

Targeted cCMV testing following failed Newborn Hearing Screening tests is **feasible** and **effective**, enabling **early diagnosis and treatment within 28 days**. This new pathway is key to **preventing progressive hearing loss and improving long-term outcomes** for infants.

Congenital Cytomegalovirus (cCMV) Targeted Testing for Infants with Failed Newborn Hearing Screening

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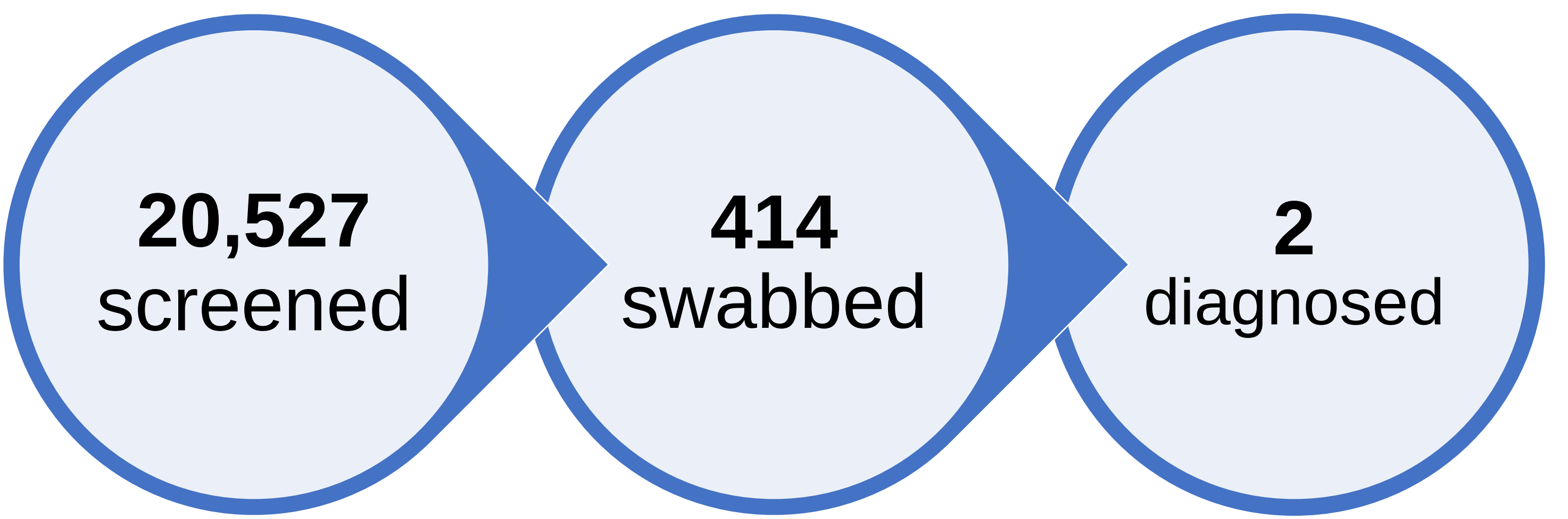
Background

Congenital Cytomegalovirus (cCMV) is **the leading non-genetic cause** of childhood hearing loss (~25%). In the UK, ~800 children are affected annually. Timely antiviral treatment (<28 days) can reduce late-onset/progressive hearing loss. Despite this there is currently **no universal screening protocol**.

Previously, cCMV testing was only offered by audiology at the diagnostic stage, often **too late** for accurate detection. Infants are typically diagnosed too late (4–5 weeks) due to delays in audiology referral, **missing the treatment window**.

Results – Patient Impact

Data was collected from July 2023 – August 2025.



Both babies were treated with antivirals **within 28 days**. The families are now under the **joint care** of Audiology & Paediatric Infectious Diseases.

