTCOME

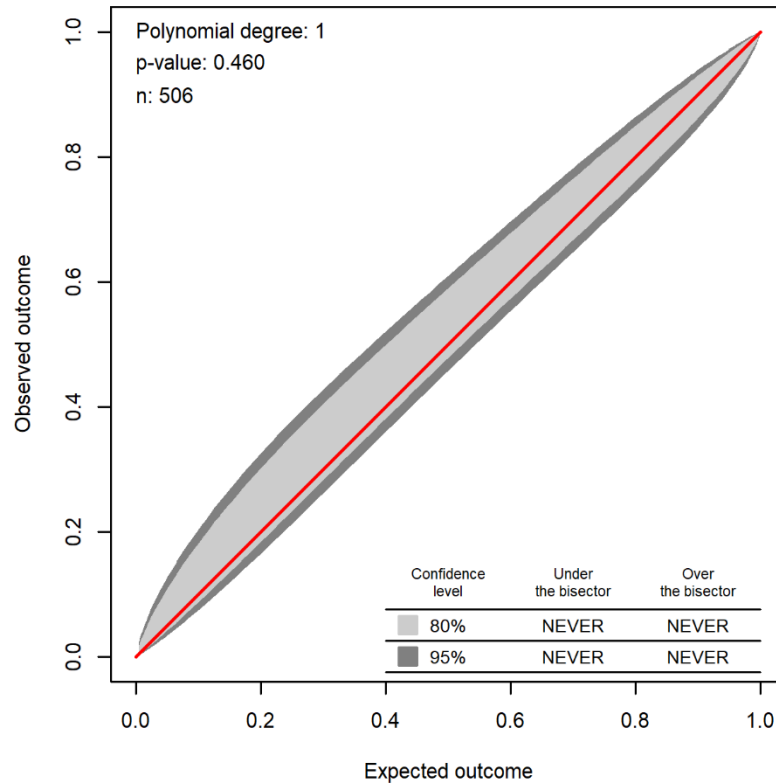


Low education/Outcome

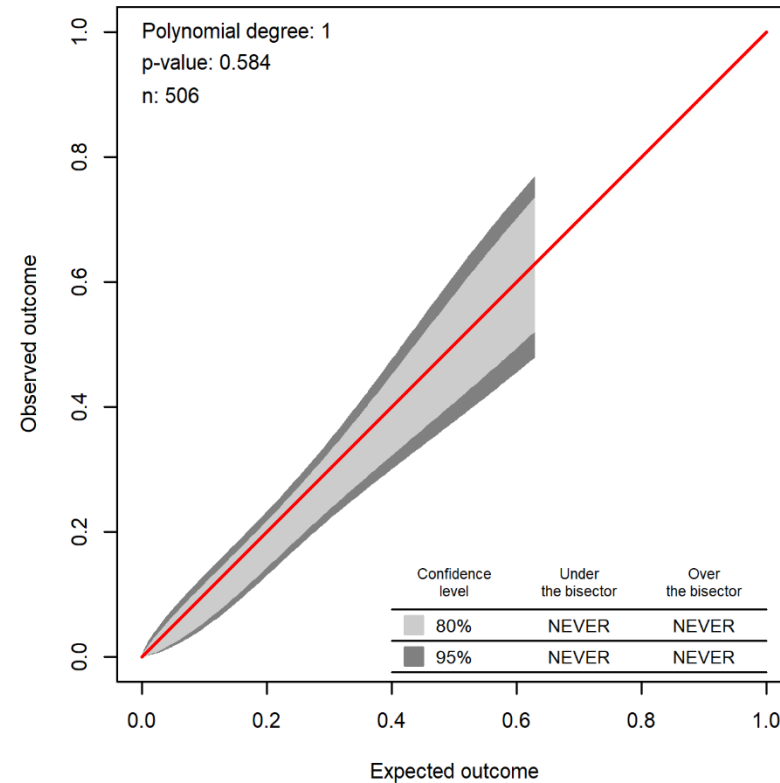


LOW EDUCATION

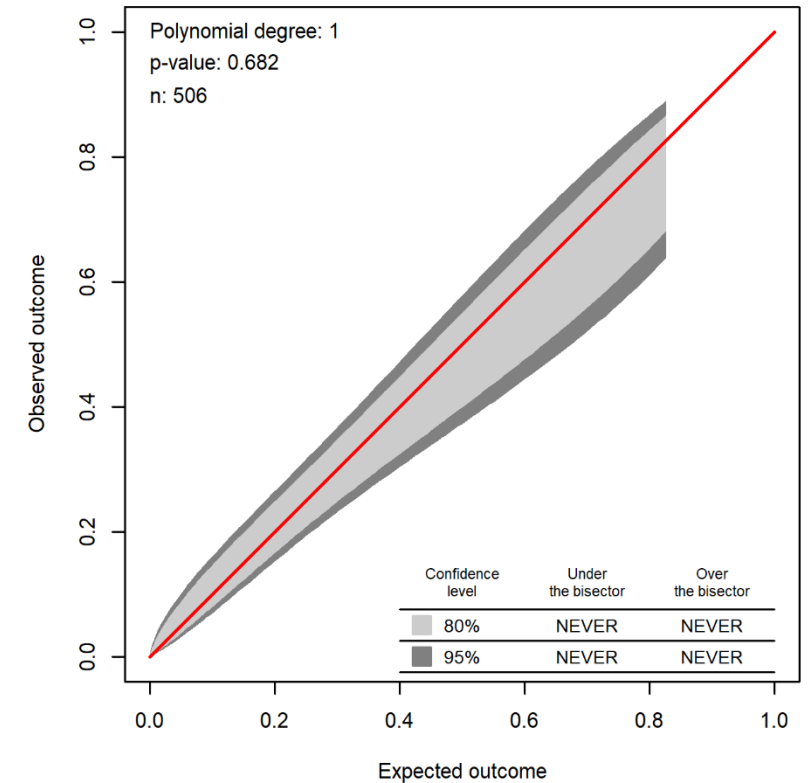
UNFAVOURABLE OUTCOME



MODERATE DISABILITY



GOOD OUTCOME



Demographics/Outcome Results Summary

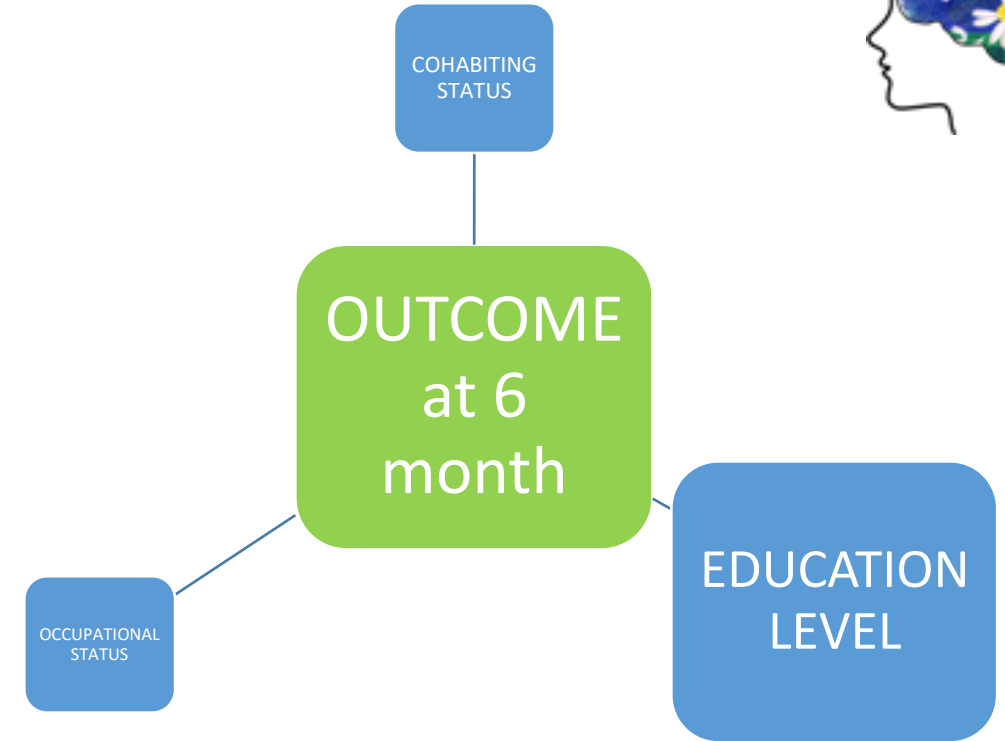


☐ Gender and Race
No significant difference

☐ Cohabiting
