

Title	Health service utilization and related costs attributable to diabetes
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Publication date	2018-08-28
Original Citation	O'Neill, K. N., McHugh, S. M., Tracey, M. L., Fitzgerald, A. P. and Kearney, P. M. (2018) 'Health service utilization and related costs attributable to diabetes', Diabetic Medicine. doi:doi:10.1111/dme.13806
Type of publication	Article (peer-reviewed)
Link to publisher's version	doi:10.1111/dme.13806
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Download date	2025-04-22 02:50:38
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Supporting Information

Appendix 1 - Model Diagnostics for Multivariable Model

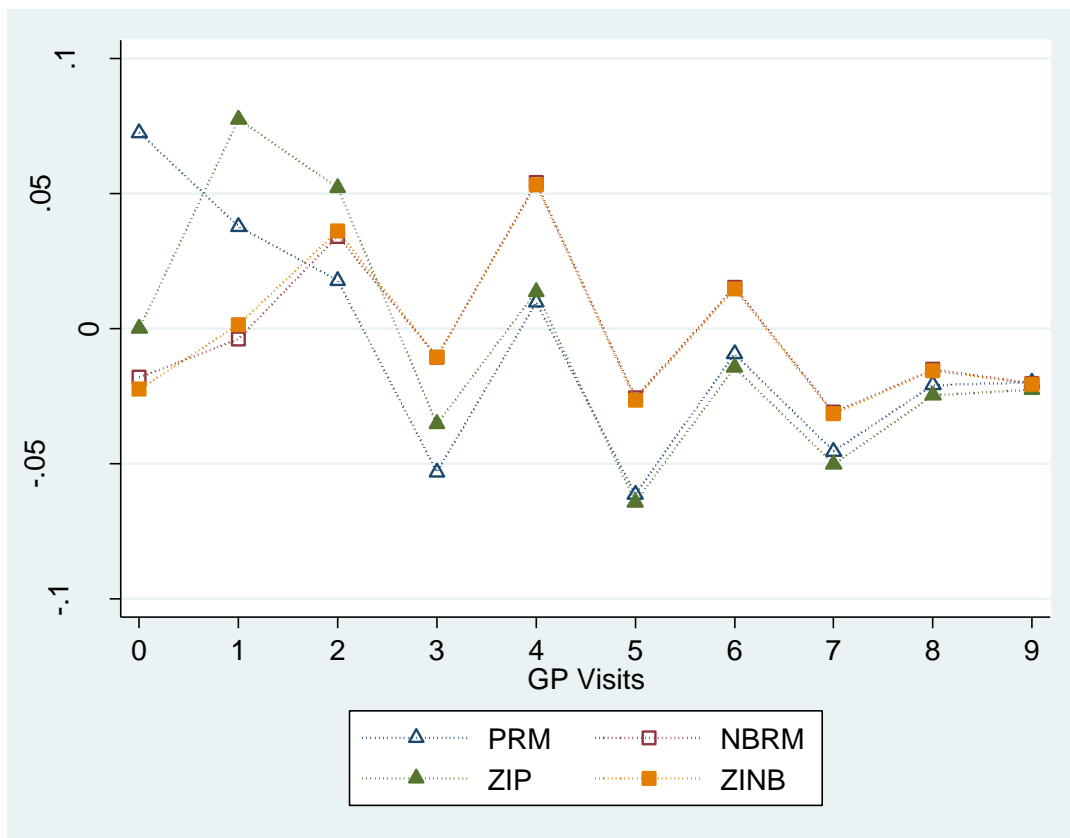
	Poisson	Negative Binomial	Zero-inflated Poisson	Zero-inflated Negative Binomial
GP visits				
AIC	44973.985	37896.424	43761.648	37876.907
BIC	45057.991	37987.430	43929.660	38051.919
Mean difference between observed and predicted counts	0.035	0.023	0.036	0.023
Out-patient department				
AIC	30296.569	22843.915	24775.994	22694.836
BIC	30380.574	22934.921	24944.006	22869.849
Mean difference between observed and predicted counts	0.057	0.005	0.020	0.005
Hospital admission				
AIC	9031.183	8034.123	8209.350	8203.378
BIC	9115.189	8125.129	8377.361	8028.366
Mean difference between observed and predicted counts	0.012	0.002	0.004	0.002
A&E attendance				
AIC	9999.863	8986.221	9191.499	8986.277
BIC	10083.869	9077.227	9359.510	9161.289
Mean difference between observed and predicted counts	0.013	0.002	0.004	0.002

