

Enhancing Adolescent Vaccination Rates

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Project Overview

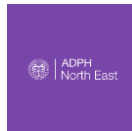
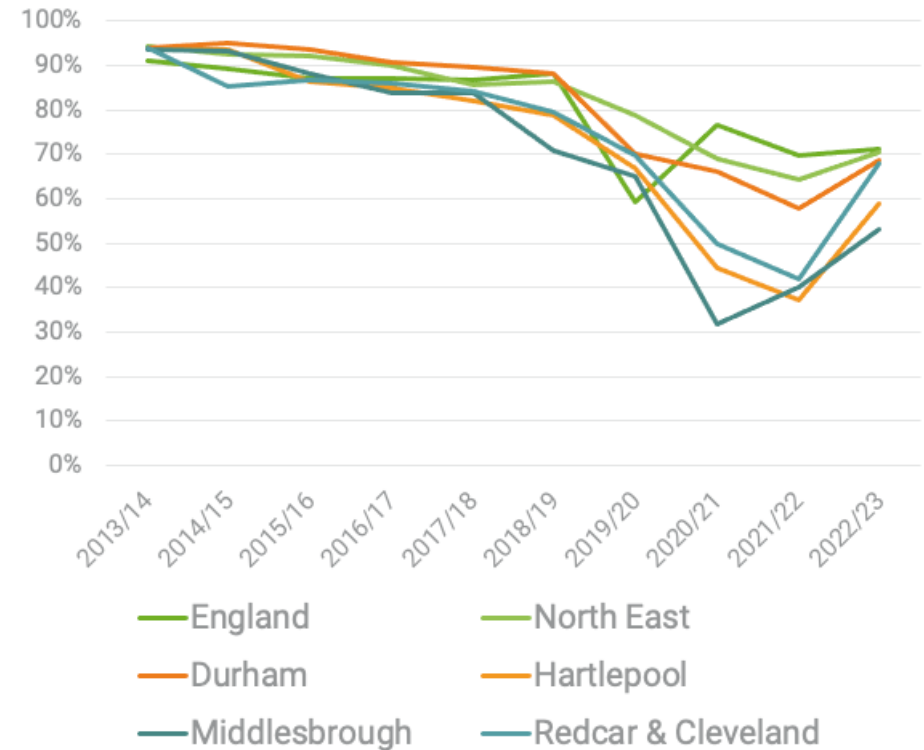
Goal: Address declining adolescent vaccination uptake rates

