

Service Evaluation of the Perinatal Virtual Clinic from 2023-2024

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Plain Language Summary

The Perinatal Virtual Clinic (PVC) provides expert advice for complex cases involving both people living with HIV since birth and the prevention of HIV transmission to babies. This service evaluation looked at the ability of referrers to carry out the PVC's recommendations and the impact on patient care. Overall, it shows that the PVC helps support decision-making for individuals with complex care needs.

Background

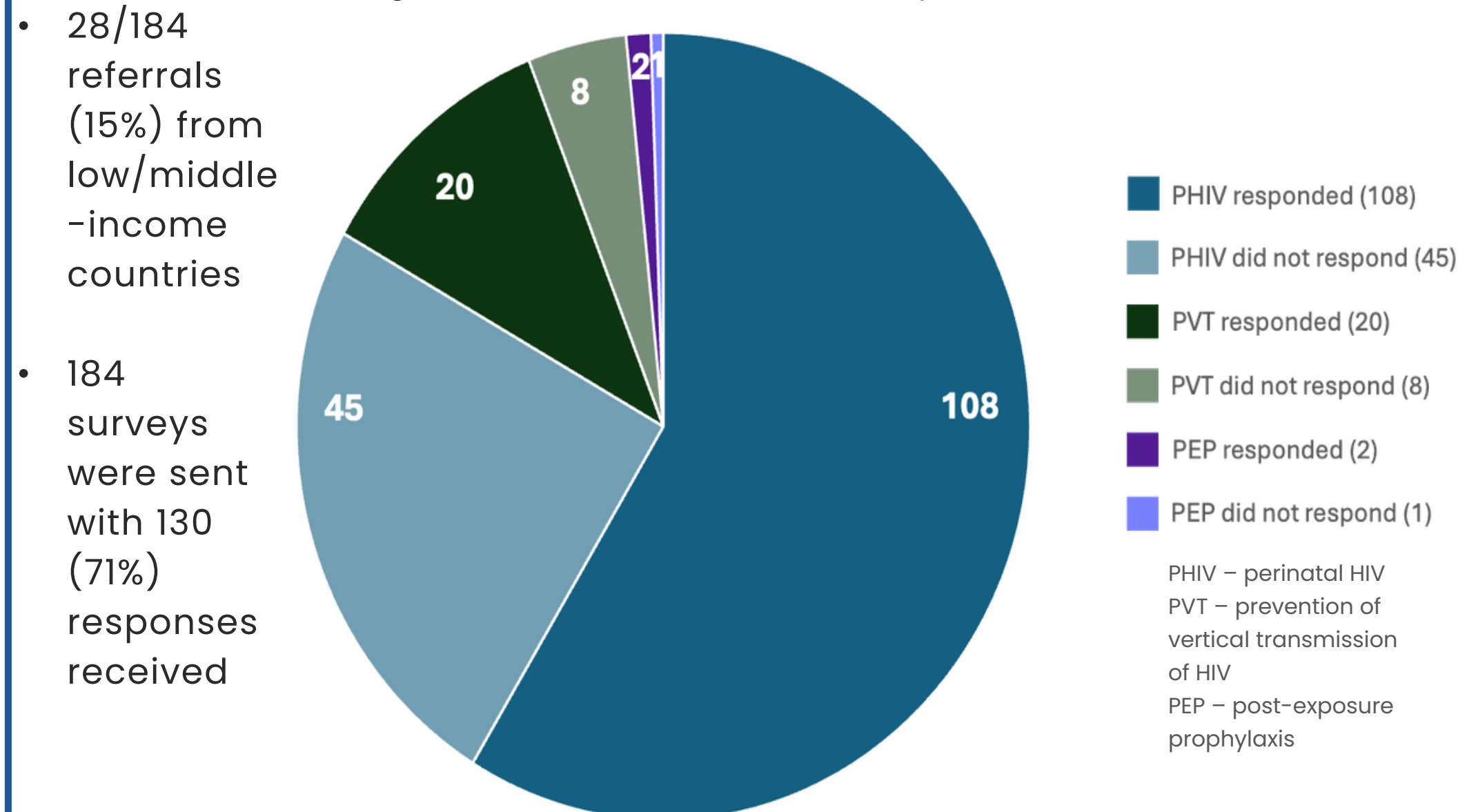
The perinatal virtual clinic (PVC) aims to support decision-making for complex case management of perinatal HIV (PHIV), alongside prevention of vertical transmission (PVT). The PVC, held monthly online, receives UK and international referrals through the Penta network and is supported by both paediatric and adult healthcare providers.