Better outcome for cohabiting patients

☐ Occupational status
Lower probability of unfavorable outcome in active patients

☐ Educational status
Better Outcome for highly educated patients





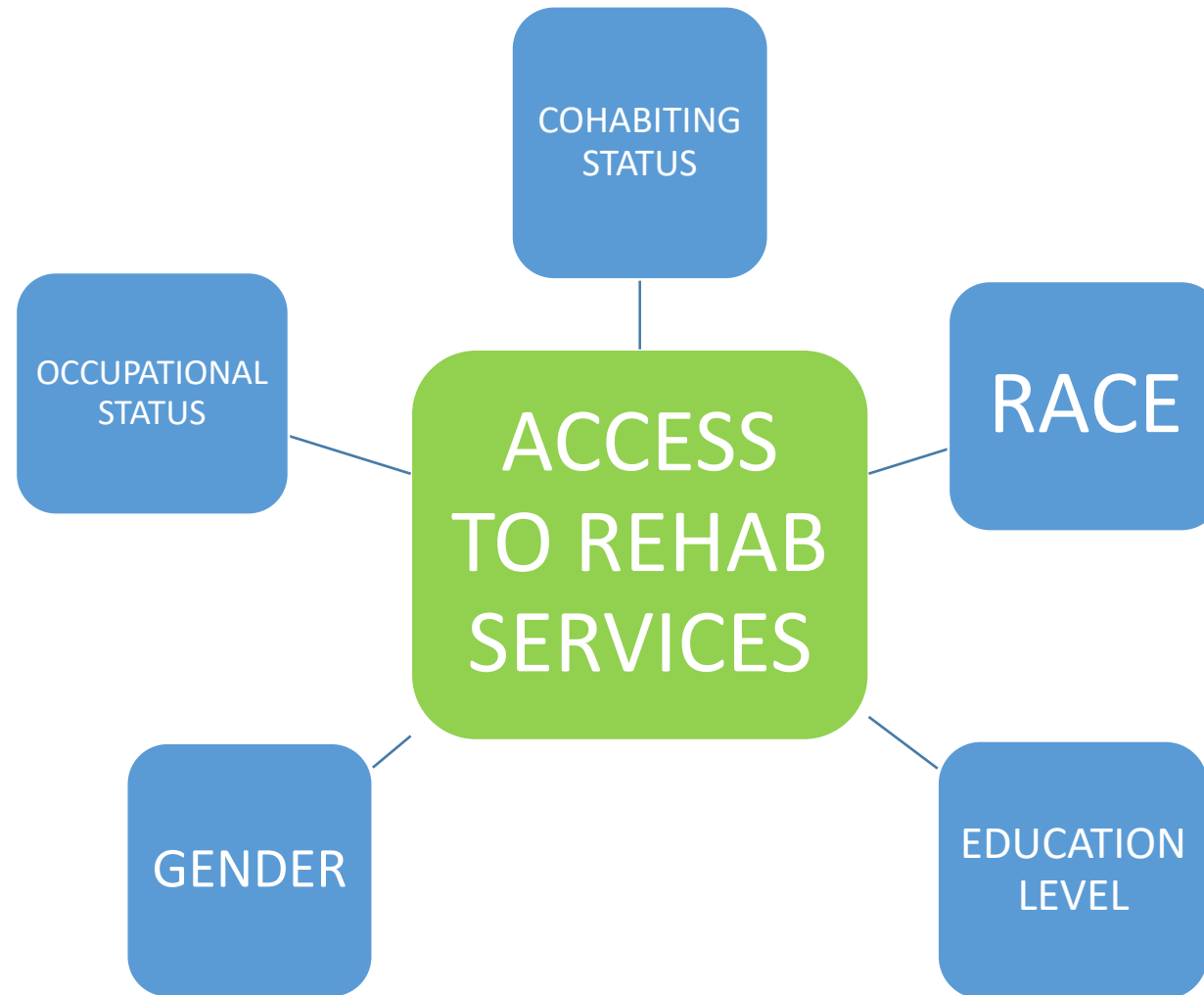
Access to rehab categories

CATEGORY OF REHAB SERVICES	
Basic rehab services	658
Multidisciplinary rehab services	210
No rehab	338

