

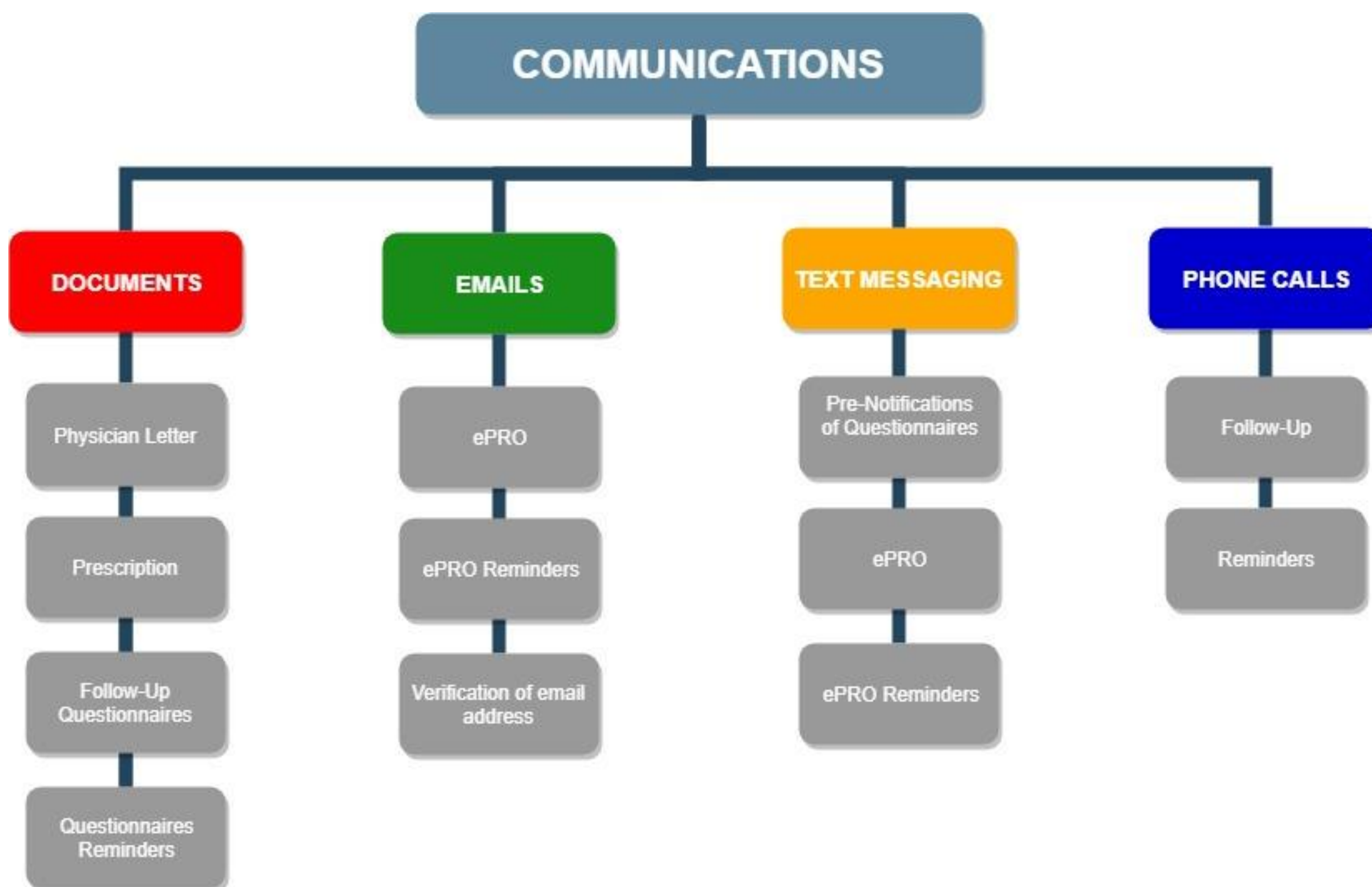
# Scaling the Communication Management System Hurdle: Communications Manager

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## BACKGROUND

Managing the communication for large clinical trials presents significant challenges. The Centre for Healthcare and Randomised Trials (CHaRT) at the University of Aberdeen UK has a number of trials that require some form of communication with participants and health professionals. This process needs to work seamlessly offering a flexible approach, in a way that allows for changes in communication strategies while the trial is ongoing.



## SOLUTION

The Communications Manager was developed with many inputs/parameters to cater for likely requirements for future trials and sites in terms of communications volume, user preferences, communication type, contents and capacity.

