

A retrospective review of resource utilization over a 6 month period and patient demographics at the COVID clinic in St James's Hospital.

Peter Conlon¹ Kaitlyn O'Brien¹ Colm Kerr^{1,5} Brian Kent^{2,5} Parthiban Nadarajan² Kate O'Brien³ Kathleen Clancy⁴ Ciaran Bannan^{1,5}

Introduction

The COVID-19 epidemic began in Wuhan, China in December 2019. Since then, there have been over 600 million cases worldwide [1]. The term 'Long COVID' was first coined in May 2020 [2] and since then, the definition has undergone many revisions. Long COVID is defined by the WHO as the continuation or development of new symptoms 3 months after the initial SARS-CoV-2 infection, with these symptoms lasting for at least 2 months with no other explanation [3].

In St James's, the COVID clinic combines both 'post-acute COVID' and 'long covid' and is serviced by the Respiratory and Infectious Disease in conjunction with the physiotherapy department, occupational therapy department and the department of neurology.

We aim to define our patient cohort and to determine what resources are being used to allow future planning for the clinic.

Methods

From October 2022 – March 2023, we prospectively completed a survey form for each patient. This included referral source, whether the patient was new or returning, planned referrals to physio, occupational therapy, psychological medicine, and otherwise. It also included investigations planned, including; phlebotomy, ECG, Holter, echocardiography, chest x-ray, CT thorax, PFTs, and sleep studies.

We retrospectively analyzed this data to determine how many investigations returned an abnormal result.

We defined an abnormal PFT result as DLCO < 75% and an abnormal overnight oximetry result as an adjusted ODI > 5.

However we recognize that this doesn't account for a proportion of patients with reactive airways disease which may or may not be multifactorial.

Results

In the last 6 months, the St James's COVID clinic saw a total of 328 patients (Table 1). 68% (n=224) were female, the median age was 48 years old. 45% (n=148) are new patients and 44.8% are GP referrals. 24% (n=81) of patients were discharged in these 6 months. The median follow-up appointment was 4 months.

Discussion

This data demonstrates the growing nature of the Covid clinic. 148 new referrals were accepted, 60% (N=90) of which came from GPs. 81 patients were discharged from clinic in the last 6 months resulting in a net gain of 67 patients. With a median follow-up appointment of 4 months, the total number of patients attending appointments is growing.

Physiotherapy and occupational therapy were referred 96 and 91 patients respectively (Table 2). These patients are followed up in a structured programme outside of the Post COVID clinic which represents a significant body of work that isn't captured in this data.

13 CT thoraxes were ordered, of which 38% (n=5) were abnormal. Of these 5 abnormal CTs 60% (n=3) had normal PFTs.

A total of 40 Holters or echocardiograms were ordered, only 3 of which had been completed in this period. Prolonged waiting times for cardiology investigations may play a role in the delay in discharging patients from the clinic.

72 requests were made to the respiratory lab for PFTs and only 4% (n=3) were abnormal based on DLCO. However, we recognize that this doesn't capture those with reactive airways disease. This may represent the changing dynamics of the Omicron variant of COVID-19.

¹ Department of Infectious Disease, St James's Hospital, Dublin, Ireland

² Department of Respiratory Medicine, St James's Hospital, Dublin, Ireland

³ Department of Physiotherapy, St James's Hospital, Dublin, Ireland

⁴ Department of Occupational therapy, St James's Hospital, Dublin, Ireland

⁵ School of Medicine, Trinity College, Dublin

Table 1

Total patents	328.00
Female	68.3 %
Age mean	48.6
Age median	48
New patients	45.1 %

Table 2

MDT involvement	% (N)
OT	27.7 (91)
PT	29.3 (96)
Occupational health	8 (29)
Psychological med	6.7 (22)
Neurology	9.5 (31)
Other	14.3

Investigation	% (n)	Abnormal (n)	%note done yet (n)
Phlebotomy	45.7	n/a	n/a
ECG	3.7	n/a	n/a
Holter	6.1 (20)	0 (0)	95 (19)
Echo	6.1 (20)	50 (1)	90 (18)
Cardiac MRI	0.3 (1)	N/a	100 (1)
CXR	19.5 (64)	7.8 (5)	0 (0)
CT thorax	3.9 (13)	38.5 (5)	15 (2)
PFTs	21.9 (72)	4.2	43.1 (31)
Overnight oximetry	16.5 (54)	11.1 (6)	25.9 (14)

Conclusions

The COVID clinic is seeing growing numbers of patients in St James's and is using a wide variety of resources including physiotherapy, occupational therapy, and neurology. The bulk of the investigations that we request come from the cardiology and respiratory department. This data will help plan for the future of the COVID clinic.