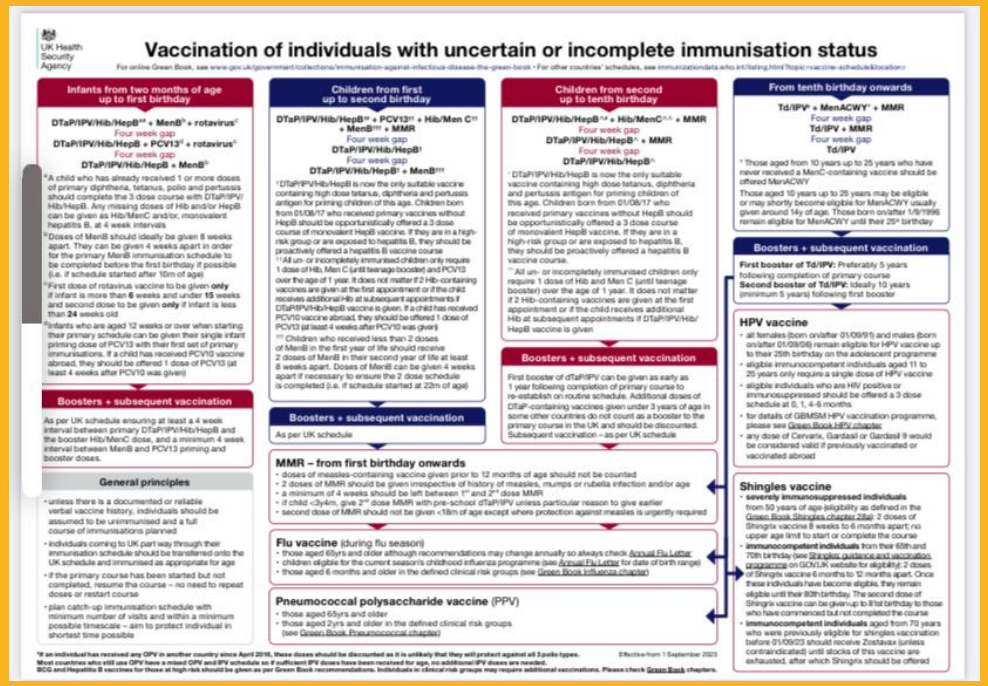
IS IT A CODING ISSUE?

IS IT REALLY IMPORTANT?

WHAT TOOLS DO WE HAVE?



UK Health Security Agency

Vaccination of individuals with uncertain or incomplete immunisation status

For online Green Book, see www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book • For other countries' schedules, see immunizationdata.who.int/listing.html?topic=vaccine-schedule&location=

Infants from two months of age up to first birthday

DTaP/IPV/Hib/HepB[1&4] + MenB[3] + rotavirus[2]
Four week gap
DTaP/IPV/Hib/HepB + PCV13[3] + rotavirus[2]
Four week gap
DTaP/IPV/Hib/HepB + MenB[3]

[2] A child who has already received 1 or more doses of primary diphtheria, tetanus, polio and pertussis should complete the 3 dose course with DTaP/IPV/Hib/HepB. Any missing doses of Hib and/or HepB can be given as Hib/MenC and/or, monovalent hepatitis B, at 4 week intervals

[3] Doses of MenB should ideally be given 8 weeks apart. They can be given 4 weeks apart in order for the primary MenB immunisation schedule to be completed before the first birthday if possible (i.e. if schedule started after 10m of age)

[2] First dose of rotavirus vaccine to be given **only** if infant is more than **6** weeks and under **15** weeks and second dose to be given **only** if infant is less than **24** weeks old

Infants who are aged 12 weeks or over when starting their primary schedule can be given their single infant priming dose of PCV13 with their first set of primary immunisations. If a child has received PCV10 vaccine abroad, they should be offered 1 dose of PCV13 (at least 4 weeks after PCV10 was given)

Boosters + subsequent vaccination

As per UK schedule ensuring at least a 4 week interval between primary DTaP/IPV/Hib/HepB and the booster Hib/MenC dose, and a minimum 4 week interval between MenB and PCV13 priming and booster doses.