Methods

An online service evaluation was sent to all referrers, both in the UK and internationally, to assess their implementation of PVC recommendations, clinical outcomes and perceived usefulness for referrals between January 2023 - December 2024.

Origins and reasons for referral

Figure 1: Service Evaluation Responses



- 28/184 referrals (15%) from low/middle-income countries
- 184 surveys were sent with 130 (71%) responses received

Prevention of Vertical Transmission Referrals

- Vertical transmission was prevented in all (20/20 cases)
- 10/20 (50%) infants received triple post-natal prophylaxis, 4/20 (20%) dual (country-specific guidelines), and 5/20 (25%) monotherapy.
- Viral suppression at delivery was achieved in 10/20 (50%) pregnant patients, with persistent viraemia in 7/20 (35%), and viral load unknown in 3/20 (15%)
- 17/20 (85%) mothers received antiretroviral therapy. 12 (60%) integrase strand transfer inhibitors, 3 (15%) non-nucleoside reverse transcriptase inhibitors and 4 (20%) protease inhibitors. 3 (15%) did not receive antiretroviral therapy as 2 had postnatal diagnoses and 1 died.

Table 1: Prevention of Vertical Transmission Outcomes

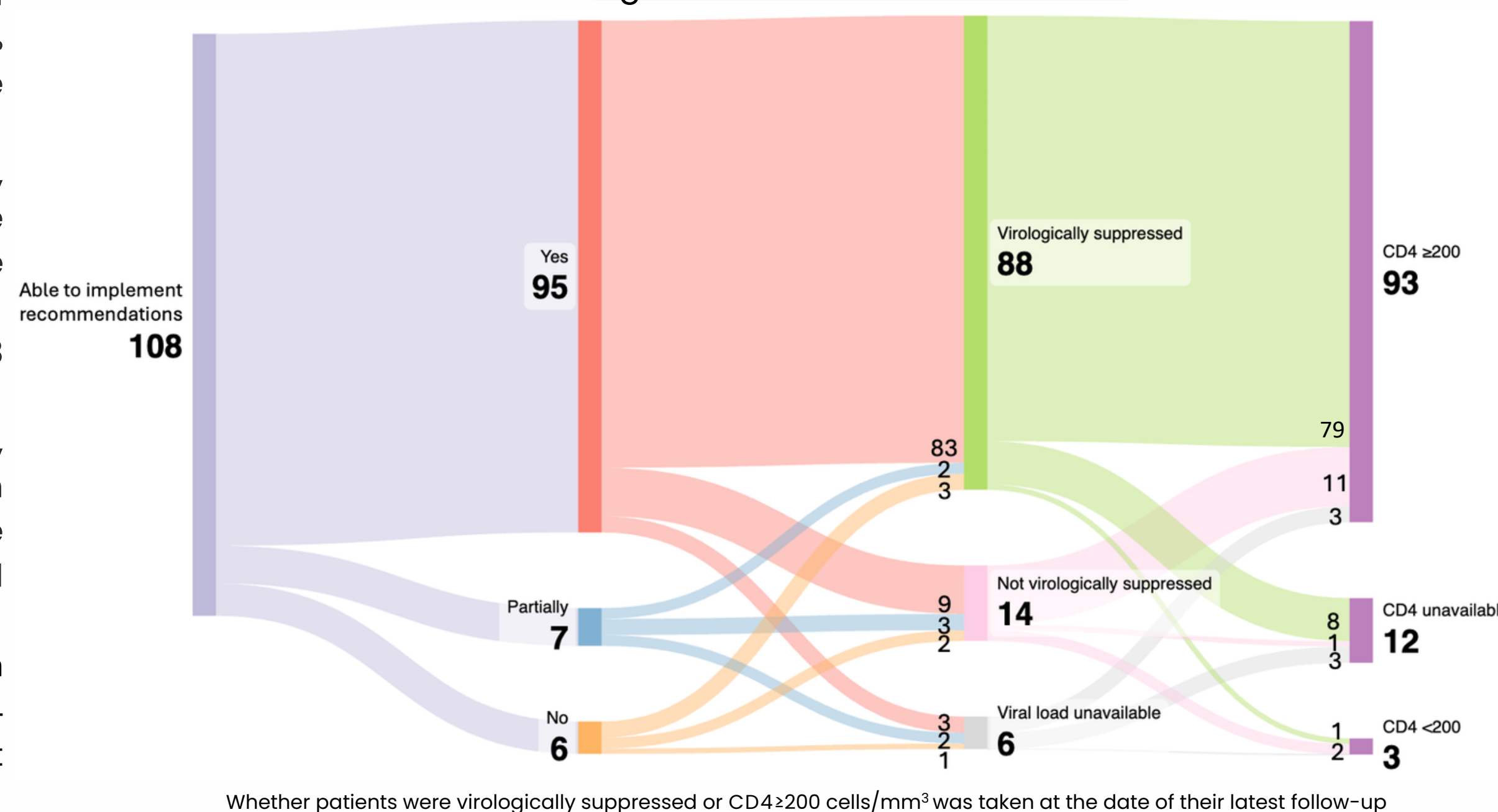
Outcome	Cases (n)	Additional comments
Vertical transmission of HIV successfully prevented		
Yes	20	
Ability to implement PVC's recommendations for patient care		
Yes	18	
Partially	2	1 x miscarriage 1 x 1.4kg birth weight with consequent unavailability of liquid antiretroviral therapy
Mother was virologically suppressed*		
Yes	10	
No	7	
Not applicable	3	1 x postnatal diagnosis so viral load at delivery unknown 1 x miscarried 1 x mother confirmed as HIV neg after delivery
How infant was delivered		
Vaginal	10	
Elective C-Section	8	
Emergency C-section	1	
Not applicable	1	1 x miscarried
