

The Impact of Emergency Ophthalmic Remote Consultations on Patient Finances, Time, and Carbon Footprint

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BACKGROUND

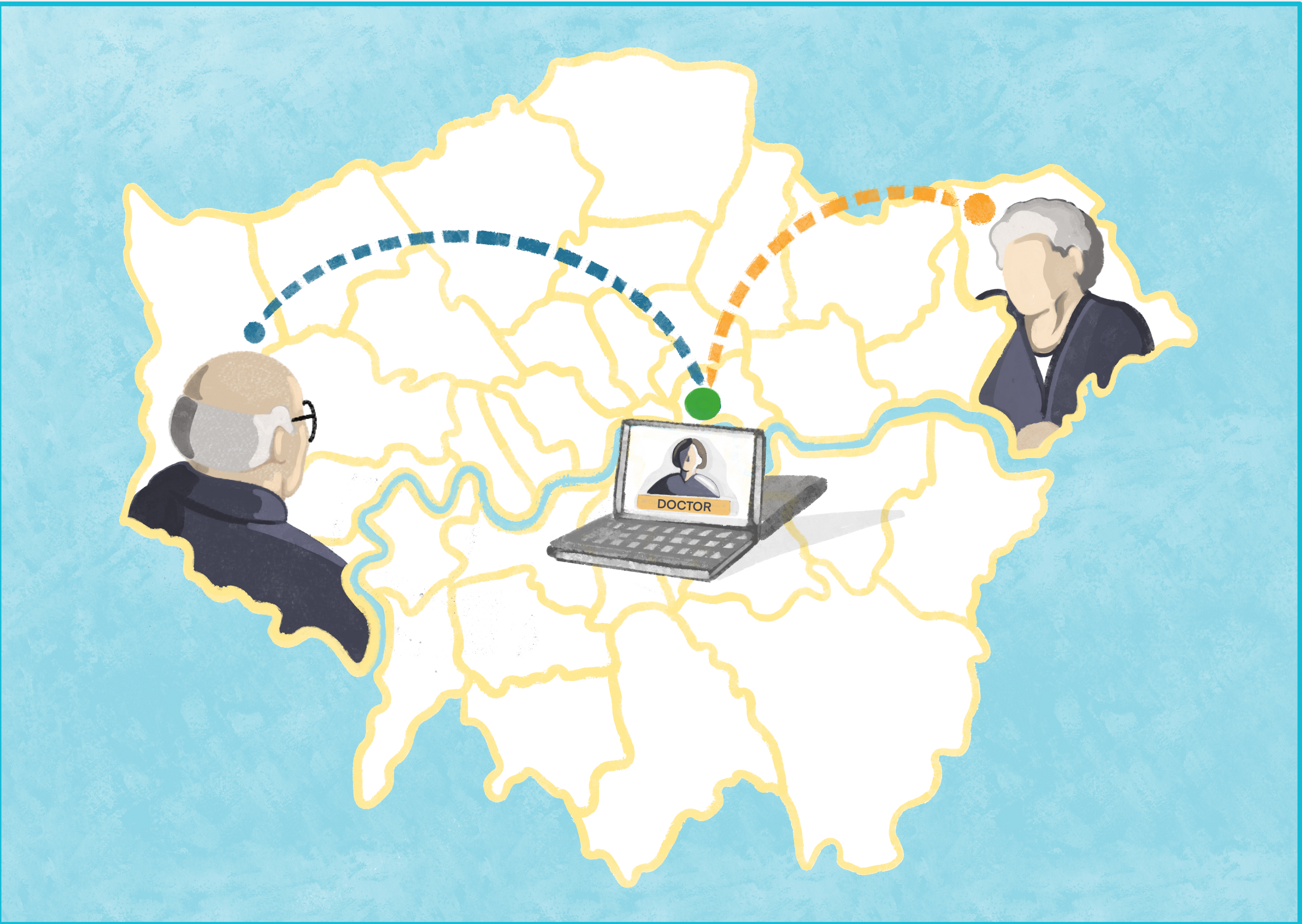
- Climate change associated with Greenhouse Gas Emissions (GHGE) is the biggest global public health threat of the 21st Century
- Transport is the largest contributor of UK GHGE
- Transport accounts for 18% of NHS emissions.
- Prior to Covid-19, video-consultations were not routinely performed in eye care due to perceived dependence on examination equipment

AIM

- To explore the impact of ophthalmic video-consultations on patient finances, time and carbon footprint.

