

Optimising your invite- reminder systems for childhood immunisations



Optimising your invite-reminder systems for childhood immunisations

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Classification: Official

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About this guide

This guide has been developed by NHS England (London) to help GP practices across London implement effective invite-reminder systems for childhood immunisation. It presents an approach that draws on the experiences of practices in London as well as evidence of what works in other settings.

While practices populations can vary considerably between each other, invite-reminder systems have been shown to be effective in equally varied settings. This guide will outline a best-practice approach but it is likely that each practice will need to adapt it to its specific context.

Effective invite-reminder approaches are continually evolving in response to changes in technology, the immunisation program and public attitudes, so approaches need to be regularly evaluated and refined in order to remain effective. We are keen to hear about what has worked or not worked for you as we expect to update this guide on a regular basis to reflect current best-practice.

If you have any questions or suggestions about how this guide can be improved please contact us on:

What are invite-reminder systems?

Invite-reminder systems (also known as call/recall) involve:

- the systematic identification of individuals eligible for immunisation
- inviting these individuals to book or attend an appointment to be immunised
- reminding them to attend booked appointments
- following up individuals who have not attended or have not responded to invitations

Why use invite-reminder systems?

While the use of invite-reminders are a contractual requirement for certain immunisations (childhood influenza, hepatitis B) they represent one of the most effective approaches to improving the uptake of immunisation in a population.

While Invite-reminders are ideally suited to individuals who may forget or where convenience determines the likelihood of immunisation uptake, they also help identify individuals who may be more hesitant so requiring greater encouragement to take up an immunisation¹.

Depending on how it is set up, an invite-reminder system can optimise uptake in a cost-effective manner. Using automated, lower-cost methods for the whole population with more resource-heavy approaches for more defined cohorts can help strike the right balance between optimising uptake and minimising cost.

What the evidence shows

Effectiveness: One Cochrane and two systematic reviews looking at over 40 randomised control trials have estimated that invite-reminder systems can increase immunisation uptake from 5 to 20%²⁻⁴. The level of effectiveness is dependent on the baseline uptake of immunisations with a lower effectiveness in more engaged populations⁵. Evidence suggests that multiple reminders are more effective than a single one⁵ but this has not been shown in all studies².

Modalities: While there are more studies evaluating the effectiveness of letters and phone calls than newer methods (emails, texts and smartphone applications), it is unclear what single modality is most effective at improving uptake. However there is evidence to suggest that a combination of different modalities is more effective than using only one method².

Content: While studies suggest that parents prefer concise reminders about upcoming immunisations, there is some evidence that reminders with evidence-based messages may also encourage uptake⁵.

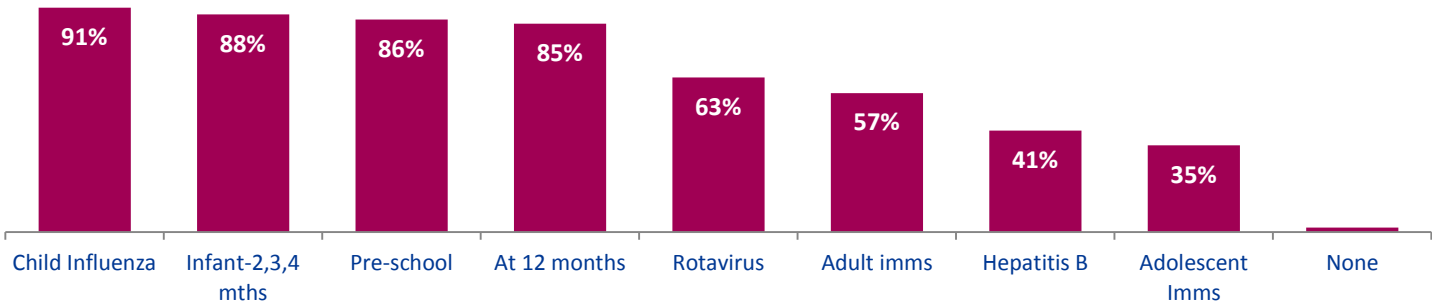
Barriers: Barriers to effectively implementing invite-reminder systems include,

- **Data accuracy:** Inaccurate record of patient details and immunisation history is a frequently cited issue that reduces the effectiveness of invite-reminders^{5,6}.
- **Accessibility of clinics:** Issues such as the ease of booking or rescheduling of appointments and accessibility of immunisation clinics have been shown to undermine the effectiveness of invite reminders⁵.
- **Practice resources:** Invite-reminder systems can be time consuming so practices with limited resources may struggle to implement these systems effectively⁶.
- **Patient/Parental attitudes:** While the majority of parents are happy to receive invites through email and text^{7,8}, there are some groups and individuals where only letters, phone calls or direct contact are effective.

