sealed envelope™

Simple randomisation service

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Overview

Sealed Envelope's simple randomisation service allows investigators to randomise patients to clinical trials quickly and simply on the web or with a text message.

Chapter 2

Simple randomisation service specification

Sealed Envelope's simple randomisation service has the following features:

- Web based service with optional randomisation via SMS
- Online set up - the client may set up the system themselves or ask Sealed Envelope to do it on their behalf.
- Randomisation lists may be uploaded to the service to enable stratification. Allocations are provided sequentially within strata. This allows block sizes, unequal treatment allocation and treatment names or codes to be defined.
- If a randomisation list is not uploaded, randomisation is by random permuted blocks to treatment **A** or **B** in ratio 1:1.
- Inclusion and exclusion criteria may optionally be configured. If configured they must be answered **Yes** or **No** as appropriate to allow randomisation to occur.
- The system is accessed via a secure connection (SSL) over the internet. This connection encrypts data between the user's internet browser and the server.
- Online randomisation is achieved by the user entering a patient identifier (text field - must be unique), stratification information (if applicable), confirming eligibility criteria (if applicable), own email address and the randomisation system password. Randomisation by SMS is achieved by the user sending a text message containing a trial identifier, patient identifier and stratification information (if applicable).
- The patient is randomised to the next treatment or code and the chosen treatment group or code shown or texted to the user.
- An email notification is generated displaying the chosen treatment group or code and sent to the email address given by the user randomising and the administrator email address. The administrator email address is the one provided when the system is set up (usually a trial coordinator or central trial email address).

- A list of all randomisations performed to date may be sent to the administrator email address by entering the password.
- The randomisation list cannot be viewed through the system. Note that for lists uploaded with randomisation codes we do not store the treatment group. Suitable safeguards for maintaining the integrity and confidentiality of the list are the client's responsibility.
- There is only one password and anyone with knowledge of the password can perform a randomisation. A request to change the password may be sent to the administrator email address. If the special link contained in that email is visited within 7 days of the request a new password can be set.
- Data and randomisations held by the randomisation system cannot be changed or edited by users. Sealed Envelope will not edit or delete any data held by the system.
- A request to delete a trial may be sent to the administrator email address by entering the password. If the special link contained in that email is visited within 7 days of the request and the password entered, the trial and all associated randomisations will be permanently deleted. Sealed Envelope cannot recover this data once it has been deleted.
- There is no audit trail provided for this system. However, the list of randomisations and email notifications provide a complete account of all actions taken on the system. We recommend the email notifications are retained for this purpose.
- The system has been tested by Sealed Envelope during software development and we are confident it performs as intended. However, clients are encouraged to test the system first by creating a dummy version of their trial and using a dummy randomisation list (if appropriate). We recommend clients test this system thoroughly and document their findings before setting up the system for actual use in their trial.

Chapter 3

Using a pre-defined randomisation list

There are several advantages to using a pre-defined list with our simple randomisation service. Using a list allows you to:

- Stratify e.g. by age group or centre
- Have more than two treatment groups
- Name your treatment groups, e.g. Placebo and Aspirin rather than A and B
- Randomise to a code, e.g. 1001, 1002,… rather than A and B. This makes the system more suited to blinded trials where the link between the codes and group is kept secret
- Alter the allocation ratio from 1:1, e.g. can be 2:1

Cost

Using a randomisation list incurs a charge - see pricing for details.

When you create a trial with a randomisation list it will initially be limited to **5 randomisations**. Contact us to arrange payment and extend this limit.

How do I set up a trial using a randomisation list?

When you create your trial you should upload the randomisation list using the file upload button on the trial creation form.

Your list must be a CSV file in the format described below. We have a randomisation list creation tool that you can use to generate a list in the correct format, but as long as the list matches the specified format you can generate it however you want.