Primary Barrier: Low parental engagement with vaccine consent process

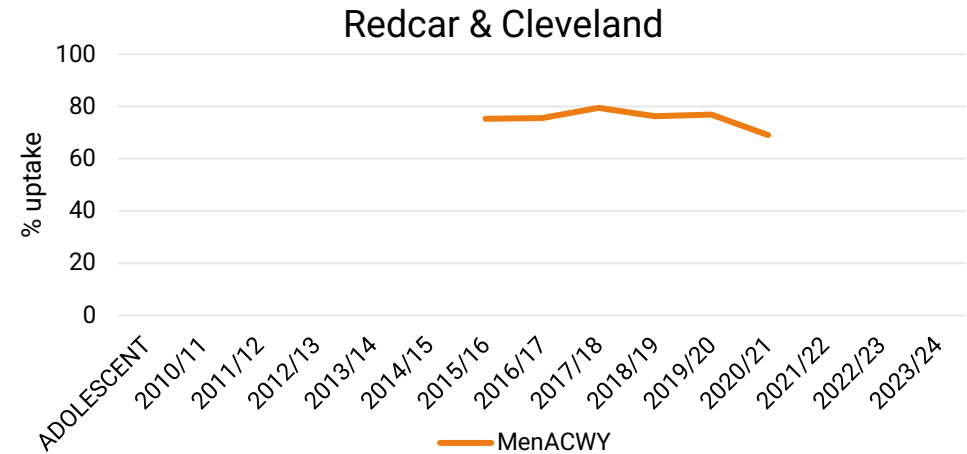
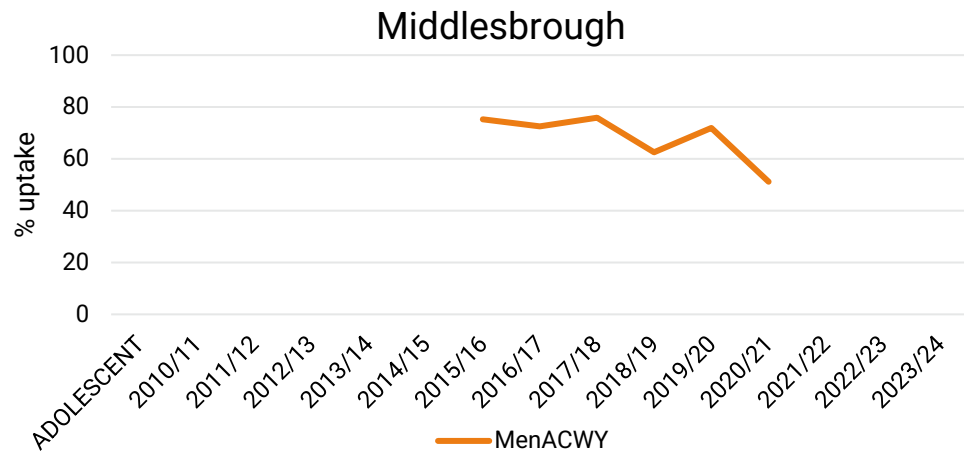
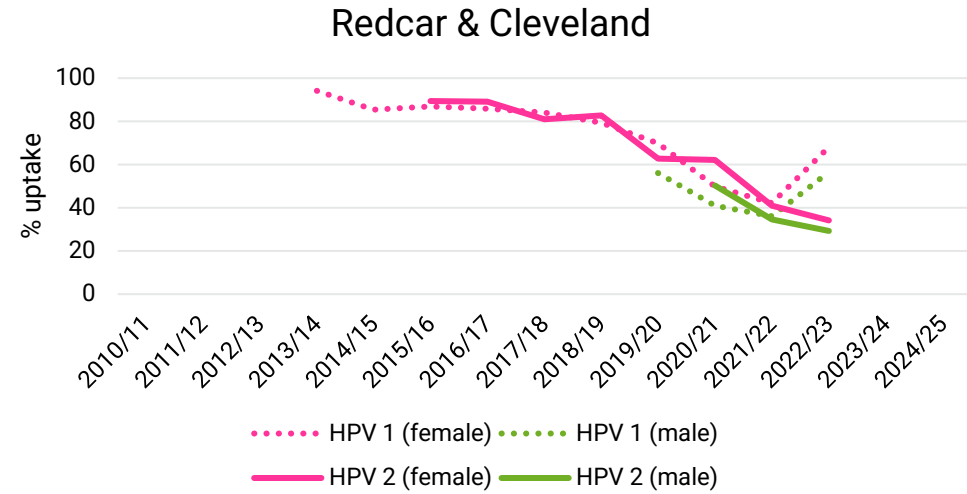
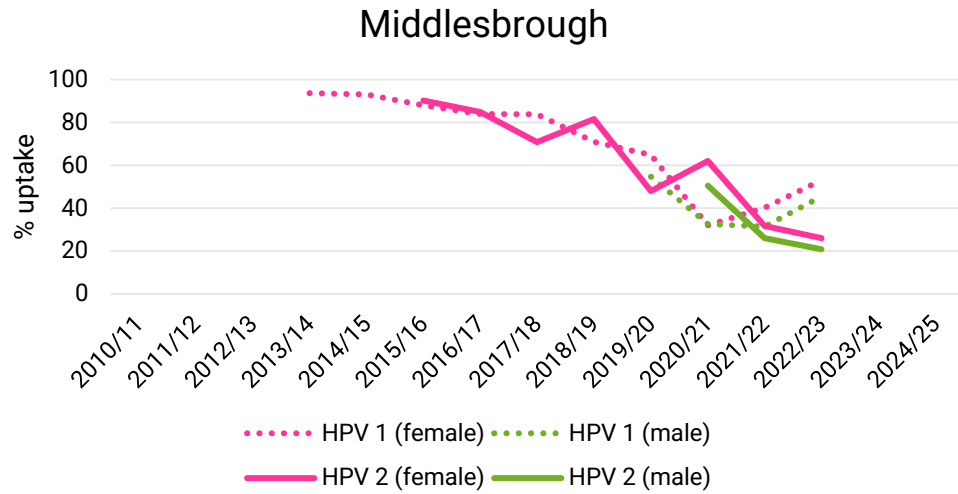
Initial trial: Middlesbrough

