

The cost of primary care consultations associated with long **COVID** in non-hospitalised adults: a retrospective cohort study using UK primary care data

Jake Tufts, Dawit T Zemedikun, Anuradhaa Subramanian, Naijie Guan, Krishna Gokhale, Puja Myles, Tim Williams, Tom Marshall, Melanie Calvert, Karen Matthews, Krishnarajah Nirantharakumar, Louise Jackson, Shamil Haroon

National Institute for Health Research NIHR



Background

Long COVID is one of the largest public health **challenges** associated with the COVID-19 pandemic

Worldwide 630 million people with COVID-19; 40 million with long COVID



Health resources utilisation (e.g., GP consultation) post-infection

No long COVID Diagnosed long COVID Long COVID symptoms

COVID-19 patients

Data source: The Clinical Practice Research Datalink (CPRD) Aurum

• **Cost of illness estimation**: bottom-up costing approach



Unit cost Costs/person UK national costs

Notes: Unit cost: consultation cost per working hour were from Personal Social Services Research Unit's (PSSRU) Unit Costs of Health and Social Care 2021

• **Regression models:** multivariable regression models

15/04/2020 Start time: estimate the cost of Long COVID

12 weeks post index date (Main analysis)

15/04/2021 Study end date

VS

Outcomes

Study aims?

Incremental costs of primary care **consultations** associated with long COVID

Risk factors associated with these costs



POST-COVID

YNDROME

Healthcare costs COST



31/01/2020 Study start date.

Index date

3 months after 12 weeks post index date (Sensitivity analysis)

Results

- The annual incremental cost of primary care consultations associated with long COVID: £2.44/patient
- **£5.72/patient** in sensitivity analysis
- National incremental cost: £23,382,452 (90% CIs: £21,378,567 £25,526,052) • **£54,814,601** (90% CIs: £50,116,967 - £59,839,762) in the sensitivity analysis
 - : A long COVID diagnosis: 43% increase in primary care consultation costs, compared to patients without long COVID symptoms
 - : A reporting of long COVID symptoms: 44% increase in primary

care consultation costs, compared to patients without long COVID symptoms **COVID-19** patients

Conclusions

The costs of primary care consultations associated with long COVID in non-

Implications

Require **substantial investment** globally to ensure adequate primary care services.

hospitalised adults are **substantial**.

Costs are significantly **higher** among those diagnosed with **long COVID**, those with long COVID symptoms, older adults, females, and those with obesity and comorbidities.

Training allied healthcare professionals & implementation of guidelines for long COVID diagnosis and care might be helpful.

Risk factors should be considered when designing and resourcing long COVID services in primary care.

References

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CONTACT INFORMATION n.guan@bham.ac.uk