CSV file format

Line 1 of the CSV file should be the header:

```
block identifier, block size, sequence within block, treatment, [strata 1, strata 2,
    ...] [code]
```

The remaining lines should be the randomisations and should contain the fields:

block identifier : Block number (integer number)

block size : Size of block (integer number)

sequence within block : Sequence number within the current block (integer number)

treatment : Name of treatment group or randomisation code (string)

strata 1, strata 2, … : Optional stratification variables (string). The header is used as the stratification label so you should capitalise, e.g. Age-group.

code : Optional column containing unique randomisation code (string).

About randomisation codes

If your trial is double-blind, you should use randomisation codes. You can put these into the **treatment** column of your CSV or use a separate **code** column. Either way, on randomisation the user will see the randomisation code and not the underlying treatment group. You will need to keep the file linking the codes to the treatment groups to allow the results to be analysed when the trial is unblinded.

Warning! Even if you upload both treatment groups and codes, we do not store the treatment groups - only the codes! Make sure you keep a copy of your original list.

Example

This is a randomisation list with a block size of 4, 1:1 randomisation to Intervention or Placebo, and stratification by age-group (under 50 vs. 50 or over) and sex (male vs. female).

```
block identifier, block size, sequence within block, treatment, Age-group, Sex
1, 4, 1, Intervention, Under 50, Male
1, 4, 2, Placebo, Under 50, Male
1, 4, 3, Intervention, Under 50, Male
1, 4, 4, Placebo, Under 50, Male
2, 4, 1, Placebo, Under 50, Female
```

```
2, 4, 2, Intervention, Under 50, Female
2, 4, 3, Placebo, Under 50, Female
2, 4, 4, Intervention, Under 50, Female
3, 4, 1, Intervention, 50 or over, Male
3, 4, 2, Intervention, 50 or over, Male
3, 4, 3, Placebo, 50 or over, Male
3, 4, 4, Placebo, 50 or over, Male
4, 4, 1, Intervention, 50 or over, Female
4, 4, 2, Placebo, 50 or over, Female
4, 4, 3, Placebo, 50 or over, Female
4, 4, 4, Intervention, 50 or over, Female
```

Chapter 4

Randomising by text message

If your trial is enabled for randomisation by text message (SMS), you can send a text and receive back a treatment allocation.

> Text message delivery can be delayed due to network and third party issues outside the control of Sealed Envelope. We do not recommend you rely on text messaging if your randomisation is very time sensitive.

Cost

Enabling this feature incurs a one-off charge if you are using the simple service, but is included in the simple with list service - see pricing for details. Standard network text message costs also apply.

How do I randomise by text message?

Once your trial has been activated for text message randomisation, you can view instructions for randomising by text message. The details vary somewhat by trial but in general you send a specially formatted text message to the Sealed Envelope text service:

```
mytrial randomise patient id [strata]
```

`mytrial` is the SMS name of your trial, `patient id` is the unique identifier(s) for the patient you wish to randomise, and `[strata]` are the stratification values if your trial is using a stratified list. You must put the word `randomise` or `rnd` between your trial name and patient identifier.

By default, the patient identifier can be anything you want, such as trial ID number, initials and date of birth, clinic number etc. Optionally, you can ask Sealed Envelope to restrict the patient identifier to conform to a certain pattern, e.g. two letters and three digits.

Examples

```
mytrial randomise JD 15/10/1954
```

Here the patient identifier is `JD 15/10/1954` which is the patient's initials and date of birth.

```
mytrial randomise 1267821 male <40
```

In this example the patient identifier is `1267821` and there are two strata: gender and age-group. The patient being randomised is male and under 40 years of age.

Can I try this out?

Yes - we have a demo set up for you to try. Go to the demotext trial and view the instructions for randomising by text message (using the password **sesame**).

What about inclusion and exclusion criteria?

If your trial has inclusion and exclusion criteria enabled, it is implied by sending a text that the patient meets these criteria. Do not send a text for patients that are not eligible.