Geography: Middlesbrough, Redcar & Cleveland, Hartlepool and Durham (trial and control schools)

HPV vaccination coverage for one dose (females)



Context



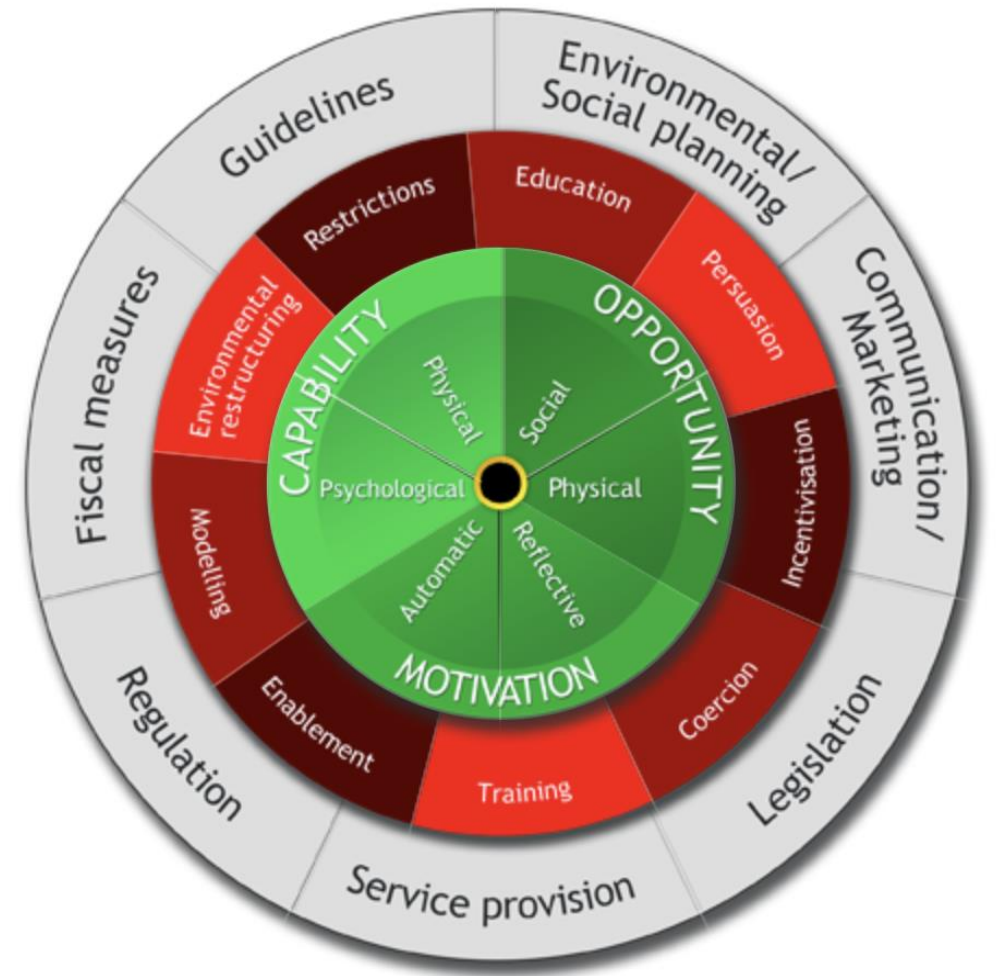
Project Approach

- Behavioural Science expertise commissioned from Caja Ltd
- Initial trial worked with Macmillan Academy in Middlesbrough to develop Interventions.
- Quantitative and qualitative evidence confirmed low return rate of consent forms and identification of barriers.
- Initial trial proved successful and approach scaled wider across the North East working with Middlesbrough, Hartlepool, Durham, Redcar and Cleveland Authorities.