ACCESS TO REHAB	
rehab after discharge	868
no rehab after discharge	338



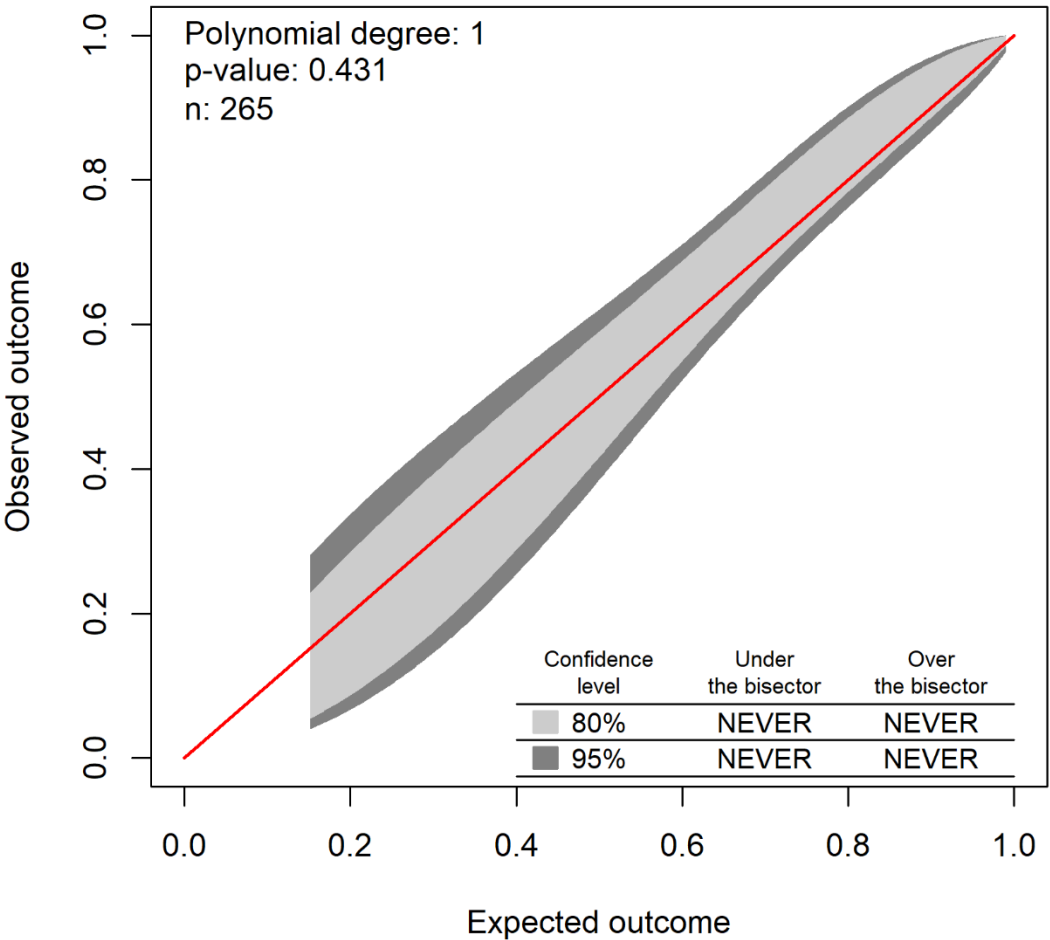
How do demographics influence access to rehab services?