General principles

- unless there is a documented or reliable verbal vaccine history, individuals should be assumed to be unimmunised and a full course of immunisations planned
- individuals coming to UK part way through their immunisation schedule should be transferred onto the UK schedule and immunised as appropriate for age
- if the primary course has been started but not completed, resume the course – no need to repeat doses or restart course
- plan catch-up immunisation schedule with minimum number of visits and within a minimum possible timescale – aim to protect individual in shortest time possible

Children from first up to second birthday

DTaP/IPV/Hib/HepB[1&4] + PCV13[3] + Hib/Men C[1&4] + MenB[3&4] + MMR
Four week gap
DTaP/IPV/Hib/HepB[1]
Four week gap
DTaP/IPV/Hib/HepB[1] + MenB[3&4]

[1] DTaP/IPV/Hib/HepB is now the only suitable vaccine containing high dose tetanus, diphtheria and pertussis antigen for priming children of this age. Children born from 01/08/17 who received primary vaccines without HepB should be opportunistically offered a 3 dose course of monovalent HepB vaccine. If they are in a high-risk group or are exposed to hepatitis B, they should be proactively offered a hepatitis B vaccine course

[1&4] All un- or incompletely immunised children only require 1 dose of Hib, Men C (until teenage booster) and PCV13 over the age of 1 year. It does not matter if 2 Hib-containing vaccines are given at the first appointment or if the child receives additional Hib at subsequent appointments if DTaP/IPV/Hib/HepB vaccine is given. If a child has received PCV10 vaccine abroad, they should be offered 1 dose of PCV13 (at least 4 weeks after PCV10 was given)

[3&4] Children who received less than 2 doses of MenB in the first year of life should receive 2 doses of MenB in their second year of life at least 8 weeks apart. Doses of MenB can be given 4 weeks apart if necessary to ensure the 2 dose schedule is completed (i.e. if schedule started at 22m of age)

Boosters + subsequent vaccination

As per UK schedule

Children from second up to tenth birthday

DTaP/IPV/Hib/HepB[1&4] + Hib/MenC[A,4] + MMR
Four week gap
DTaP/IPV/Hib/HepB[1] + MMR
Four week gap
DTaP/IPV/Hib/HepB[1]

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Boosters + subsequent vaccination

First booster of dTaP/IPV can be given as early as 1 year following completion of primary course to re-establish on routine schedule. Additional doses of DTaP-containing vaccines given under 3 years of age in some other countries do not count as a booster to the primary course in the UK and should be discounted. Subsequent vaccination – as per UK schedule

From tenth birthday onwards

Td/IPV[5] + MenACWY[*] + MMR
Four week gap
Td/IPV + MMR
Four week gap
Td/IPV

[*] Those aged from 10 years up to 25 years who have never received a MenC-containing vaccine should be offered MenACWY

Those aged 16 years up to 25 years may be eligible or may shortly become eligible for MenACWY usually given around 14y of age. Those born on/after 1/9/1996 remain eligible for MenACWY until their 25th birthday

Boosters + subsequent vaccination

First booster of Td/IPV: Preferably 5 years following completion of primary course
Second booster of Td/IPV: Ideally 10 years (minimum 5 years) following first booster

HPV vaccine

- all females (born on/after 01/09/91) and males (born on/after 01/09/06) remain eligible for HPV vaccine up to their 25th birthday on the adolescent programme
- eligible immunocompetent individuals aged 11 to 25 years only require a single dose of HPV vaccine
- eligible individuals who are HIV positive or immunosuppressed should be offered a 3 dose schedule at 0, 1, 4–6 months
- for details of GBMSM HPV vaccination programme, please see Green Book HPV chapter
- any dose of Cervarix, Gardasil or Gardasil 9 would be considered valid if previously vaccinated or vaccinated abroad

Shingles vaccine

- **severely immunosuppressed individuals** from 50 years of age (eligibility as defined in the Green Book Shingles chapter 28a): 2 doses of Shingrix vaccine 8 weeks to 6 months apart; no upper age limit to start or complete the course
- **immunocompetent individuals** from their 65th and 70th birthday (see Shingles guidance and vaccination programme on GOV.UK website for eligibility): 2 doses of Shingrix vaccine 6 months to 12 months apart. Once these individuals have become eligible, they remain eligible until their 80th birthday. The second dose of Shingrix vaccine can be given up to 91st birthday to those who have commenced but not completed the course
- **immunocompetent individuals** aged from 70 years who were previously eligible for shingles vaccination before 01/09/23 should receive Zostavax (unless contraindicated) until stocks of this vaccine are exhausted, after which Shingrix should be offered

Boosters + subsequent vaccination

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MMR – from first birthday onwards

