Evaluation of quality, time and cost effectiveness of the virtual platform in multi-agency management of osteogenesis imperfecta during COVID-19 pandemic

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Background

Management of Osteogenesis Imperfecta (OI) requires multidisciplinary team working. (1). The Metabolic Bone Disease team (MBD) occupational therapist and physiotherapist at Royal Manchester Children's Hospital (RMCH) have a role in multi-agency working with the hospital team, social care, community and education services to ensure the needs of the child and family are met.

RMCH is a tertiary teaching hospital providing care across a wide geographical area of the Northwest of England and a common challenge for hospital-based staff is attendance at meetings for coordinating care with multiple agencies, hosted in the community.

Aim

To maintain positive communication and continue to share information during the COVID-19 pandemic a service delivery method was adapted with the use of virtual platforms in place of face to face contact for:

- Meetings: Transition into a nursery and between schools and Educational Health Care Plan reviews. Child In Need meetings and Team Around the Family meetings with hospital staff, community services and social care.
- School education: Delivering educational talks on OI to nursery/school staff and community therapists.
- Other: Joint appointments for example, with local wheelchair services.

Methods

6 month review of the changes in practice. Total therapist travel time was calculated using a route planner. The combined travel cost saving was calculated using cost per mileage as provided by RMCH and a mid-point band 7 salary according to National Health Service (NHS) terms and conditions. This service was evaluated using a questionnaire.

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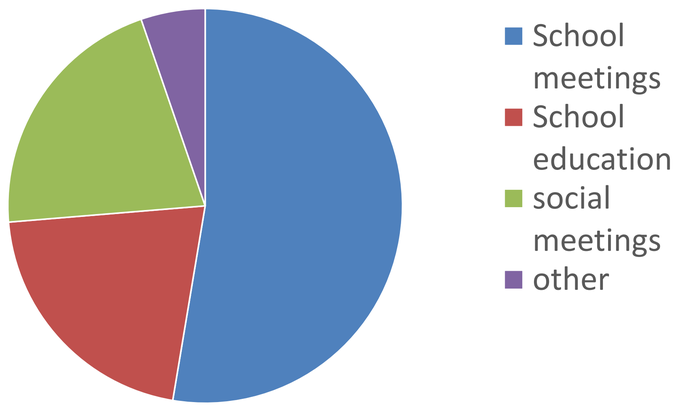

