

INTRODUCTION

The phenomenon of “Long-COVID” is broadly defined by the persistence of physical and/or psychological and cognitive symptoms following a SARS-CoV-2 infection, usually 3 months from acute infection and lasting longer than 2 months^[1]. Patients are currently being assessed for this “Long-COVID syndrome” in the general Infectious Diseases clinic in the Mercy University Hospital, Cork. Patients presenting with “Long-COVID” have a workup to exclude ongoing organ damage, inflammation, thrombosis and are screened for other medical conditions which may present in a similar way. Since long-COVID is a still evolving field and this clinic is a new service, the exact burden on healthcare is yet to be determined^[2]. Micro-costing is a cost estimation method that enables precise estimation of economic costs for health interventions, hence one of the best methods to analyse this^[3].

AIMS

- To quantify the cost associated with ambulatory care of patients in the ‘Long-COVID’ outpatient clinic.
- To carry out generalised and personalised resource utilisation analysis for the first 45 patients who attended the clinic.

METHODS

- A micro-costing study was carried out on a cohort of the first 45 outpatients assessed for Long-COVID that have completed follow-up at the Mercy University Hospital, Cork, Ireland.
- The costs per person were calculated based on patient flow pathway, staff grade, time and types of investigations done, with discussion with hospital administration to calculate individual component costs.
- All hospital resources used in the assessment of these patients were identified from service analysis and patient notes retrospectively.
- Associations between baseline patient characteristics and costs per patient (in 2022 euros) were examined using univariate and multivariate analyses.

RESULTS

- Average cost of providing care: **€781** (95% confidence interval €639-923) per patient
- Cohort of patients (total:45)
 Average **Age** of patients: 48 (21-74)
 50% was overweight or obese
Gender: 40 females, 5 males
 45% had pre-existing anxiety disorder
- The breakdown of costings (Image 2) were 1% non-medical staffing, 26% medical staffing, 29% bloods (Image 3), 11% imaging and 33% other investigations
- Outcome: the work-up for 80% did not show significant abnormalities (Image 4,5)
 - Obstructive Sleep Apnoea (OSA) assessment: 6 (13%)
 - Cardiomyopathy assessment: 2 (4%)
 - Psych referral: 14 (31%)
 - Reassured, discharged - 100%