How infant was fed		
Only breastfed	7	
Only formula-fed	11	
Lost to follow up	1	
Not applicable	1	1 x miscarried

*Mothers' latest viral loads were taken at delivery

Perinatal HIV Referrals

- 88% fully implemented recommendations, 6% partially and 6% were unable to.
- At latest follow-up, 102/108 (94%) were alive, 2/108 (2%) were deceased, 3/108 (3%) transferred and 1/108 (1%) unknown.
- At latest follow-up, 88/102 of those with known outcomes were virologically suppressed (86%)
- 93/96 (97%) with known outcomes had a CD4 ≥ 200 cells/mm³ at latest follow-up

Figure 2: Perinatal HIV Outcomes



Post-exposure prophylaxis referrals

- Data was available for 2/3 (67%) PEP users.
- Horizontal transmission was prevented in both (2/2) with full implementation of PVC's recommendations.

Perspectives on PVC service by referrers

- Excluding cases from the lead centre (35/102); referring clinicians reported high perceived usefulness of PVC support;
- 5/5 rating in 64/72 (89%) for PHIV, and 19/19 (100%) for PVT / PEP.

Conclusion

PVC provides an effective and highly valued multidisciplinary forum for complex case management for perinatal HIV and prevention of transmission. Recommendations were mostly implemented and favourable outcomes were achieved. Further work is required to understand reasons for incomplete implementation of PVC recommendations such as local availability of appropriate drugs or paediatric formulations.

Additional info

PVC referrals: anonymised cases can be submitted by completing the referral slide decks [Chiva | Perinatal Virtual Clinic](#) and emailing caroline.foster5@nhs.net.
Acknowledgements: We would like to acknowledge and thank all our colleagues who kindly submitted cases to the PVC and joined the monthly meeting to offer their advice and expertise.