- doses of measles-containing vaccine given prior to 12 months of age should not be counted
- 2 doses of MMR should be given irrespective of history of measles, mumps or rubella infection and/or age
- a minimum of 4 weeks should be left between 1st and 2nd dose MMR
- if child <3y4m, give 2nd dose MMR with pre-school dTaP/IPV unless particular reason to give earlier
- second dose of MMR should not be given <18m of age except where protection against measles is urgently required

Flu vaccine (during flu season)

- those aged 65yrs and older although recommendations may change annually so always check Annual Flu Letter
- children eligible for the current season's childhood influenza programme (see Annual Flu Letter for date of birth range)
- those aged 6 months and older in the defined clinical risk groups (see Green Book Influenza chapter)

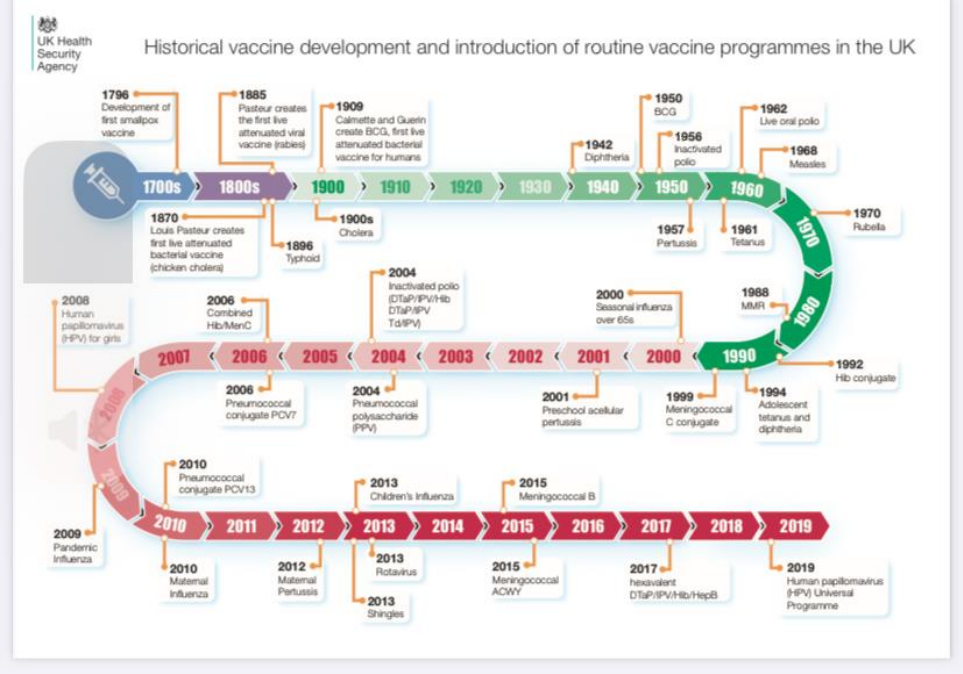
Pneumococcal polysaccharide vaccine (PPV)

- those aged 65yrs and older
- those aged 2yrs and older in the defined clinical risk groups (see Green Book Pneumococcal chapter)

[5] an individual has received any OPV in another country since April 2016, these doses should be discounted as it is unlikely that they will protect against all 3 polio types.
Most countries who still use OPV have a mixed OPV and IPV schedule so if sufficient IPV doses have been received for age, no additional IPV doses are needed.
BCG and Hepatitis B vaccines for those at high-risk should be given as per Green Book recommendations. Individuals in clinical risk groups may require additional vaccinations. Please check Green Book chapters.

Effective from 1 September 2023

ROUTINE VACCINATION TIMELINE



SHOULD WE MAKE ASSUMPTIONS? MOST PEOPLE WILL BE UP TO DATE, SURELY?

REGIONAL VARIATIONS

London and the SE have routinely given MMR2 at 18/12

There was a polio catch-up campaign in London in 2022-23 giving additional protection to children <11y