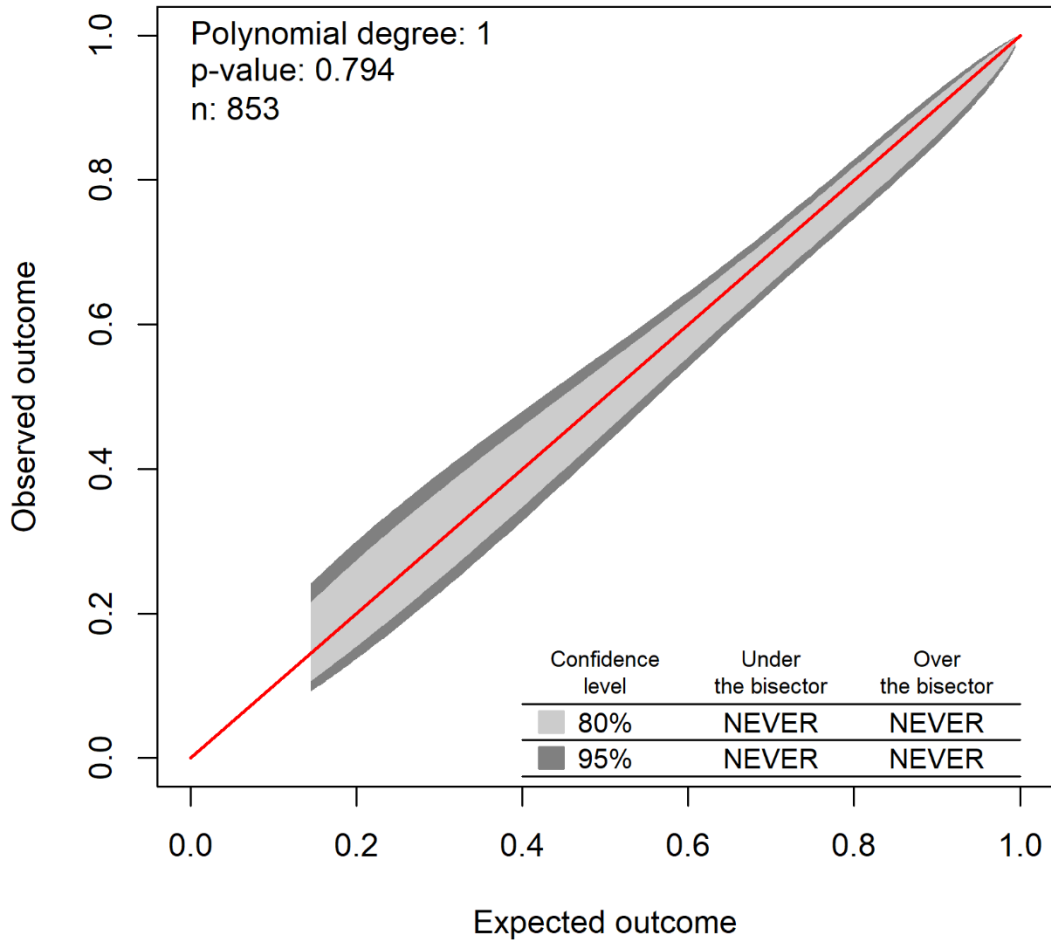


Gender/Access to rehab

FEMALE



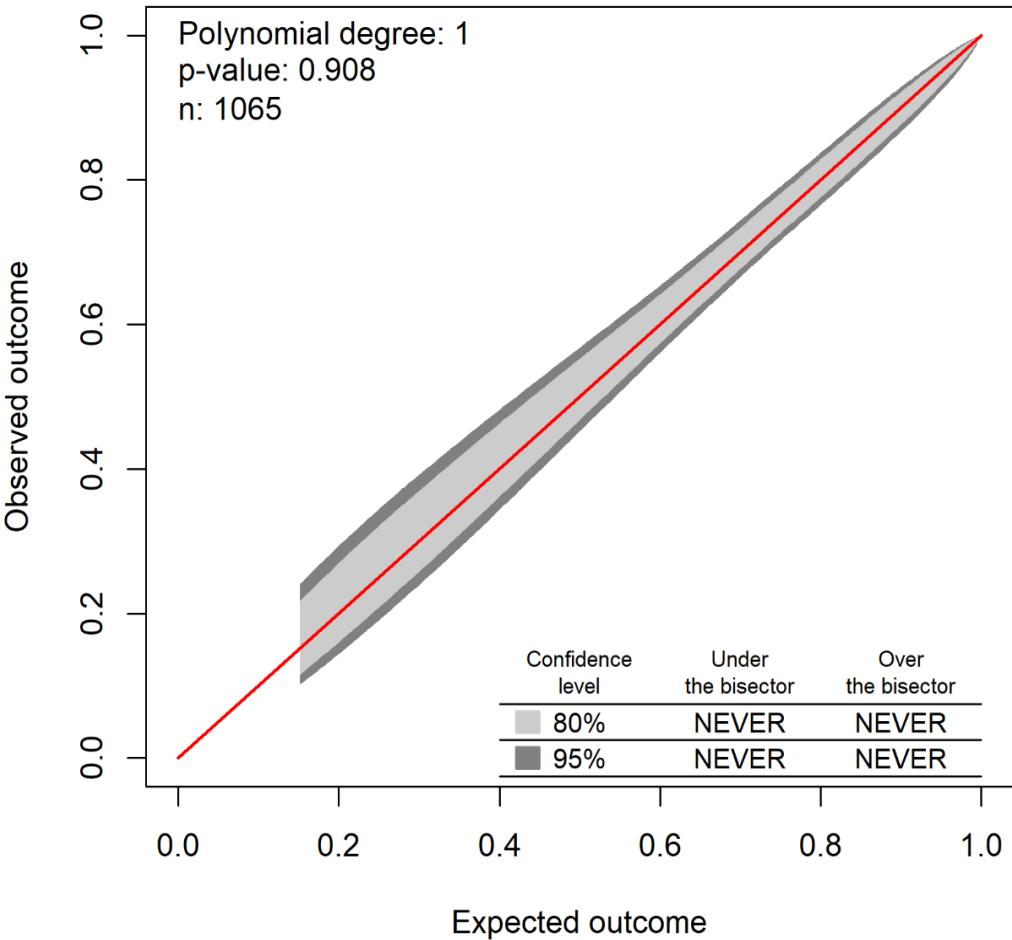
MALE



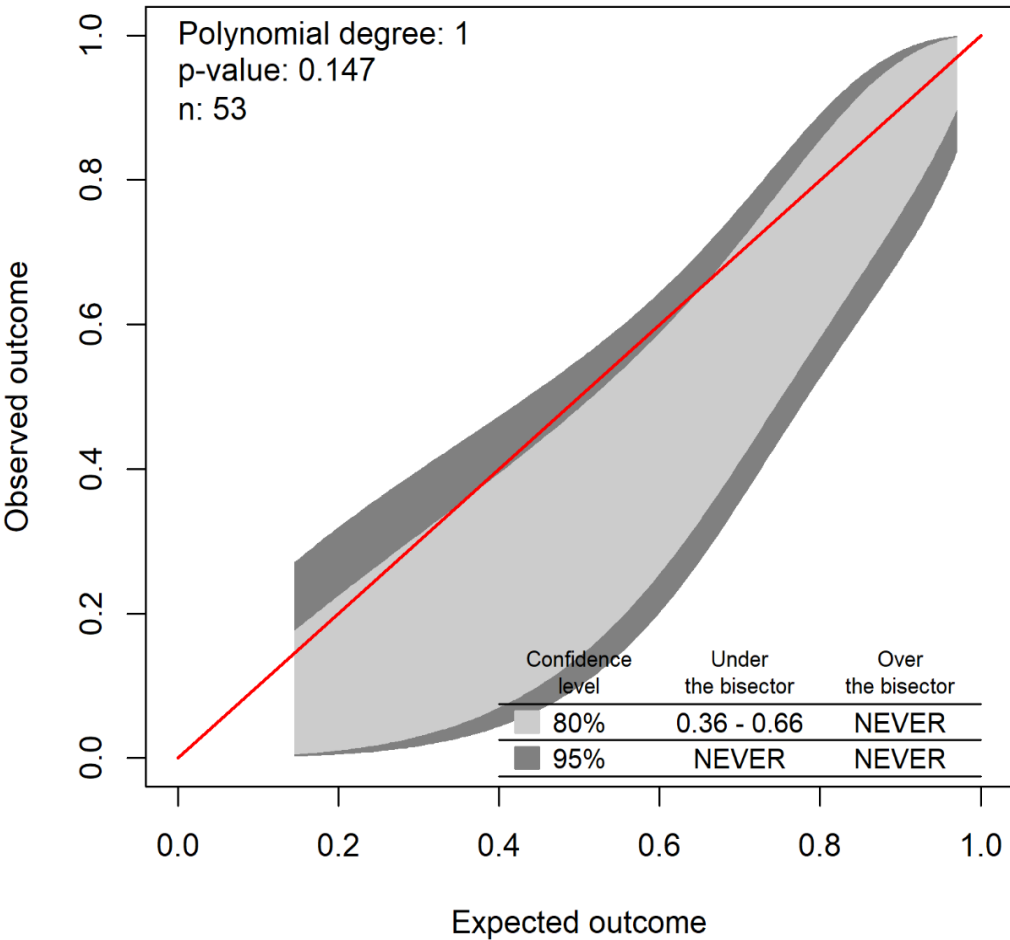


Race/Access to rehab

WHITE EUROPEAN



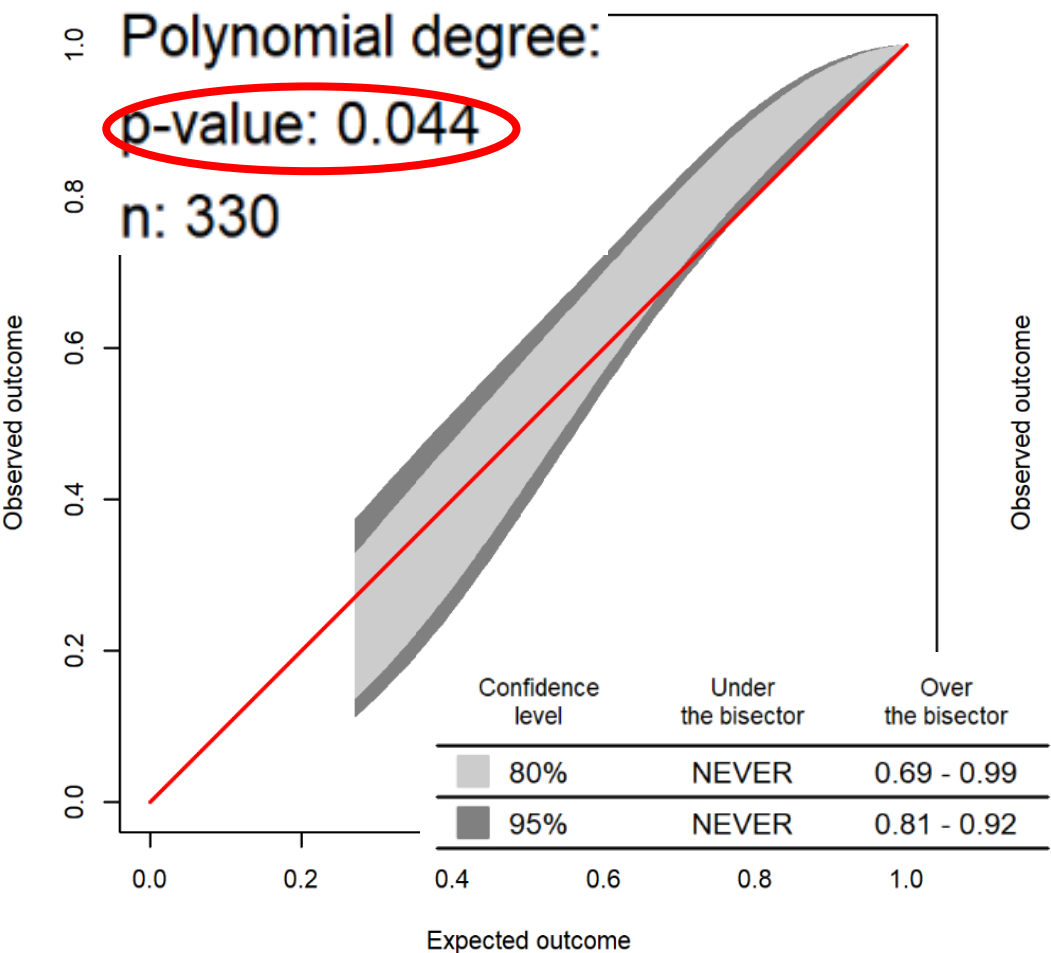
NON WHITE EUROPEAN