Table S1 – Evidence for Model Selection

AIC - Akaike Information Criterion

BIC - Bayesian Information Criterion

Figure S1 – Residual plot: GP visits



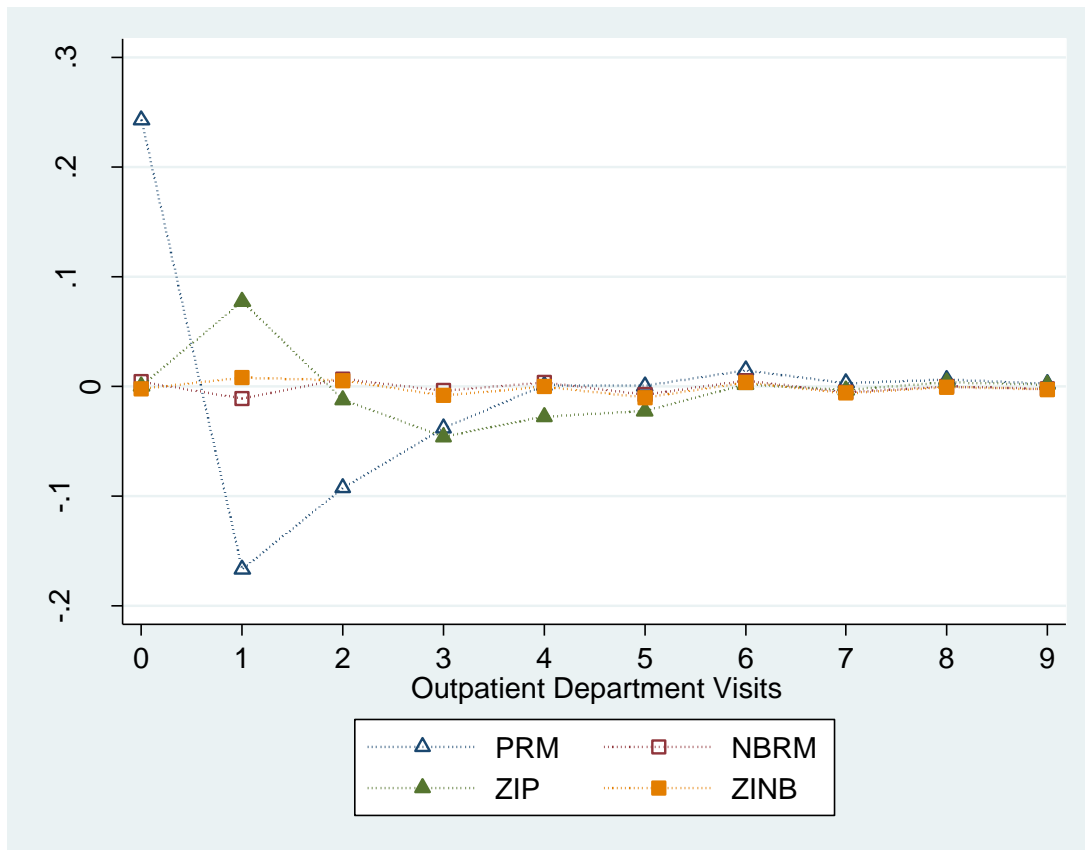
PRM – Poisson Model

NBRM – Negative Binomial Model

ZIP – Zero-inflated Poisson Model

ZINB – Zero-inflated Negative Binomial Model

Figure S2 – Residual plot: Outpatient Department Visits



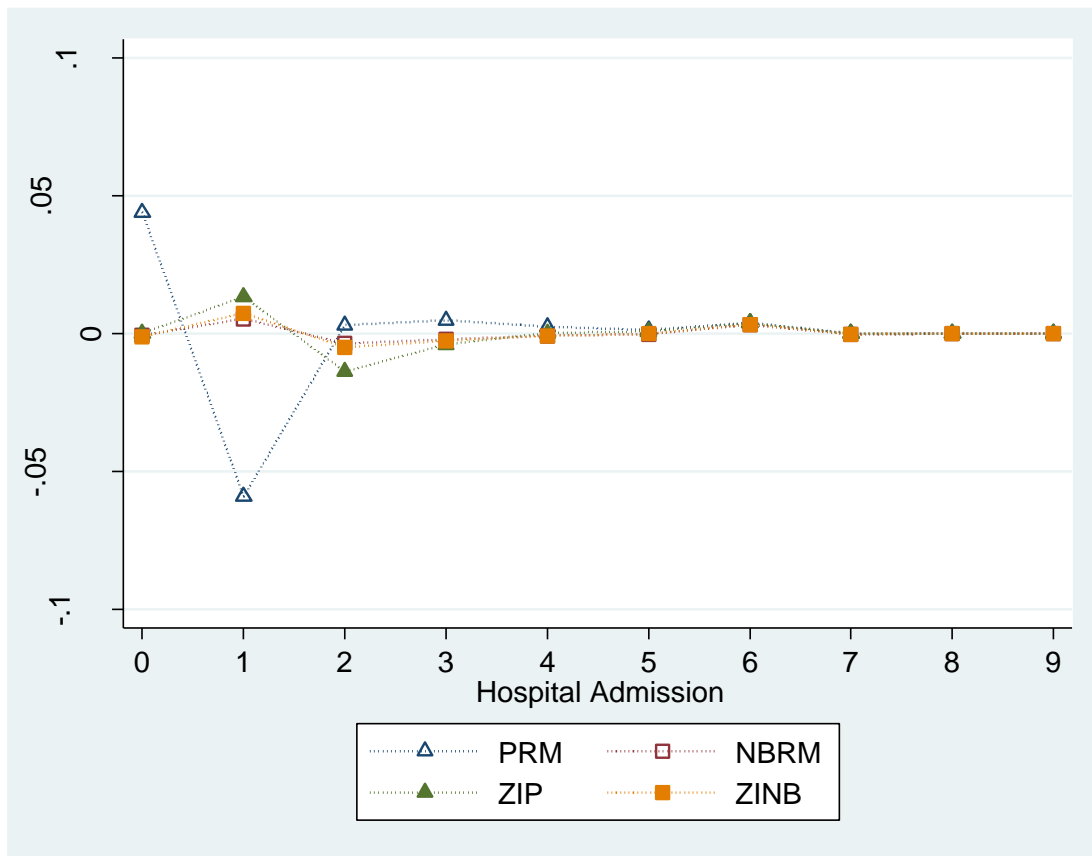
PRM – Poisson Model

NBRM – Negative Binomial Model

ZIP – Zero-inflated Poisson Model

ZINB – Zero-inflated Negative Binomial Model

Figure S3 – Residual plot: Hospital Admission



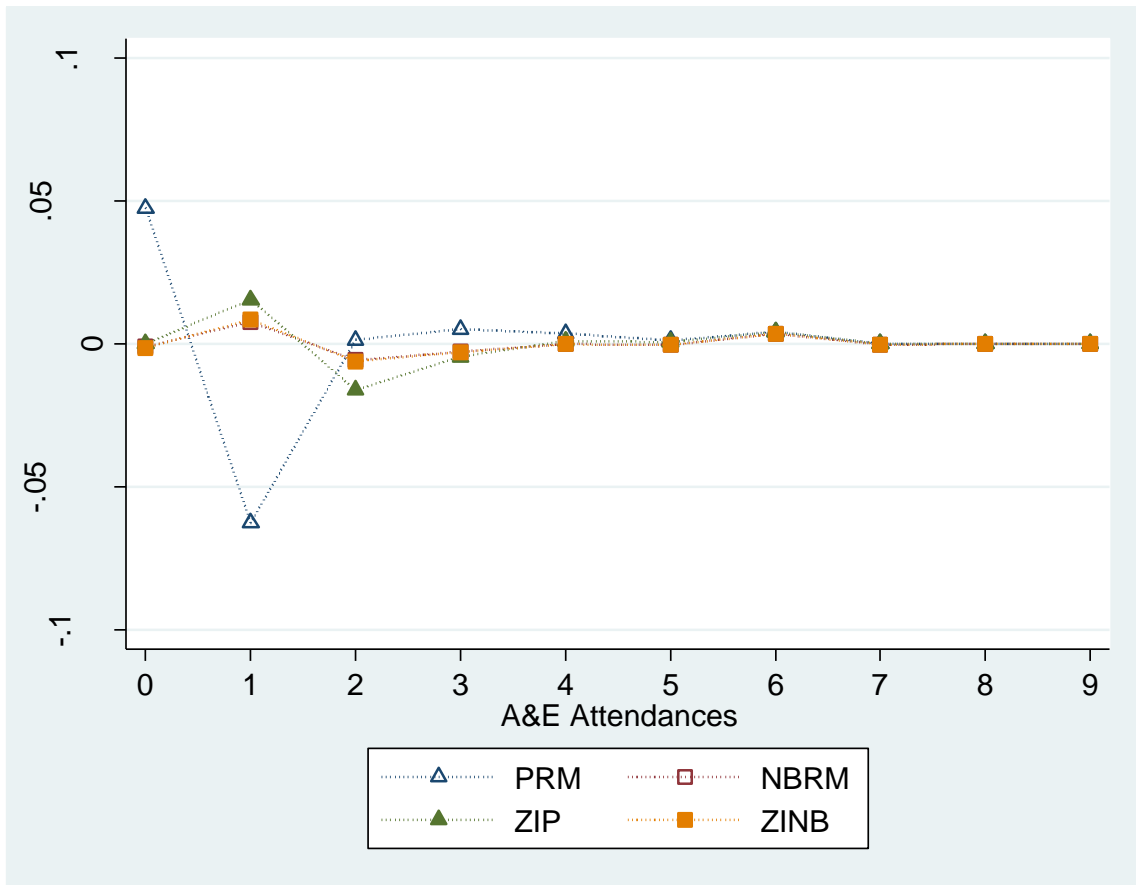
PRM – Poisson Model