What's happening in London?

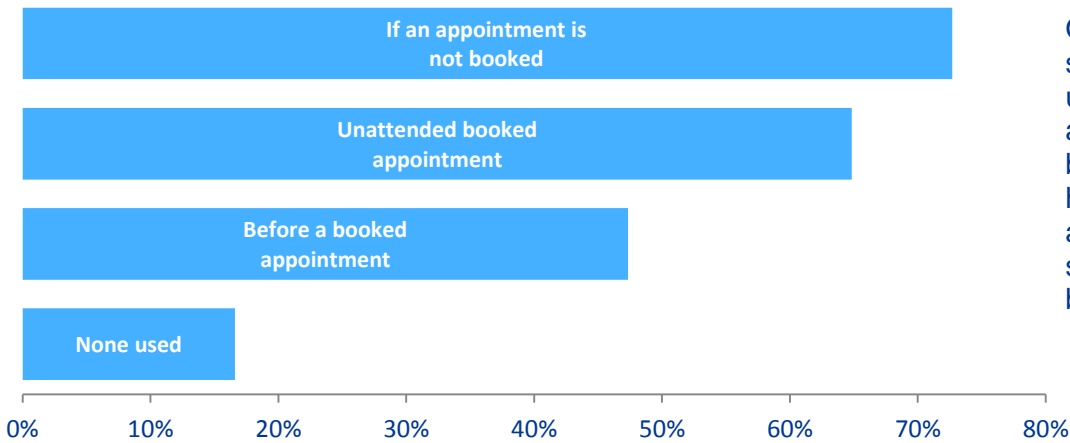
A survey was sent to all practices in London asking them about their experiences with invite-reminder systems and this was followed by a set of more in-depth interviews with 25 practices. More than 60% of practices responded to the survey and the key results shown below:

Which vaccines do you use proactive invites for?



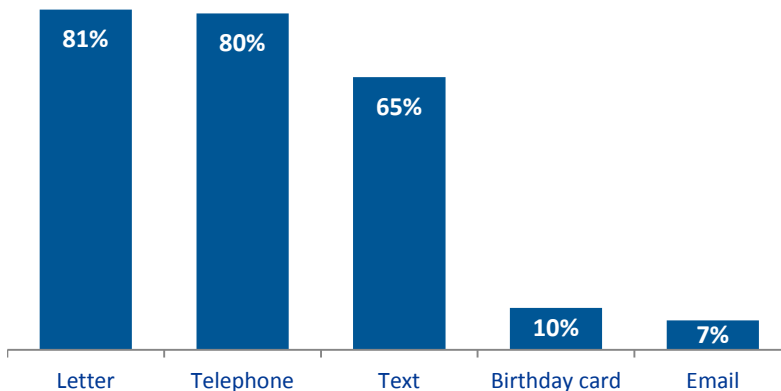
The vast majority of London practices use an invite reminder system for childhood immunisations. Lower proportions use them for adolescent and adult immunisations.

What so you use reminders for?



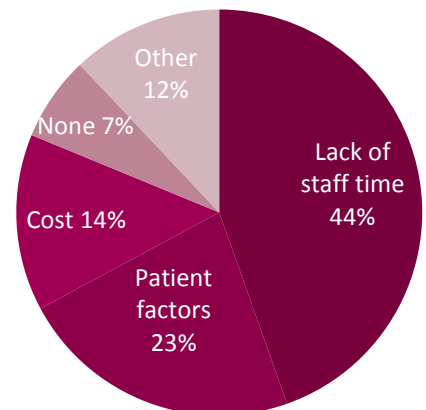
Once an invite has been sent, follow-up reminders are usually sent if an appointment has not been booked or if a patient/parent has not attended booked appointment. Just under half send a reminder before a booked appointment.

What methods do you use for invite-reminders?



