

# Improving Efficacy and Sustainability of Virtual Cardiology Clinics.

Ibrahim Yearoo

Cardiology Department , Beaumont Hospital , Dublin , Republic of Ireland

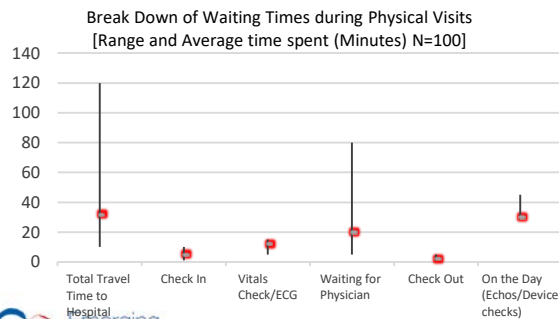
The COVID-19 outbreak has placed Health Services under significant strain. Social distancing measures were introduced in the Republic of Ireland in March 2020 and virtual consultations (via telephone or video call) were identified as a potential alternative to face-to-face visits at this time.

## OBJECTIVES

☀ Strategies to keep clinics going had to be developed while ensuring safety of patients and hospital staff and ensuring that quality of care is maintained

**Physical Visit Issues:**  
Looking back allowed identification of 'wasteful' processes in the clinic that did not add value to patient's experience. The average total observed time outside of the physician's examination room was 39 minutes. (Range from 12min. to 110min. on busy days or reduced staff OPD cover).

Increased delays were noted for patients requiring on the day investigations like cardiac device checks or Transthoracic Echocardiography. The average face-to-face consultation time was 24mins.

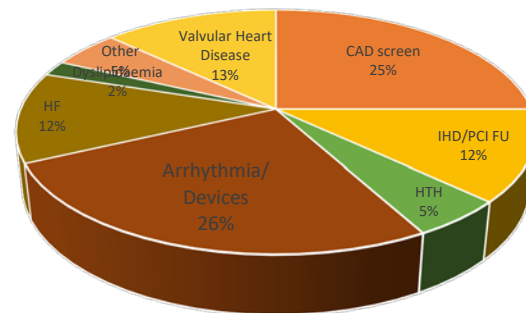


## MATERIALS AND METHODS

We started the clinic transition to virtual visits in March 2020 and reflect on 100 consecutive patients' experience in virtual visits. Clinic metrics were tracked. Electronic survey responses were collected from patients attending virtual visits. Input from our cardiology team (Clerical, OPD nursing and physicians) were collected.

## RESULTS

Virtual Patients Cohort (N=100)

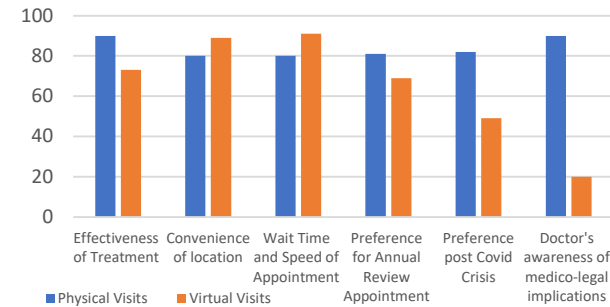


Following the target of 75% virtual consultations being set, 81% of consultations were delivered virtually during the period of July to December 2021. Average time spent for a virtual consultation was 19 minutes.

We managed to increase patient volume (5 additional new patients per week per clinic) and reducing the waiting time for routine OPD from 44 weeks to 40 weeks. Discharge from clinic at the third visit was encouraged and prompted if clinically indicated.

Survey of patients attending virtual visits found that most were equipped with technology - smartphone or computer with internet (89%), had access to a private location (94%), and most were able to access the visit without any limitations should we move to telemedicine on secured Hospital E-platforms (76%).

Review of Satisfaction scores (%): 'Very satisfied , extremely satisfied' only. (1-5 scale)



Our patients appreciated the convenience of virtual visits but sometimes missed the personal connection of an in-person visit. Overall, though, virtual visits were frequently viewed as no different than office visits. Team members identified benefits and challenges of virtual visits, as well as lessons learned from this transition.

Overall patients and physicians satisfaction scores (82.5 out of 100) following a sudden, unanticipated transition to virtual visits were very encouraging.

Satisfaction scores were high for virtual consultations (90/100 for patients and 75/100 for clinicians); however, outside of the COVID-19 pandemic, phone/video consultations would be preferred less than 50% of the time. Information to support the future redesign of virtual outpatient services was collected

## CONCLUSION

Virtual Clinics could become the new normal and that routes to high-quality help, advice, and care, at lower cost and greater speed, are potentially many. Taking advantage of digital medicine can be a real driver in meeting the demands of the population in order to ease the pressure on the health service. Virtual care at scale would release face-to-face time in clinical practice to be used for the patients who truly benefit from it.

## RECOMMENDATIONS

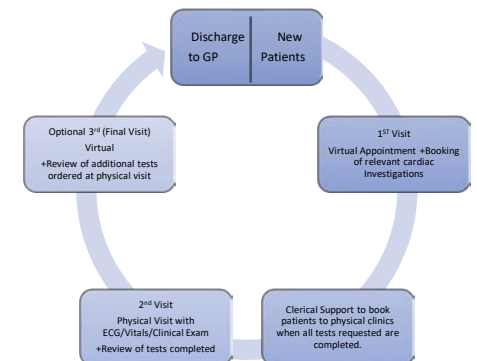
Virtual clinics should be sustained and improved in the post COVID era.

Advantages:

- ❖ Reduction of the need for patients to visit a hospital or health facility
- ❖ Saving time, stress and the expense of travelling to a medical appointment
- ❖ Helping to minimise risk of infection to both patients and medical staff
- ❖ Creating space for those who truly need a physical review and assessment
- ❖ Potential for clinic expansion with increased numbers
- ❖ Direct effect on reducing waiting lists to get into busy cardiology clinics

Providers and consumers of digital medicine should be regularly surveyed, educated and trained locally and nationwide to bring improvements to the service.

## New Model combining Virtual and Physical Visits to improve efficacy and flow post Covid-19 pandemic.



## ACKNOWLEDGEMENTS

- 1-Beaumont Hospital Outpatient's Staff
- 2-Health Service Executive Website (<https://www2.hse.ie/coronavirus/>)