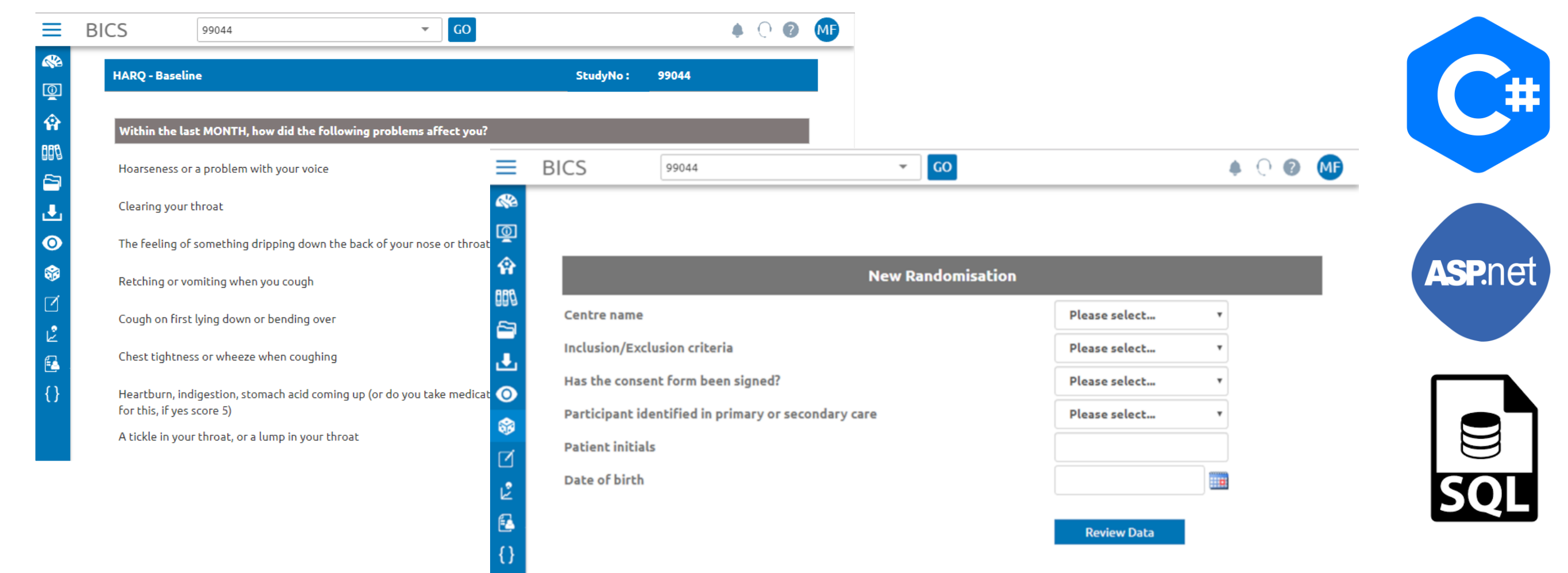
Communication Manager Scheduling				
Reminder time points: 1 <sup>st</sup> : 3 weeks after first attempt. 2 <sup>nd</sup> : 3 weeks after first reminder.				
Communication Item	Initial Communication	1 <sup>st</sup> Reminder	2 <sup>nd</sup> Reminder	Comment
Phone	Phone	Phone	Letter	If phone call unsuccessful then schedule reminder(letter) from current date
Email	Email	Email	Letter	
Letter	Letter	Letter	phone	Letters should be sent at three-week intervals to allow time for response
More than one method selected, including phone	Phone	Phone	Letter	Always default to phone contact first, if selected
More than one method selected, excluding phone	Email	Email	Letter	
Phone number incorrect	Letter/email (if selected)	Letter/email	Letter /email	If phone number incorrect – research nurse would need to contact Trial office to ask that letter sent out.
Email address bounces	Letter/email (if selected)	Letter/email	Letter	
Text Message				Sent as reminder before email, letter or phone call is sent

Another important consideration to facilitate scalability was ensuring ease of setting up new trials and studies.

The modular framework employed in the development of Communications Manager makes it easy to amend any aspect of the tool if and when requirements change.

The Communications Manager integrates with existing CHaRT website templates and development tools in our portfolio and is fundamental to building a successful system.

The Communications Manager is a web-based system (C#/ASP.NET/SQL Server database) and has been integrated with an existing randomisation system and study databases.



## KEY CONSIDERATIONS

- Third-party project management options.

Various third party off the shelf software solutions were initially considered. None however were able to deal with all types of communications, some were not easily scalable to clinical trials with large recruitment sizes and some did not offer the level of customisation on the communication type required.

- Scalability.

The Communications Manager was intended to be a cost-effective solution that could be used by all the trials within CHaRT. The application had to scale well to support multi-centre clinical trials with large numbers of sites and participants requiring high volumes of communication with all the stakeholders.

## KEY ACTIVITIES

- Building a communications triggering and generating algorithm.
- Developing a communications issuing, suspending and tracking algorithm.

The Communications Manager handles the entire process from identifying the communication event (e.g. documents, emails, text messages, phone calls) triggering the communications generation (e.g. a customised letter to a physician (eg a GP), prescription for signature, text message to be sent to a participant to complete an online questionnaire, trigger for research nurse to call a participant) and tracking receipt and, where relevant, return of the communication into the trial office.