Image 1. Age & Sex vs. Cost

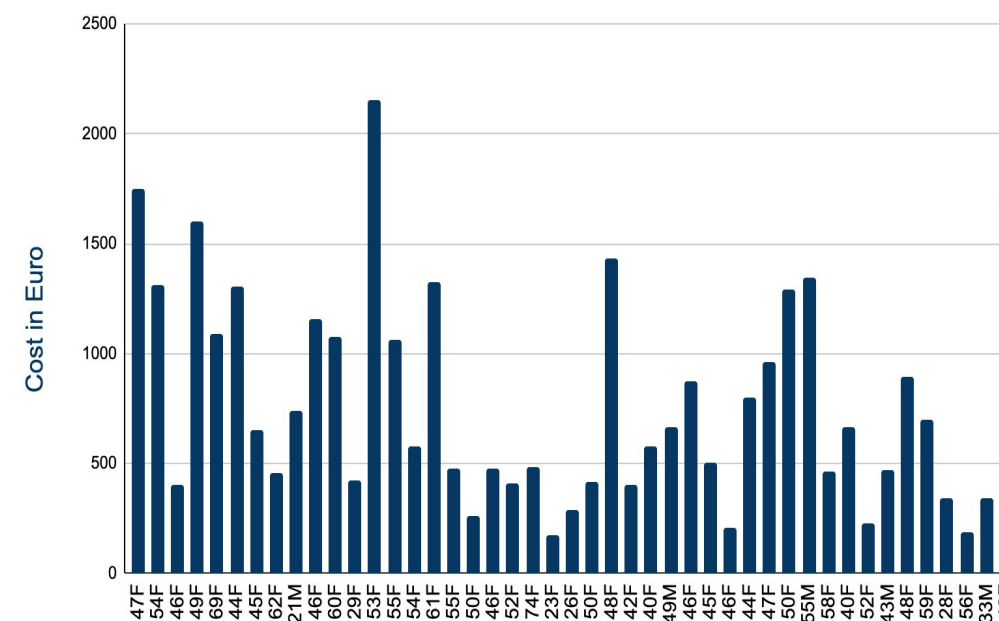


Image 3. Blood Investigations

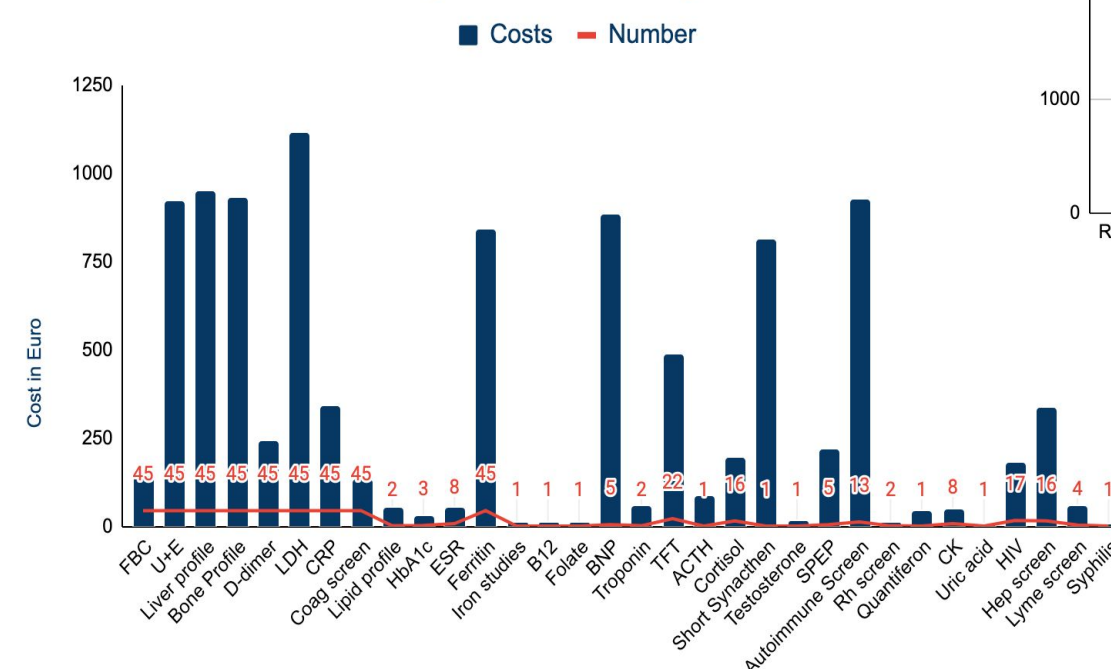


Image 2. Total cost breakdown

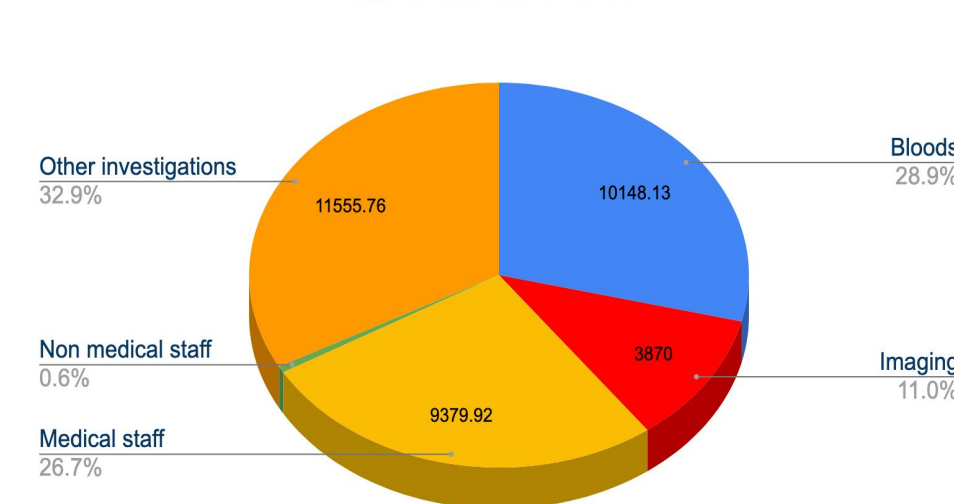


Image 4. Referrals and Total cost

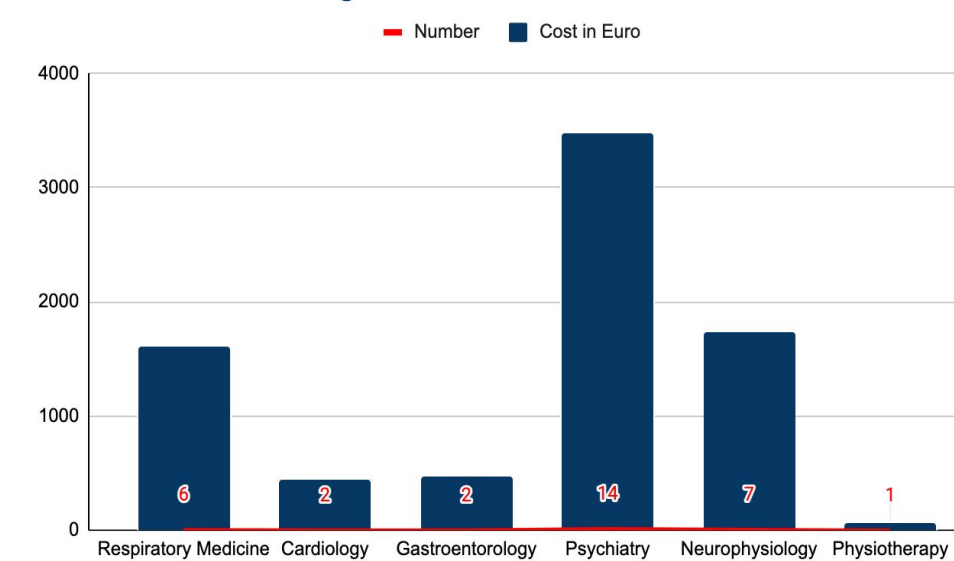
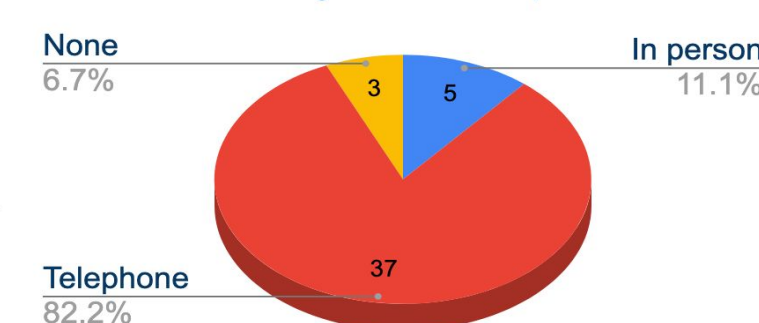


Image 5. Follow up



CONCLUSIONS

- These data are valuable for planning services at a local level and informing national policy.
- The identification of patient-specific factors associated with resource use gives valuable prognostic information.
- Describing the characteristics of our cohort of patients attending for “Long-COVID” allows focus and investment in managing possible co-morbidities.
- Our data allows for planning for increased staffing and increased patient output with time.
- The data on specific investigations carried out can guide initial management of Long COVID in a community setting before referral to a specialised service.
- The identification of the costs in association with specific patient factors can guide allocation of funds according to needs of each patient cohort

FUTURE STEPS

- We currently use patient reported data, observational data and clinical characterisation to tailor effective management of Long COVID, which are all subject to biases.
- Long COVID holds the potential to produce a second public health crisis on the heels of the pandemic itself. Proactive efforts to identify the characteristics of this heterogeneous condition are imperative for a rigorous scientific effort to investigate and mitigate this threat.

REFERENCES

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