NBRM – Negative Binomial Model

ZIP – Zero-inflated Poisson Model

ZINB – Zero-inflated Negative Binomial Model

Figure S4 – Residual plot: A&E Attendances



PRM – Poisson Model

NBRM – Negative Binomial Model

ZIP – Zero-inflated Poisson Model

ZINB – Zero-inflated Negative Binomial Model

Appendix 2 - Health Service Utilisation and Socioeconomic Status

Table S2 – Health Service Utilisation Stratified by Diabetes and Public Health Insurance Cover*

	Diabetes			No Diabetes		
	Public health insurance (n=281)	Other (n=340)	p-value	Public health insurance (n=2,310)	Other (n=5,176)	p-value
GP visits						
Attended past year	98	94	0.006	92	84	<0.001
Mean (SD) no. visits past year	7.2 (5.3)	4.4 (4.6)	<0.001	5.2 (4.5)	3 (3.4)	<0.001
Outpatient department visits						
Attended past year	64	58	0.1	42	38	0.002
Mean (SD) no. visits past year	2.5 (2.9)	1.8 (2.7)	0.005	1.3 (2.2)	1 (2)	<0.001
Hospital admissions						
Attended past year	23	17	0.06	16	11	<0.001
Mean (SD) no. visits past year	0.4 (0.9)	0.2 (0.6)	0.02	0.2 (0.6)	0.1 (0.6)	<0.001
A&E attendance						
Attended past year	24	17	0.05	18	13	<0.001
Mean (SD) no. visits past year	0.4 (0.8)	0.3 (0.8)	0.2	0.3 (0.7)	0.2 (0.6)	<0.001

*Public health insurance cover was used as a proxy variable for socioeconomic status. Individuals with private insurance, dual cover or no cover were classed as "Other"