Letters and telephone calls are the most popular methods for delivering invite-reminders. Text-messaging is also used by the majority of GP practices.

What challenges do you face in delivering your invite-reminder system?



A lack of staff time, cost and patient factors represent the most frequent challenges to practices in delivering their invite-reminder systems.

What practices have said

What works well?

- **Having a designated lead:** Practices identified the importance of having a designated person (usually a member of the administration team) to coordinate the invite-reminder process.
- **An agreed process:** A clear and simple-to-follow process ensured that invite-reminders were sent out regularly and with minimal effort. It also ensured consistency even if different members of staff were involved. Some practices have implemented e-workflows that makes the process even more efficient
- **Starting early:** Identifying your eligible population in advance allows for invitation and booking in good time allowing greater focus on the more hesitant.
- **Knowing your population:** Practices normally have a good idea about how different groups or individuals respond to different invitations and reminders. Some require only reminding, others need direct calling from a practice nurse and others need even more encouragement.
- **Flexibility:** Using multiple methods and running immunisation clinics in a flexible manner allowed practices to optimise immunisation uptake.

“It’s easier to use the same recall system for everything.”

“Knowing your practice population is key.”

“It’s a joint venture and a multi-pronged approach.”

What are the challenges faced?

- **Staff time and cost:** The invite-reminder process can be time-consuming and is a strain on staff resources. Calls and letters can be costly.
- **Data accuracy:** There are a variety of data accuracy issues that complicate the invite-reminder system. These include practice systems not being updated when a patient is immunised elsewhere, Open Exeter and the GP systems not matching and patient details not being up to date. This usually requires manual checking that is time-consuming.
- **Patient factors:** A lack of interest, awareness and engagement from patients, high numbers of patients moving in and out of the area as well as language and cultural barriers can make it difficult to encourage immunisation uptake through invite reminders.

“Making sure data is complete and accurate is half the battle.”

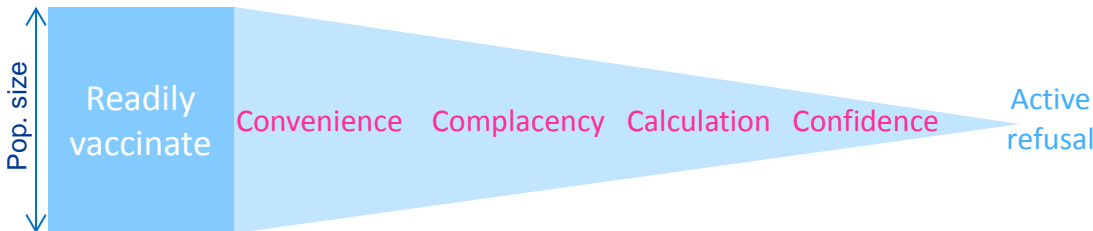
“Staff time is the biggest challenge.”

“You don’t know where a text is going.”

Optimising your system

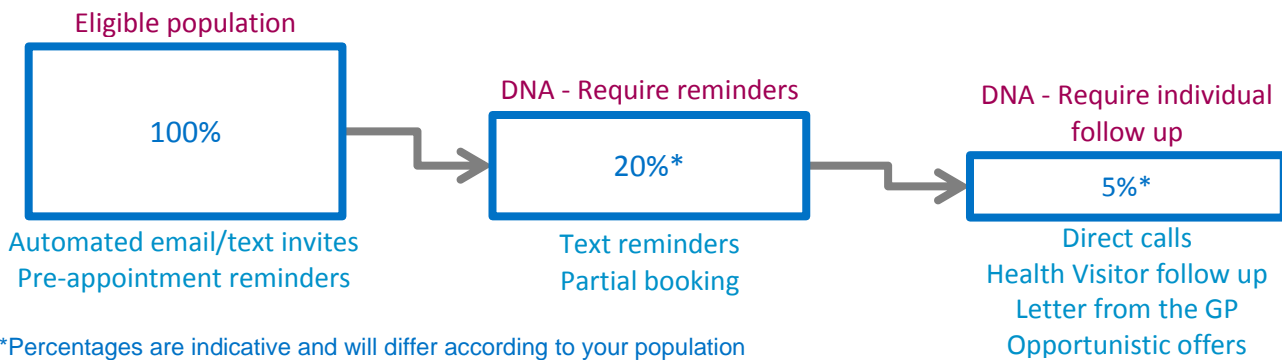
Your overall approach

While invite-reminder systems can be very effective they can also take up valuable staff time. A way to address this is to design an approach that minimises administration time while engaging as much of your population as possible. A large proportion of your population will readily vaccinate and only require reminding when immunisations are due. There is another proportion who will take up immunisation if it is convenient.



