

Establishment of a dedicated paediatric cardiology clinic for patients with Duchene Muscular Dystrophy in a UK tertiary children's hospital

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Introduction

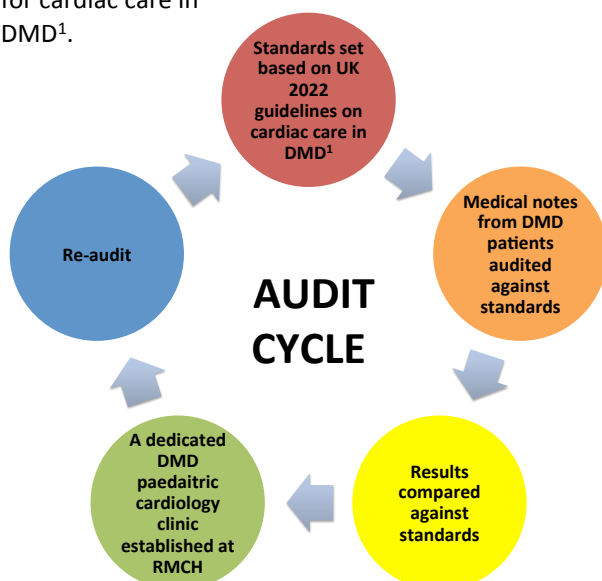
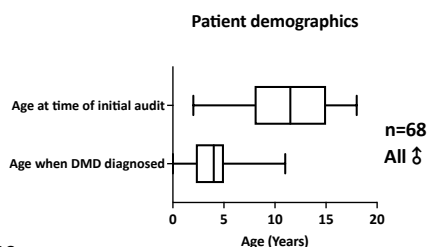
- Duchenne muscular dystrophy (DMD) is an inherited muscle disease that presents in early childhood and causes progressive muscle weakness due to mutations in the dystrophin gene.
- With disease progression, respiratory, orthopaedic and cardiac complications emerge.
- Multidisciplinary team involvement including regular cardiology review is essential for optimal patient management.

Aims

- To evaluate the cardiac management of paediatric patients with DMD at Royal Manchester Children's Hospital (RMCH).
- To establish a dedicated DMD paediatric cardiology clinic at RMCH.

Methods

- Medical notes from 68 DMD patients were audited against the 2022 UK recommendations for cardiac care in DMD¹.



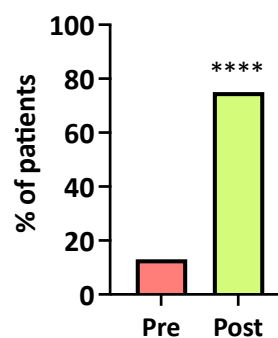
Results

	Pre-establishment of a DMD clinic	Post-establishment of a DMD clinic
Annual cardiology reviews	9/68	51/68
Initiation of cardiac therapy	19/47	39/48

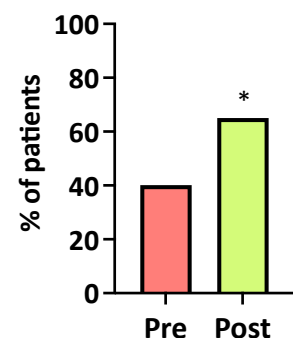
Figure 1 - (A) Proportion of children with DMD with annual cardiology reviews post DMD diagnosis pre (red) and post (green) establishment of a dedicated DMD paediatric cardiology clinic. (B) Proportion of eligible children with DMD commenced on cardiac therapy pre (red) and post (green) establishment of a dedicated DMD paediatric cardiology clinic.

****p < 0.0001; *p < 0.05.

(A)



(B)



Conclusion

- Cardiac complications are one of the main causes for morbidity and mortality in DMD.
- Clinical outcomes depend on regular monitoring and timely identification of children who would benefit from initiation of cardiac medication.
- The audit demonstrates a definite benefit of creating a dedicated cardiology clinic in the care of these complex patients.

References

¹Bourke et al. *Open Heart* 2022;9:e001977. doi: 10.1136/openhrt-2022-001977