METHOD

- Moorfields Eye Hospital (MEH) set up an emergency eye triage video-consultation (VC) service
- Time, cost, distance and carbon dioxide (CO₂) emissions saved through this video-triage service were calculated from a single weekday snapshot of patients using the service, instead of attending the walk-in eye casualty, based on patient postcode
- Additionally, 3182 patients were asked to estimate these savings via an online questionnaire
- Historic attendance figures were used to extrapolate annual estimates for comparative time, cost and CO₂ emissions

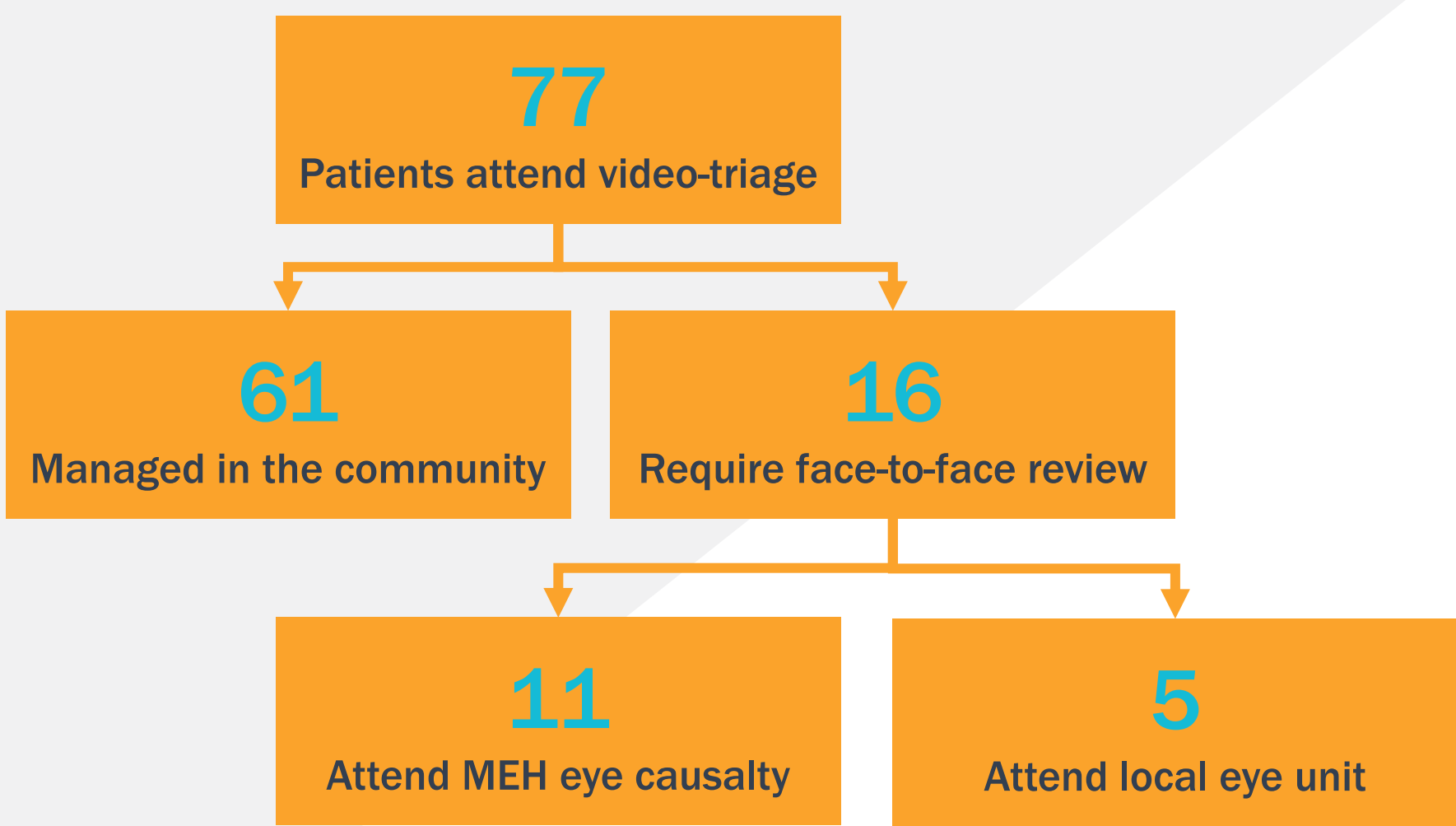


RESULTS (1)

- On average **353** patients used the emergency video-triage service per week
- That equates to **18,356** per year

RESULTS (2)

Single day snapshot results (n = 77)



Patient Survey results (n = 3118)

	Per Patient attending video-triage	Annual Saving - all video patients	Annual savings in context
Travelling distance saved	41 KM	586,172 KM	15 times around the earth
Travelling time saved	1h 43	24,750 h	2 ¾ years of life
Travelling expenses saved	£25.07	£360,080	11.8 times average UK annual salary
Volume of CO ₂ emissions saved	4.31 KgCO ₂	61,869 KgCO ₂	185 flights from London to New York

- 75% of patients reported that the video-triage service spared them from taking time off work

CONCLUSION

- The Mayor of London has pledged to cut London's carbon footprint by 60% by 2025.
- The London NHS Carbon Reduction Leads Network (CRLN) serves to support reducing carbon emissions associated with energy, transportation and procurement.
- Travel carbon savings via video-triage appear promising. This solution is adaptable and scalable
- This project does not account for carbon-savings associated with reduced travel and hospital estate associated with working from home

	Per Patient attending video-triage	Annual Saving - all video patients	Annual savings in context
Travelling distance saved	25.4 KM	465,324 KM	11.6 times around the earth
Travelling time saved	1h 38	29,828 h	3 ½ years of life
Travelling expenses saved	£28.66	£527,919	17.3 times average UK annual salary
Volume of CO ₂ emissions saved	3.72 KgCO ₂	68,193 KgCO ₂	204 flights from London to New York