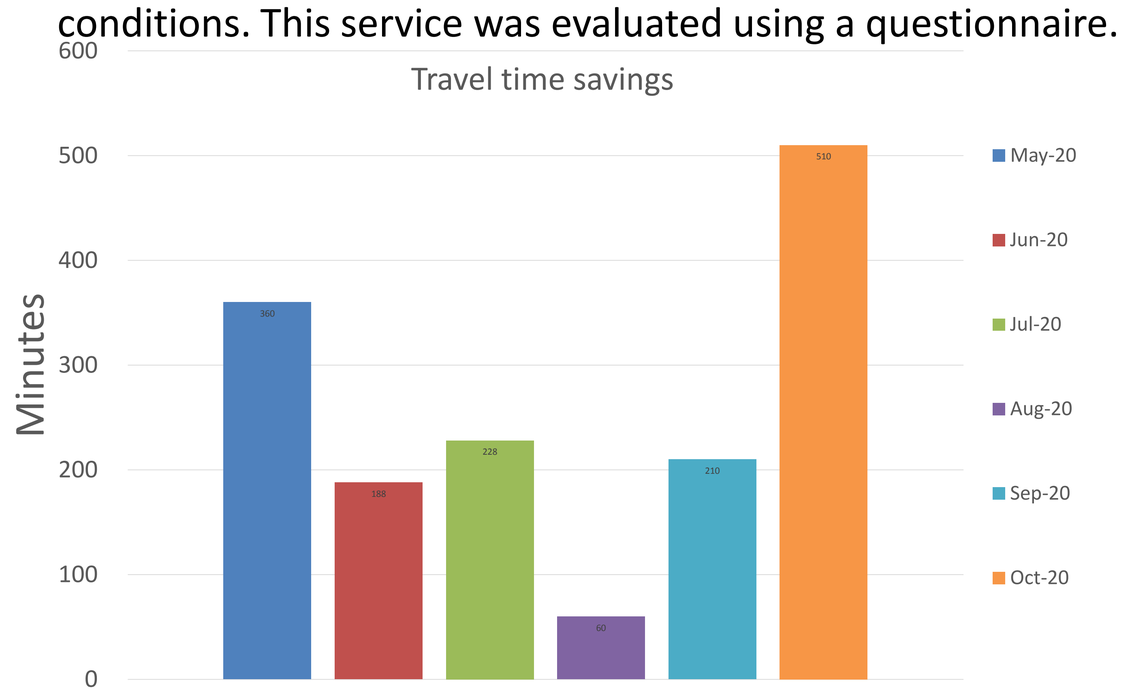

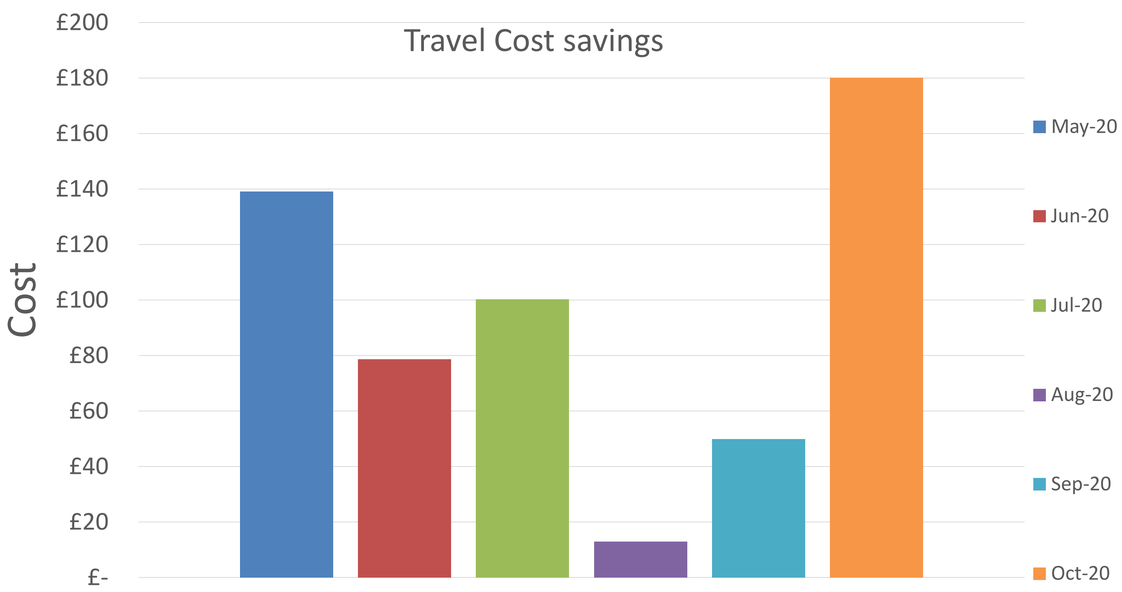

"The information was at a good level, without being overwhelming whilst also giving resources that we could use if we did want further information" – SENCO

"This is the first meeting I have been able to attend as I have never been well enough to travel" – Parent

"Well done on delivering it through MS teams" – Community OT

Results

Over a period of 6 months the team took 19 virtual meetings.

- Total travel time saved 19 hours
- Total travel costs and therapist time saved £1,849
- Evaluation revealed effective ability to deliver aspects of individualised MBD therapy services via a virtual platform
- Dynamic approach to deliver service through alternative method during period of lockdown and restrictions
- Virtual platform can be more inclusive and accessible to patients, families, hospital staff and community services despite lockdown and shielding
- Positive and effective communication was maintained
- Ability to deliver education and training virtually, to empower community staff and other Allied Health Professionals

The therapists have utilised the time resource by reviewing patients face to face during their admission to hospital for infusion treatment and by preparing resources to send out to patients, families and community staff.

Conclusion

Besides time management, financial benefits, and continuity of care during the COVID-19 pandemic, a significant improvement in multiagency teamwork was demonstrated. MBD therapists have changed their default communication to the virtual platform with face-face meetings reserved for environmental assessments of school and home.

References

1. Marr, C., Seasman, A., Bishop, N. (2017) Journal of Multidisciplinary Healthcare Managing the patient with osteogenesis imperfecta: a multidisciplinary approach. 10 p.145-155

Disclosures/conflicts of interests: Authors declare no competing interests