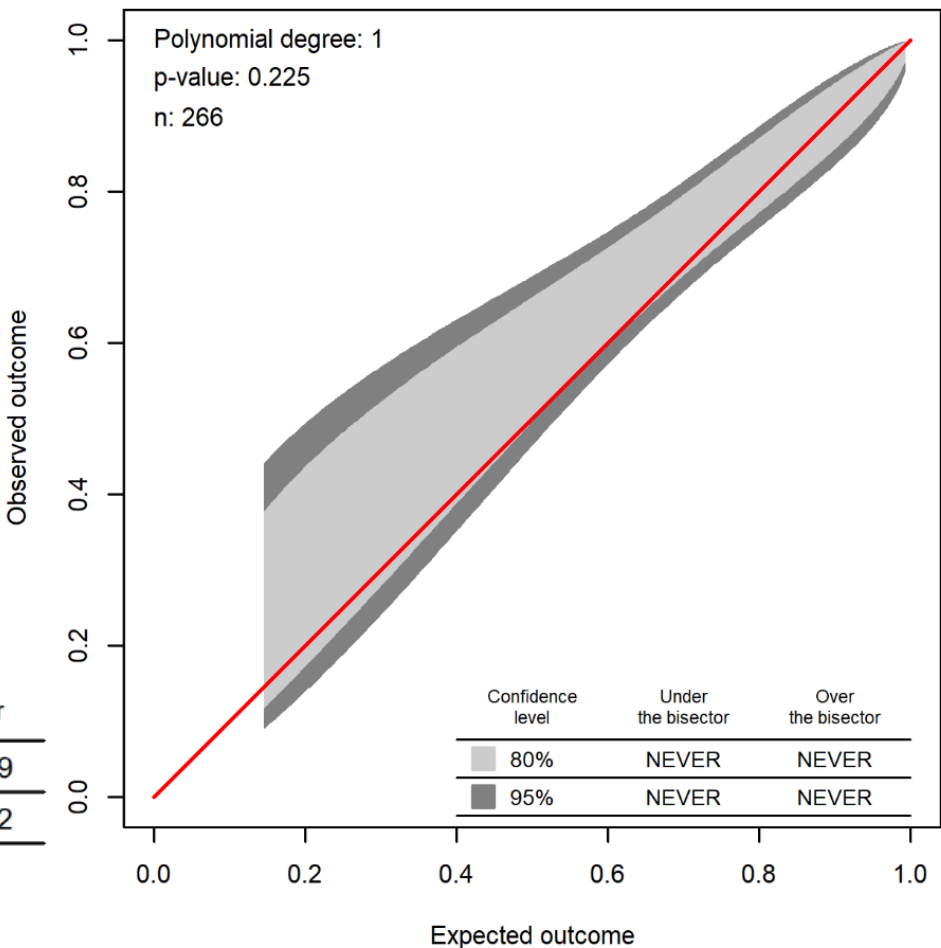


Educational level/Access to rehab

HIGH EDUCATION



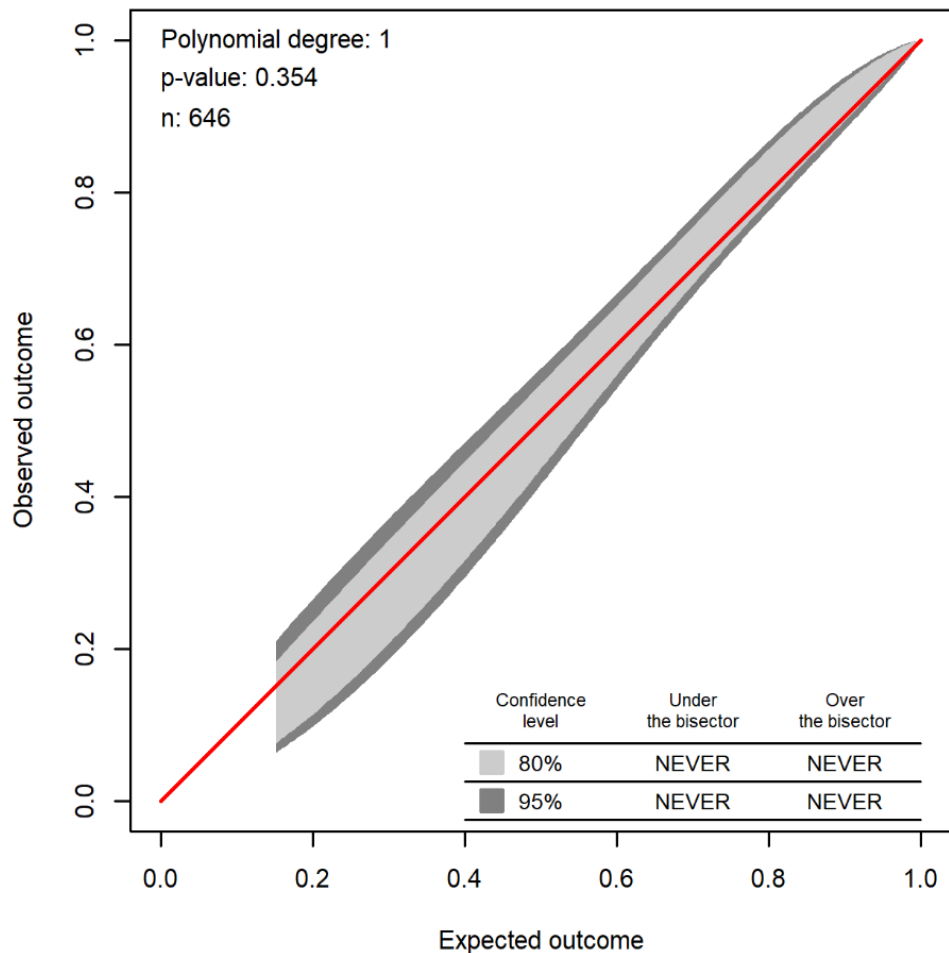
LOW EDUCATION



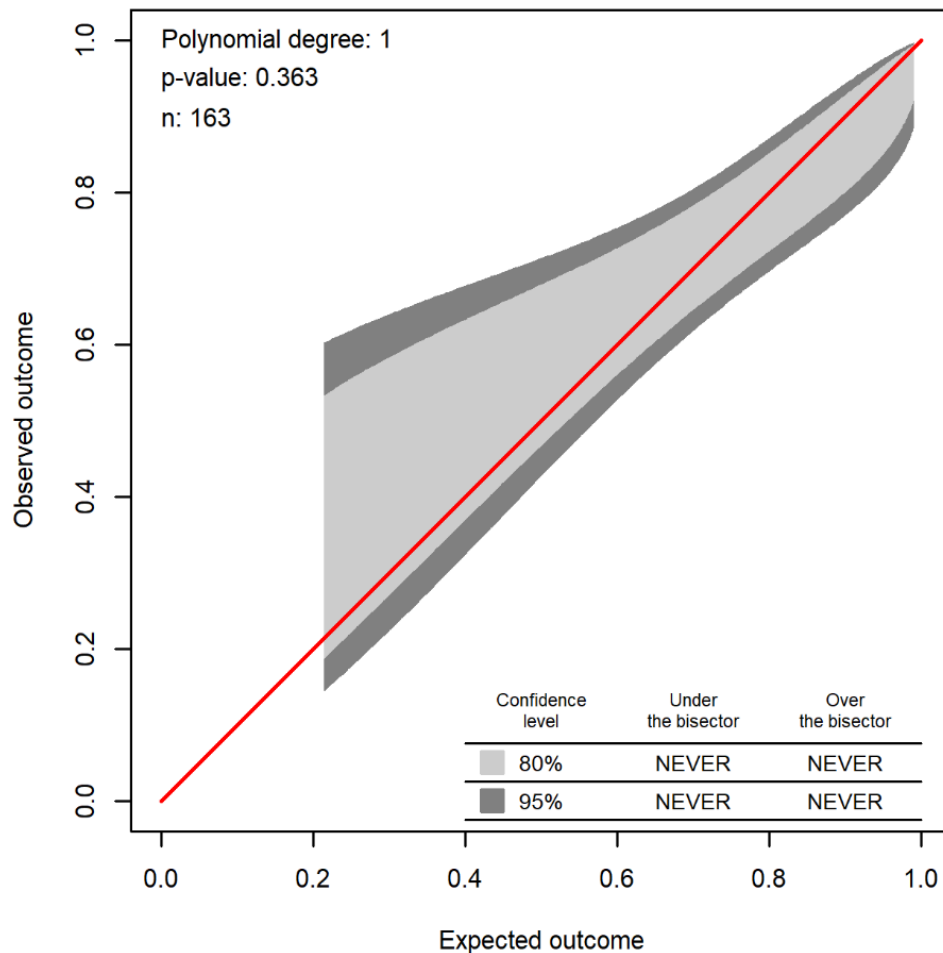


Cohabiting status/Access to rehab

COHABITING



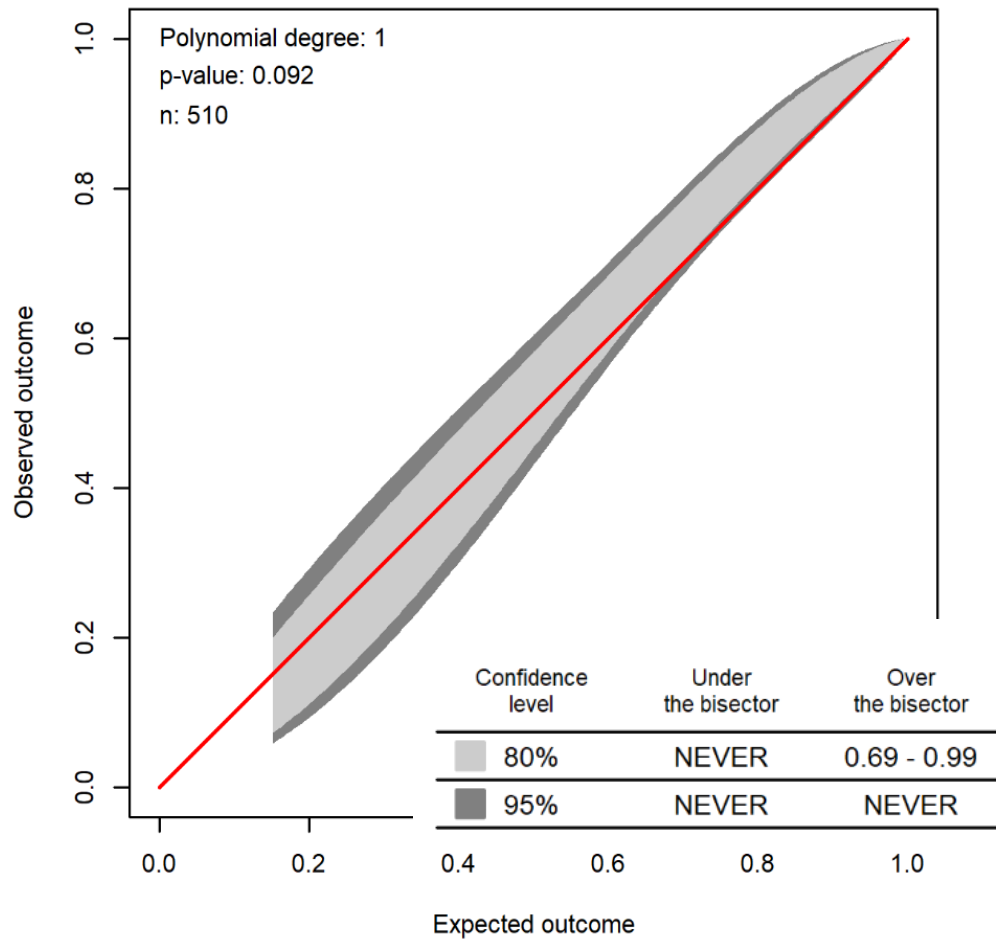
NON COHABITING