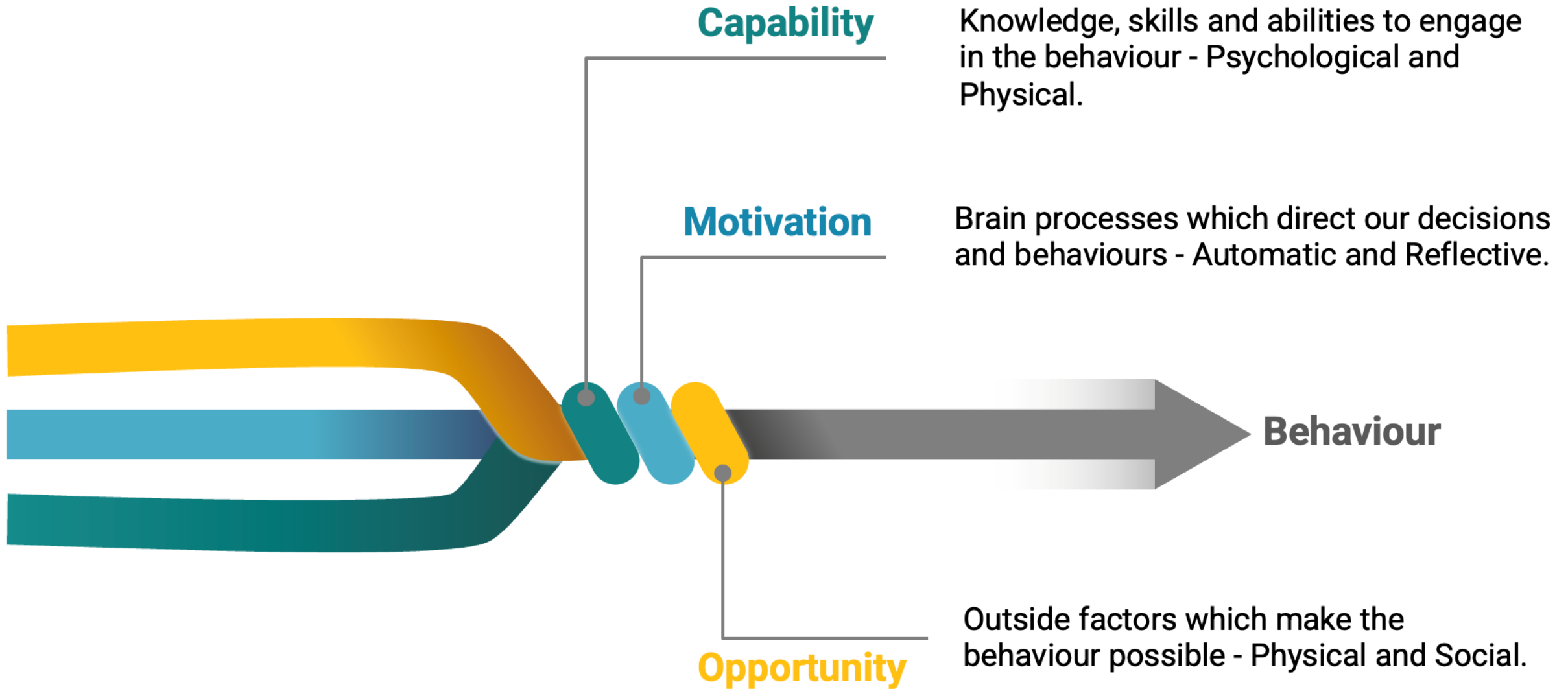


Understanding Barriers

- Insights work to identify key barriers to adolescent vaccine uptake.
- Interviews and focus groups were conducted with school staff, students, parents, and immunisation service providers.
- Outputs were categorised according to the COM-B model of behaviour.
- Through this activity, parents identified as the main targets of our interventions.



Michie S, Atkins L, West R. (2014) *The Behaviour Change Wheel: A Guide to Designing Interventions*. London: Silverback Publishing.