Hesitant vaccinators have been categorised into 4 main types – those driven by *Convenience*, those who underestimate the risk of non-immunisation (*Complacency*), those who actively weigh-up the pros and cons (*Calculation*) and those who lack *Confidence* in the immunisation^{1,9}.

Automating initial invitation and subsequent reminders will allow you to successfully reach the majority of your population with minimal administrative resource. This will allow you more time to engage the more hesitant and harder-to-reach communities and individuals through other means:



*Percentages are indicative and will differ according to your population

Optimising your system

- Have a designated practice lead for invite-reminders
- Agree a clear process that is appropriate for your population¹⁰ (see pg. 8)
- Collect the right details and update as necessary: Take every opportunity to update patient contact details and include their email addresses¹⁰.
- Encourage online booking. An online account will allow patients to update their details more easily and allow invites to link directly to appointment booking, encouraging attendance.
- Use a mix of different types of invite reminders to ensure the best response.
- Consider the best mix of invite-reminder modalities:
 - Texts and emails are cost effective but may not be appropriate for everyone or situation
 - Emails provide more narrative than texts so may be more appropriate as a first invite
 - Calls are costly and time consuming but can be useful in discussing patient concerns and booking appointments directly.
 - Letters can be costly, time consuming and dependent on correct address details but they provide useful narrative which are effective for some patients.
- Automate where possible– identify eligibility through a standard report, use automated emails and texts.
- Make your clinics as accessible as possible – consider extended hours, ad-hoc capacity to immunise opportunistically and catch-up clinics^{5,10}.
- Work with local public health teams to ensure your population is as aware of immunisation as possible. This helps reduce the effort needed to proactively invite and remind parents/patients.

Harder-to-reach populations

Automated emails, texts and letters will not be suitable for everyone. A failsafe mechanism needs to be present to ensure certain populations and individuals who have not responded to invitations/reminders are equally catered for. These include:

- Individuals or communities who do not routinely use mobile phones or the internet
- Looked after children or those with safeguarding concerns
- Individuals or communities of no fixed abode
- Communities with beliefs that may hinder immunisation uptake

There are NICE recommendations specific to improving uptake in these groups¹⁰. A useful way to analyse and engage more hesitant populations is set out in the WHO TIP¹¹ guide and may be something to consider with other practices, local public health team and other local stakeholders.