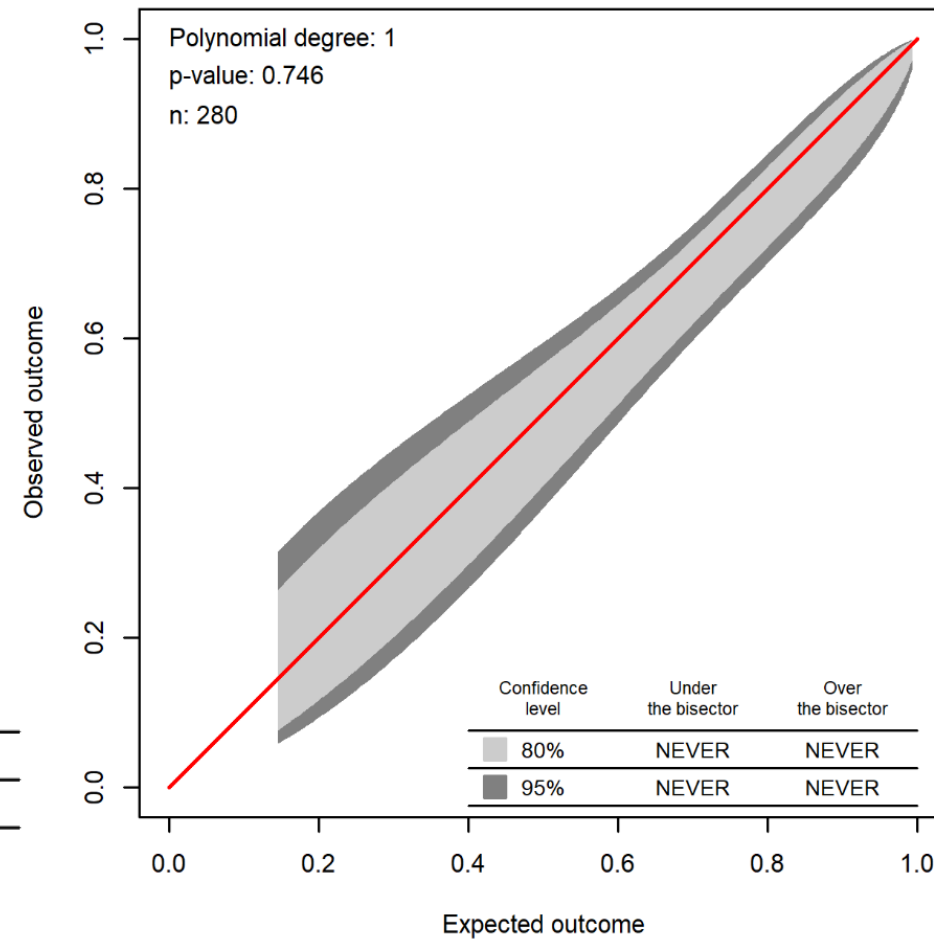


Occupational status/Access to rehab

ACTIVE



NON ACTIVE



Demographics/Access to rehab Results Summary

☐ Gender

No significant difference

☐ Race

Less probability to access rehab for non white

☐ Educational status

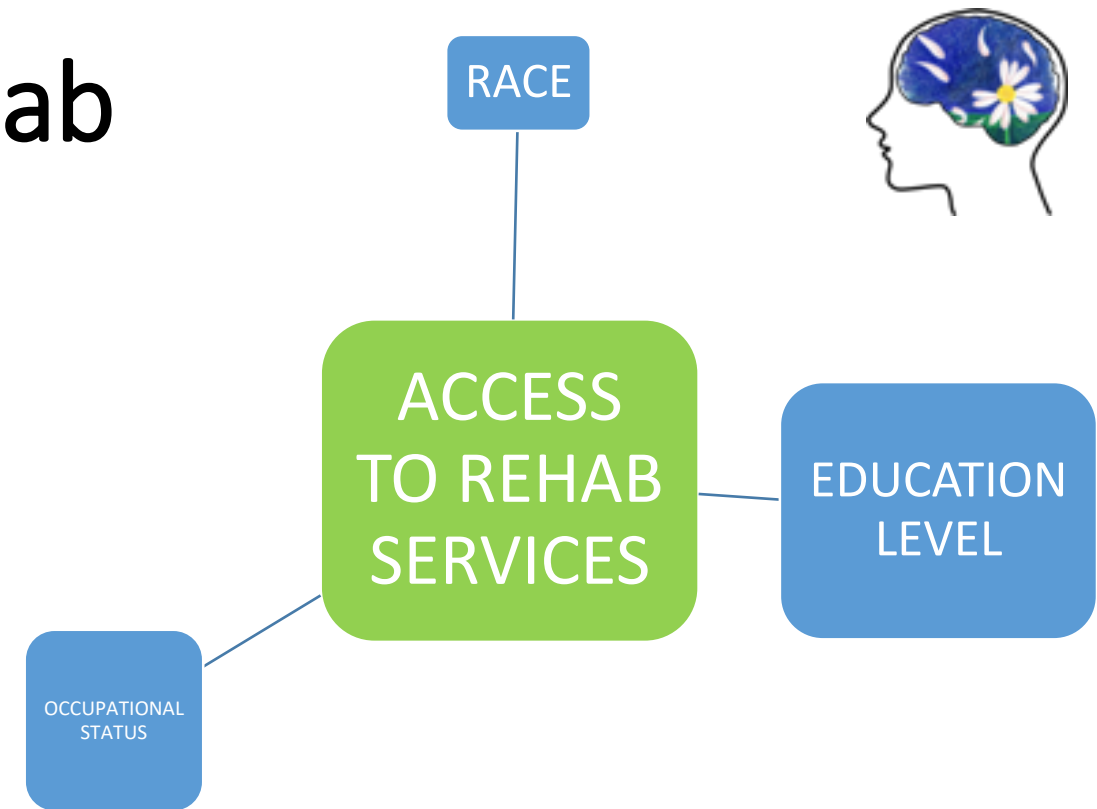
Higher probability to access rehab for higher educated patient

☐ Cohabiting

No significant difference

☐ Occupational status

Higher probability to access rehab for those who were active





Conclusions

- ☐ Preliminary results show that some demographic data has an influence on outcome
- ☐ Some of these demographic characteristics influences access to rehab services
- ☐ Does 'Social Complexity' influences outcome?

CREACTIVE

Collaborative REsearch on ACute Traumatic brain Injury in intensiVe care medicine in Europe



Grazie

27° Meeting GiViTI

7-8-9 Novembre 2018