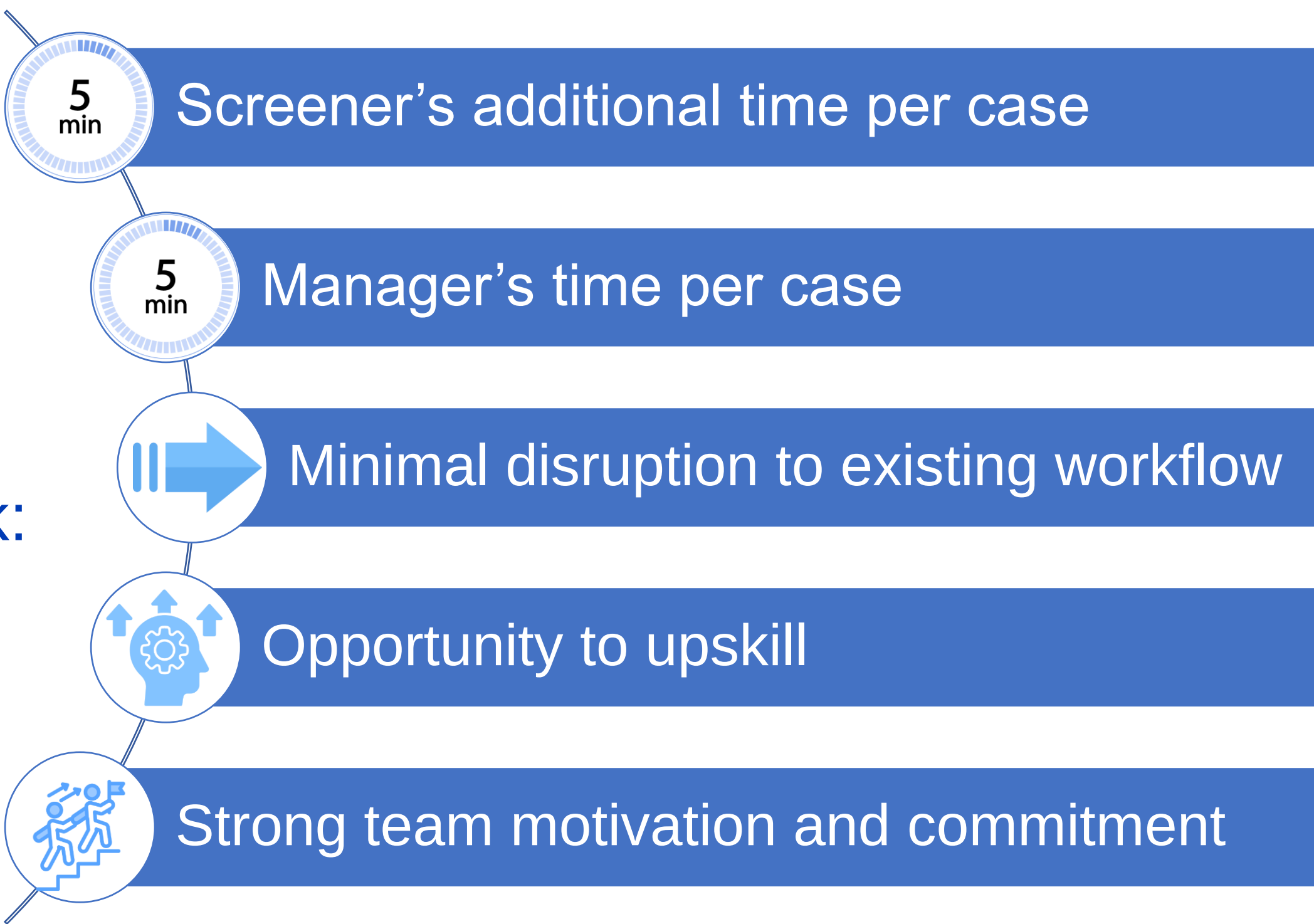
Aims

The aims of this project were as follows:

1. To establish an early diagnostic pathway for infants failing Newborn Hearing Screening to receive timely cCMV testing.
2. For those that require it, to initiate treatment within 28 days of life.
3. To improve overall family experience during diagnosis and treatment.

Results - Staff Impact

A review was conducted to assess the team feedback:



Methods

Newborn Hearing Screeners were trained by audiology to:

- Obtain verbal consent
- Collect saliva samples
- Book tests and print labels for lab submission

An MS Teams group was set up, containing all relevant resources including tracking spreadsheets, parental information and referral pathways.

An **audit of additional time and feedback** from the screening team was also completed.

Conclusion and Next Steps

Timely cCMV diagnosis is **achievable** and **impactful**, without adding considerable additional workload to screening teams.

Early treatment equals better outcomes, mitigating the risk of babies waiting for audiology assessment, who may then miss the 28 day window to access antiviral treatment.

Next Steps

- To offer support to other NHSP sites to implement cCMV testing
- Explore regional variations in clinical practice and the rates of cCMV detected through targeted testing in infants who fail newborn hearing screening tests.



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