Capability	Opportunity	Motivation
Technological literacy/capabilities.	Access to technology.	Parents don't want to give consent.
Unfamiliarity with the online consent process.	Tutors were unaware vaccines are happening until the day.	Anti-vax literature.
A perceived gap in communication & correspondence between the SAIS and schools flagged by the school teams.	No school nurse.	Fear of needles.
Poor parental education.	No yearly onboarding pack.	Fear of side-effects.
Language barriers.	Negative parental influence.	Negative associations with COVID-19 vaccines impacting the perception of routine immunisations.
Lack of awareness of Gillick Competency.	Social media influence.	Lacking reassurance.
Children uneducated (missing from curriculum/assemblies).	Given sheet of side effects after the jab and pass on the message to other students.	"Just don't want them".
Lack of awareness of the process.	Letters promoting vaccination sent straight to home.	"Never catch anything so don't need them".

Concepts We Use To Develop Nudges

In order to develop **'Nudges'** to influence how people interact with services we use a number of concepts based on how humans think and behave

Type 1 & 2 Thinking

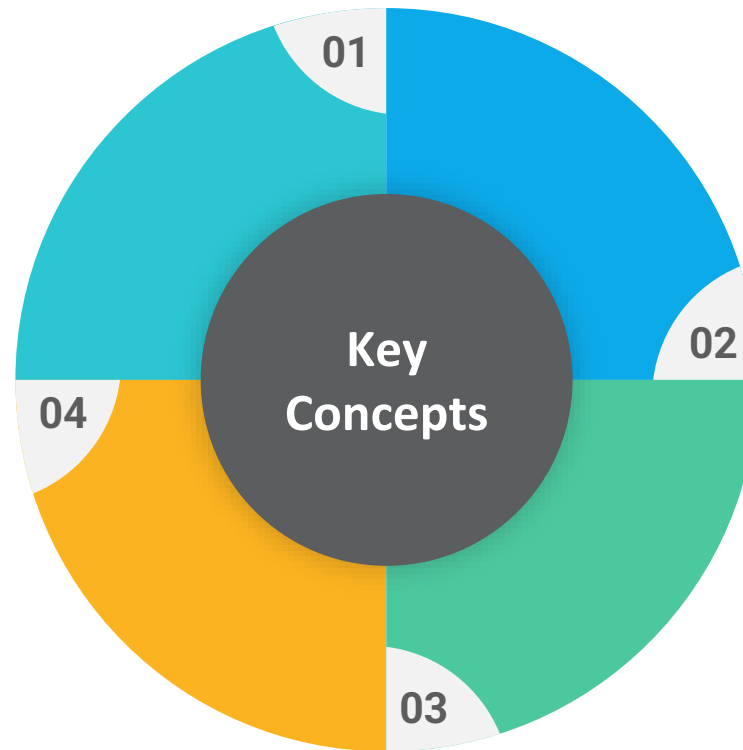
'Type 2 Thinking'. – We use consideration and judgement when deciding what they want to do

'Type 1 Thinking'. - We make quicker and more automatic decisions based on what is presented to them

COM-B

Understanding barriers to accessing services and drivers of inequality through:

- Capability
- Opportunity
- Motivation.



Cognitive Biases

Shortcuts that our brains take when making decisions. Most of the conscious decisions we make are being made with filtered data or a heavily biased mindset

Value Modes

Settlers – Like top-down messages and likely to follow the majority.

Prospectors - Guided by external influences & want be part of the 'in crowd'

Pioneers – Strong sense of right & wrong and social purpose.

Specific Techniques

USING CONCEPTS FROM BEHAVIOURAL SCIENCE TO “NUDGE” PARENTS TO GIVE CONSENT.

Concept	Definition	Example
Power of Free	If we can avoid losing anything when engaging in a behaviour we are more attracted to it. A free product means no effort or time has to be invested in the decision and is psychologically more attractive to us, simply because it costs nothing.	Highlighting explicitly to parents that the vaccinations are all free.
Norms	We are likely to engage in behaviours that we see lots of other people engaging in.	Highlighting that most adolescent children in the North East are vaccinated.
Loss Aversion	The pain of losing is psychologically more powerful than the pleasure of winning, so we seek to avoid loss.	Stating to parents that without their consent, their child may miss out on the protection they need.
Urgency	People prioritise urgent tasks over ones they might perceive to be more important.	Sending out reminder prompts as close to the consent deadline as possible (24 hours) and stating this explicitly to parents (e.g., “Just 1 day left”).
Salience	People respond best to things that are novel and relevant to them.	Highlighting key information in bold or coloured text and using norms that relate to the North East specifically.
Messenger	Who communicates the message is important.	Signing off communications from the Director of Public Health and using Headteachers to spread the message from a trusted and recognisable source. Most parents will be more familiar with these messengers than the SAIS and thus more likely to act on the request to return consent.
Altruism	People have the natural tendency to be altruistic and care about the thoughts, feelings, and safety of others.	Showing that giving their consent may also encourage other parents to do the same.