**Trigger Event Administration**

Display Order	Event Name
1	Randomisation
2	Titration Dose Fixed
3	Week 26 Trigger
4	Ad-hoc Prescription

**Trigger Administration**

Triggering Event	Triggered Communication	Specific Centre	Schedule Date From	Delay (days)
Randomisation	GP Letter		Trigger Date	0
Randomisation	Best Contact Letter		Trigger Date	0
Randomisation	GP Letter 6 month (not attended)			
Randomisation	GP Letter 12 month (not attended)			
Titration Dose Fixed	Prescription (2nd sup)			
Week 26 Trigger	Prescription (3rd sup)			
Ad-hoc Prescription	Prescription (Ad-hoc)			

**Due Communications Viewer**

Show all communications up to this date: [Date Picker]

Communication name: [Dropdown: All]

Communication method: [Dropdown: All]

Centre: [Dropdown: All]

Study No: [Dropdown: All] or 101024

[Filter] [Reset]

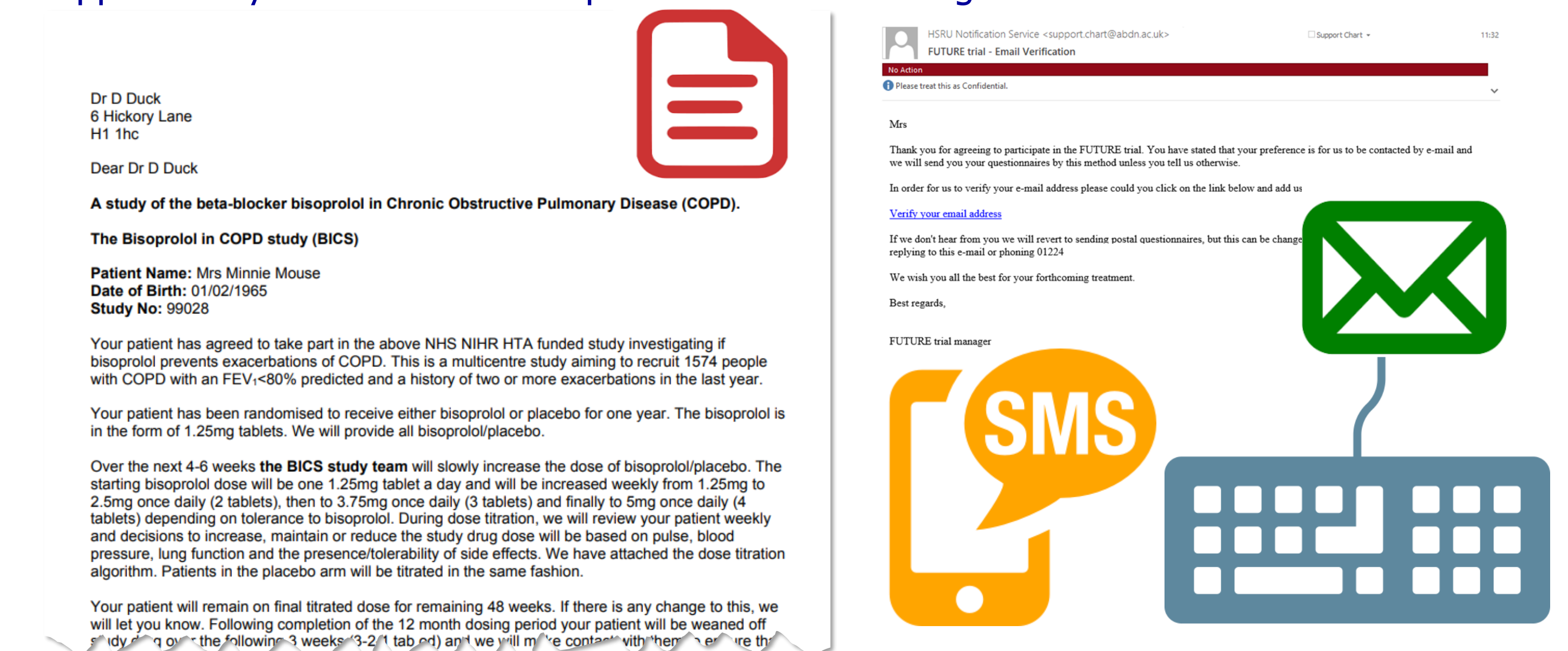
**Communication Events List**

Order	Display Name	Study No	Method	Due Date	Display Name	Ready to send?
1	GP Letter					
2	GP Letter 6 month (not attended)	101024		04/10/2019	GP Letter 6 month (not attended)	✗
3	GP Letter 12 month (not attended)	101024		04/04/2020	GP Letter 12 month (not attended)	✗
4	GP Letter 6 month (attended)	101024				✓
5	GP Letter 12 month (attended)	101024		25/04/2019	Prescription (2nd supply)	✓
6	Prescription (2nd supply)				GP	✓
7	Prescription (3rd supply)				GP	✓
8	Prescription (Ad-hoc)				GP	✓
9	Best Contact Letter				Best contact	✓

## CONCLUSIONS

The Communications Manager enables seamless management of communications, thereby reducing the logistical issues that document management entails. Whilst focussing on scalability, the Communications Manager is a cost-effective solution that will be used by all the trials hosted within CHaRT.

This has enabled trial staff to focus on other aspects of managing the trial and optimising communications management. The Communications Manager is a platform that continues to evolve as new functionalities and features become available to enable the tool to support every communication requirement in conducting a clinical trial.



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