Things to look out for

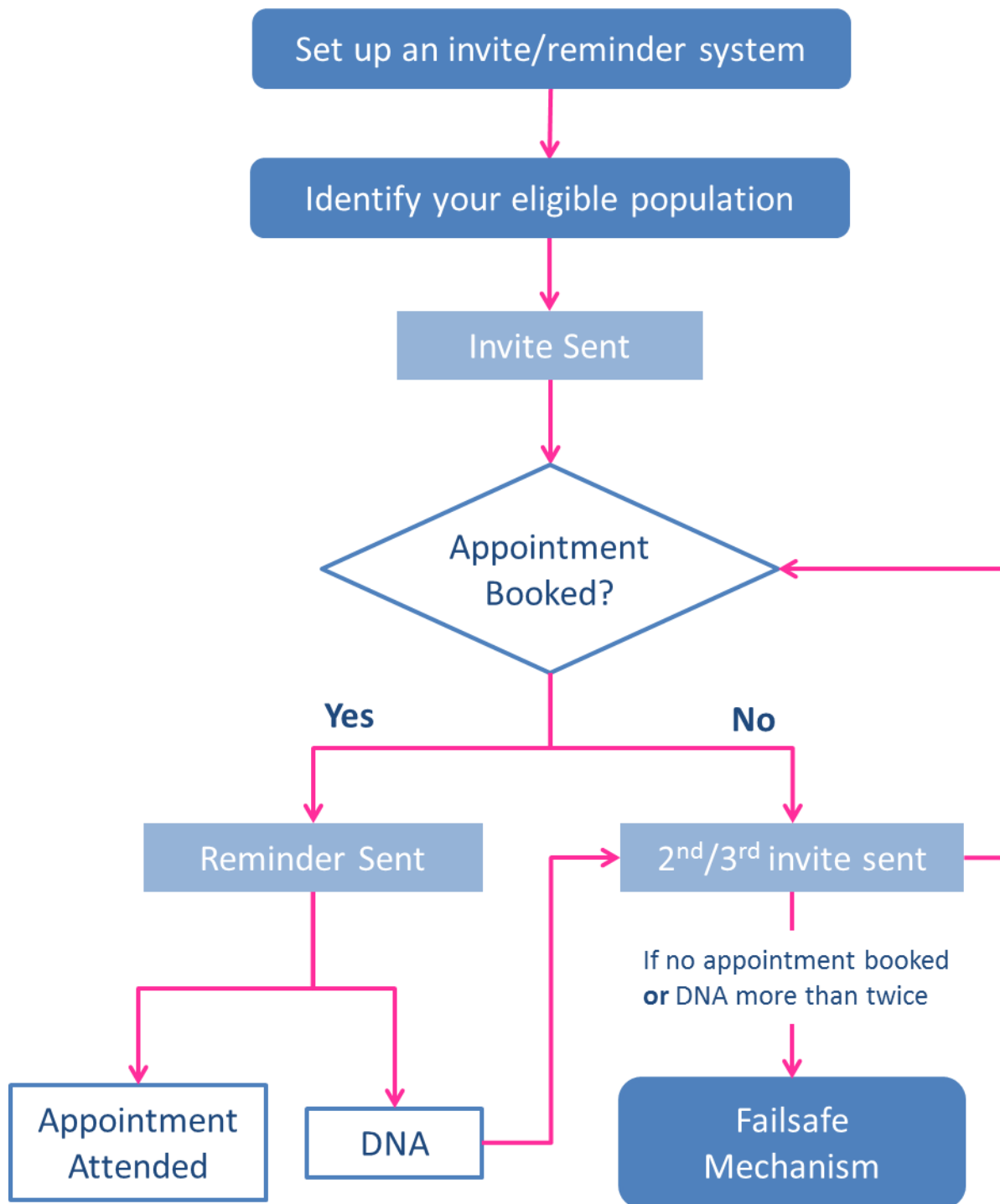
- **Making the most of online booking** – Practices are currently being encouraged to register patients for services such as online appointments, online repeat prescription ordering, and online access to medical records. Studies show that by making immunization appointments available online, your practice will see a reduction in phone calls. When sending out your key message ensure that your call to action is for patients to register for online services so they can book their appointments online. If you require assistance in setting up the appointments, contact your London region Patient Online Implementation Lead: england.patient-online@nhs.net
- **eRedbook** - The eRedbook is the UK's first digital Personal Child Health Record (PCHR) as a result of collaboration between NHS England, The Royal College of Paediatrics and Child Health and private partners. It will result in an easily accessible online format for parents and health professionals to use in the management of a child's healthcare. Furthermore it will have the ability to send reminders to patients about booked immunisation appointments and thus be a potentially important part of a practice's invite-reminder system. It is currently being trialled in some areas of the UK including London and is expected to be rolled out across all CCGs by 2018. If you would like more information please visit: <http://www.eredbook.org/>
- **London CHIS system** – Child Health Information providers that collect and reports immunisation data are to move to a 4-hub model across London from April 2017. These hubs will enable data to be collected in an integrated manner across the capital and improve overall data quality. Thus immunisations in any setting in London will update a single patient's records allowing GP practices and other providers to have access to an up-to-date and complete immunisation record.

Useful Contacts

- Our team: If you have any queries about this guide please contact us on: england.londonimms@nhs.net
- Patient Online: For more information please contact: england.patient-online@nhs.net
- Your IT supplier may be able to help with optimising your system.
- Commissioning Support Units may be able to offer additional support:

Optimising your invite-reminder system for childhood immunisations

Below is a high-level process for invite-reminders that can be adapted to suit your specific needs¹:



¹ Adapted from Atchison et al, the Evaluation of a Standardized Call/Recall System for Childhood Immunizations in Wandsworth, England J Community Health (2013) 38:581–587

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