Toolkit

HOW WE APPLIED THE CHOSEN BEHAVIOUR CHANGE TECHNIQUES TO INFLUENCE REAL-WORLD BEHAVIOURS.

We developed a behaviourally informed communication strategy to increase parental consent form returns. The approach was designed to fit closely with existing processes to maximise sustainability of the solution. A toolkit was developed for use by school admin teams, including:

- An informational letter, personalised and made specific by being from the relevant Local Authorities Director of Public Health.
- 3 Email templates to be sent out from school Headteachers.
- 2 SMS messages to serve as reminders to any parents who had not consented in response to the letter or emails.
- Recommendations for statements to be made by staff during assembly time for the relevant school years, as a call-to-action for the students to report back to their parents that their vaccinations were due.

The assets above were shared with schools through an Implementation Pack that also highlighted an optimal three-week implementation plan:

Spot the Nudge

Urgency

Salience

Power of Free

Social Norm

+ve Framing



Middlesbrough Council
PO Box 505
Fountains Court
119 Grange Road
Middlesbrough
TS1 2DT

February 2023

1 minute to give consent + 2 minutes to get their vaccines = 3 minutes to protect your child for life

Dear <name>,

Working with your school, Public Health South Tees and the NHS have arranged for your child to receive their **FREE** Meningitis and 3-in-1 Booster vaccinations in Macmillan Academy on **Wednesday 15th February 2023** and need your consent to continue.

More than 7 in 10 North East parents like you consent to their children receiving these vaccinations when they need them.