INTERNATIONAL VARIATIONS

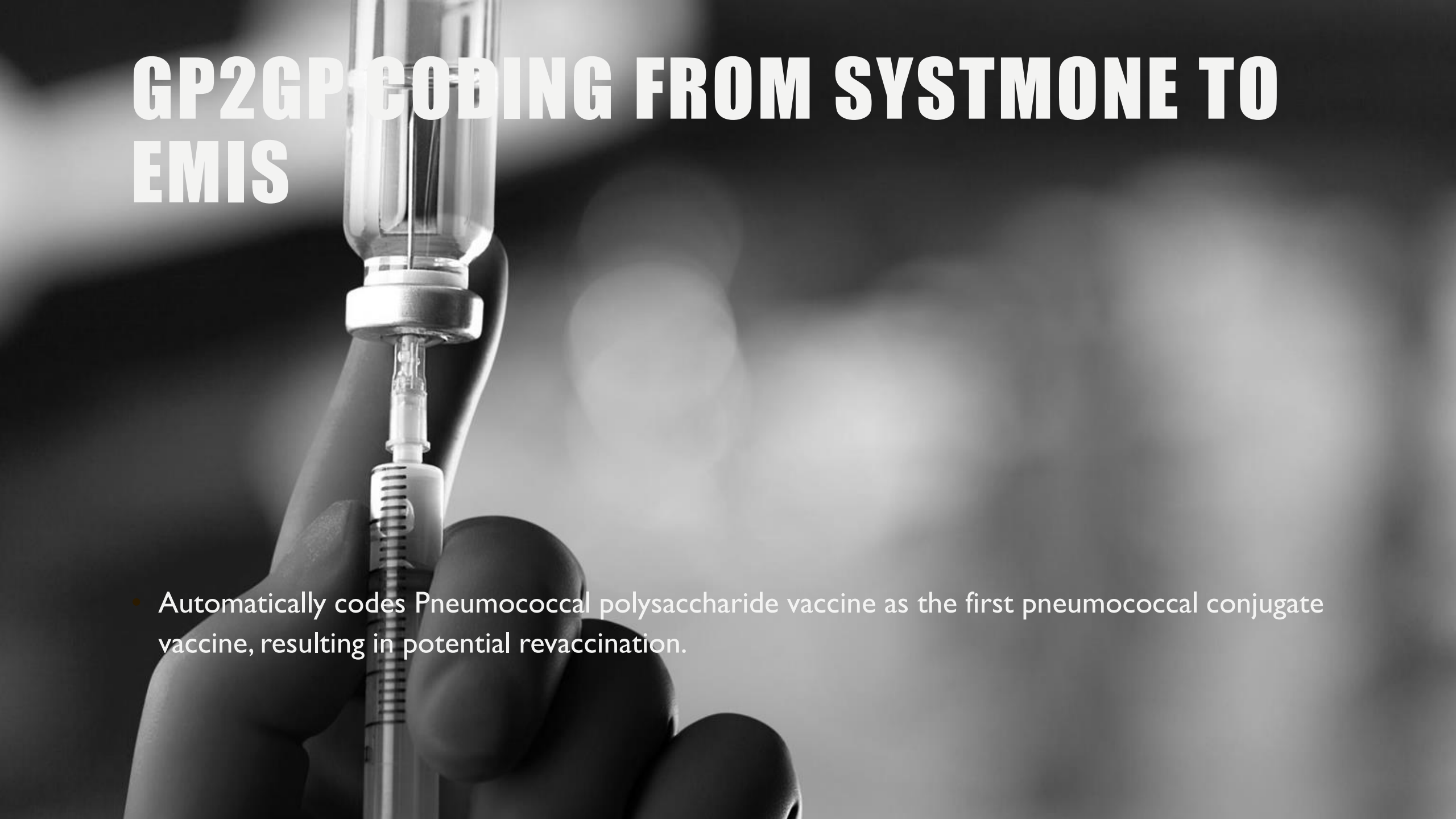
- Many countries give a dose of multivalent vaccine at 18m, with a further dose intended at 6y. How are these doses coded?

QUALITY OUTCOME FRAMEWORK: HAS THIS HELPED OR HINDERED?

ARDEN'S PROMPTS

THESE ARE USEFUL, BUT YOU CAN'T RELY ON THEM

GP2GP CODING FROM SYSTMONE TO EMIS



- Automatically codes Pneumococcal polysaccharide vaccine as the first pneumococcal conjugate vaccine, resulting in potential revaccination.

UP TO DATE WITH IMMUNISATIONS…

- When this code is implemented, it will reduce prompts for any vaccines which have been missed. Patients' perception is that they are up to date, but are they as informed as we are?

IS CURRENT CODING ACCURATE?

- Could there be a legacy effect if patients' immunisation records are not checked on registering with a new practice?

UKHSA GUIDANCE ON DISCOUNTING ORAL POLIO VACCINE GIVEN SINCE APRIL 2016

SO EVEN THE CHILDREN THAT SEEM TO BE UP TO DATE MAY NEED FURTHER VACCINES.

SO WHO DOES YOUR CODING?

AND IS THERE ANY ROOM FOR IMPROVEMENT?