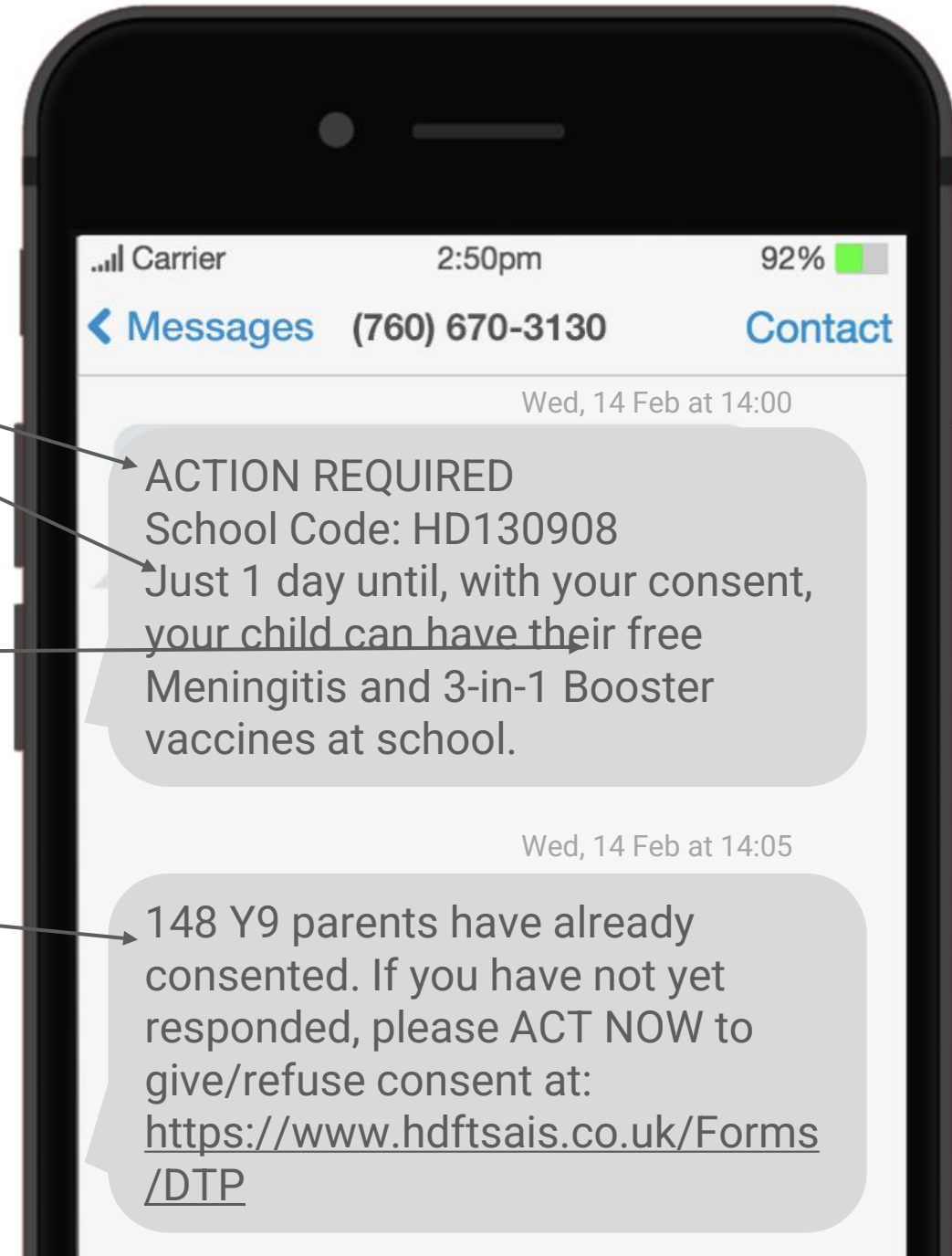
The meningitis vaccine (called MenACWY) provides safe and effective protection against meningitis. Teenagers and young adults are in one of the most at risk groups for contracting this disease, which can quickly cause life threatening illness. Since meningitis vaccines were introduced in 1999, the number of people getting the disease has dropped by 96%.

Spot the Nudge

Urgency

Power of Free

Social Norm



Spot the Nudge

Saliency

Social Norm

Loss Aversion

Join the Arm(y) Fighting Cancer



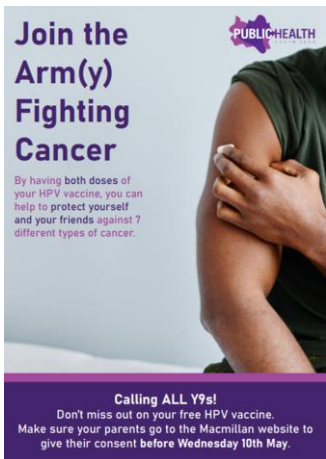
By having both doses of your HPV vaccine, you can help to protect yourself and your friends against 7 different types of cancer.

+ve Framing

Power of Free

Calling ALL Y9s!
Don't miss out on your free HPV vaccine.
Make sure your parents go to the Macmillan website to give their consent before Wednesday 10th May.

Adolescent Trial at Macmillan 2023



DTP/MenACWY:

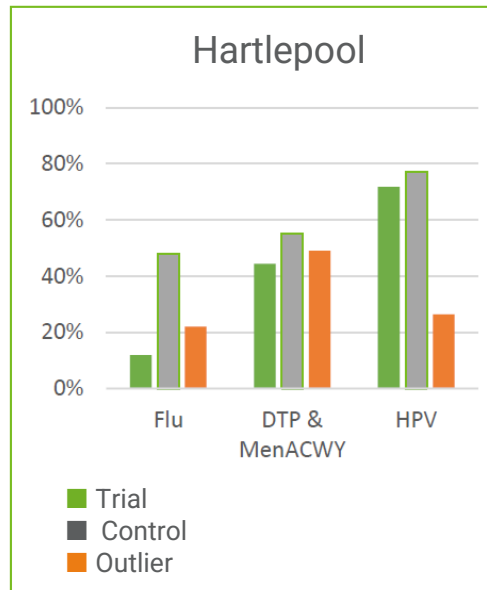
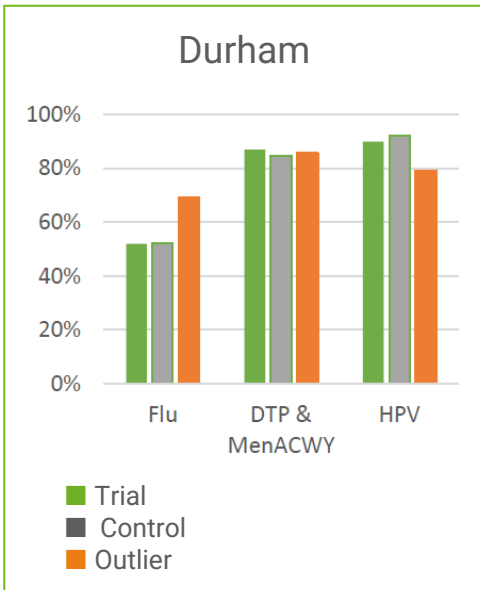
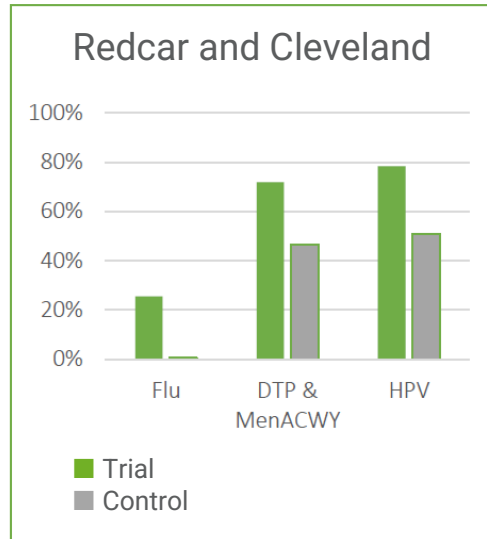
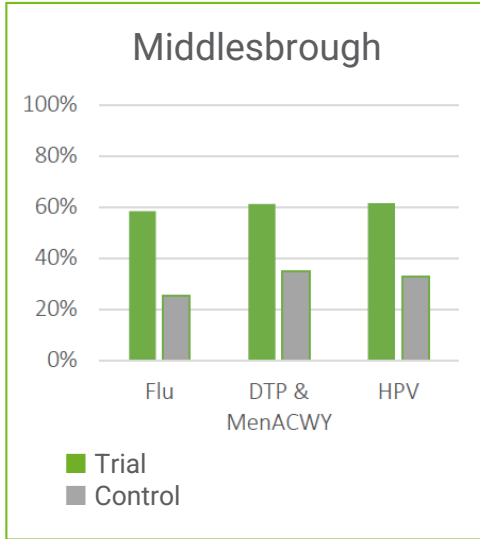
- Data from Academic Year 21-22: **50.4% vaccine uptake**
- Initial consent prior to trial (26/01/23): **130 (50%)**
- Consent after amended letter: **159 (61%)**
- Consent after text 1: **178 (70%)**
- Consent after text 2: **189 (74%)**

HPV (Y9)

- Initial consent prior to trial: **N/A**
- Consent after amended letter: **125 (52%)**
- Consent after text 1: **149 (62%)**
- Consent after text 2: **162 (68%)**
- Consent after text 3: **165 (70%)**



Adolescent Outcomes and Next Steps



Work with SAIS to implement recommendations from the final report.

RECOMMENDATIONS

- Lobby for NHS England to shift adolescent vaccinations to a 'Default' with an opt-out system, aligning with most parents' preferences and removing barriers to higher uptake.
- Expand the successful strategies trialled in 4 local authorities to boost opt-in consent returns.
- Encourage the use of Headteachers and Public Health Directors as trusted messengers to improve parental engagement with vaccination communications.
- Shorten the consent window, align e-consent portal closures, and ensure continuous updates on session dates.
- Strengthen the role of Public Health and School Age Immunisation Service (SAIS) in supporting Headteachers and Immunisation Coordinators with knowledge and engagement.
- Provide schools with return rate data and train School Immunisation Coordinators to ensure effective and responsible communication.

