

The Essential guide to LifeGuide intervention development

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Introduction

The Essential Guide to LifeGuide intervention development was written by the LifeGuide team at The University of Southampton, originally for use by internal staff and students. However, we feel it may be useful to share it with other people currently using and considering using LifeGuide. This document outlines the key things we have found helpful to think about when creating an online intervention. Trust us, thinking about them before you start developing your intervention may save you a lot of stress and time later on. We have a lot of experience using LifeGuide and we have come up with these tips to help you get the most out of LifeGuide and to help you avoid making common mistakes.

Before you begin, there are a couple of key things you should know about LifeGuide. The LifeGuide Community can be found at www.lifeguideonline.org. This website has a number of functions which are worth exploring, but mainly you will use it to store and share your intervention once you have developed it. Please note, you will not create and develop your intervention online. For this you will use the authoring tool.

The LifeGuide authoring tool can be downloaded from the LifeGuide Community website (<https://www.lifeguideonline.org/releases/authoring>). You should save this authoring tool to your hard drive. It can also be downloaded or copied onto a memory stick, but it is likely to be slower. You must not download the authoring tool onto a network drive or a shared drive as it will not function properly.

For use alongside the LifeGuide authoring tool is 'The Wiki', which can be found at https://wiki.lifeguideonline.org/wiki/Main_Page. The Wiki provides a step by step guide to the technical side of LifeGuide and logic writing. It also has a very useful logic dictionary. The Wiki will be referred to throughout this document.

It is worth reading the 'What is LifeGuide' section of the wiki before you continue with this document, found at https://wiki.lifeguideonline.org/wiki/1._What_is_LifeGuide.

The following paper gives an additional introduction to LifeGuide and can be found on the LifeGuide Community website:

Williams, S., Yardley, L., Weal, M. and Wills, G (2010) Introduction to LifeGuide: Open-source Software for Creating Online Interventions for Health Care, Health Promotion and Training. In proceedings Med-e-tel: Global Telemedicine and eHealth Updates: Knowledge Resources. Luxembourg, LU, 187-190.

1. Thinking about planning, designing and developing your intervention

Writing the content of an intervention

It is much easier to edit the content of an intervention using ordinary text files such as Microsoft Word. Using track changes in Word is very useful when several people are making comments, and adding and editing text. Some people also like to use PowerPoint to design what their web pages may look like before moving on to the authoring tool.

Having a non-web based final version of the intervention content is also extremely useful for documentation and for making any future modifications that may be required at a later date.

When writing the content of your intervention (in Word or PowerPoint), give each page a meaningful name and note this on the document. These names can then be used to name the pages within LifeGuide. If this is not possible, ask the person who is making the pages to note the LifeGuide page names on the corresponding pages within the Word/PowerPoint document. This will make it much faster to find pages if changes need to be made later on.

Planning the navigation of your intervention

Most commercial websites are flexible – they are designed so that people can click around a website, picking and choosing items they are interested in. Online behavioural interventions are often different. They often require a more ‘tunnelled’ approach which involves end-users needing to see certain parts of the intervention before going on to other parts (e.g. review last week’s goals before learning new behaviours in the next session).

People who use online interventions are not always typical internet users and may therefore be fairly unfamiliar with the web. We suggest the following for clear navigation:

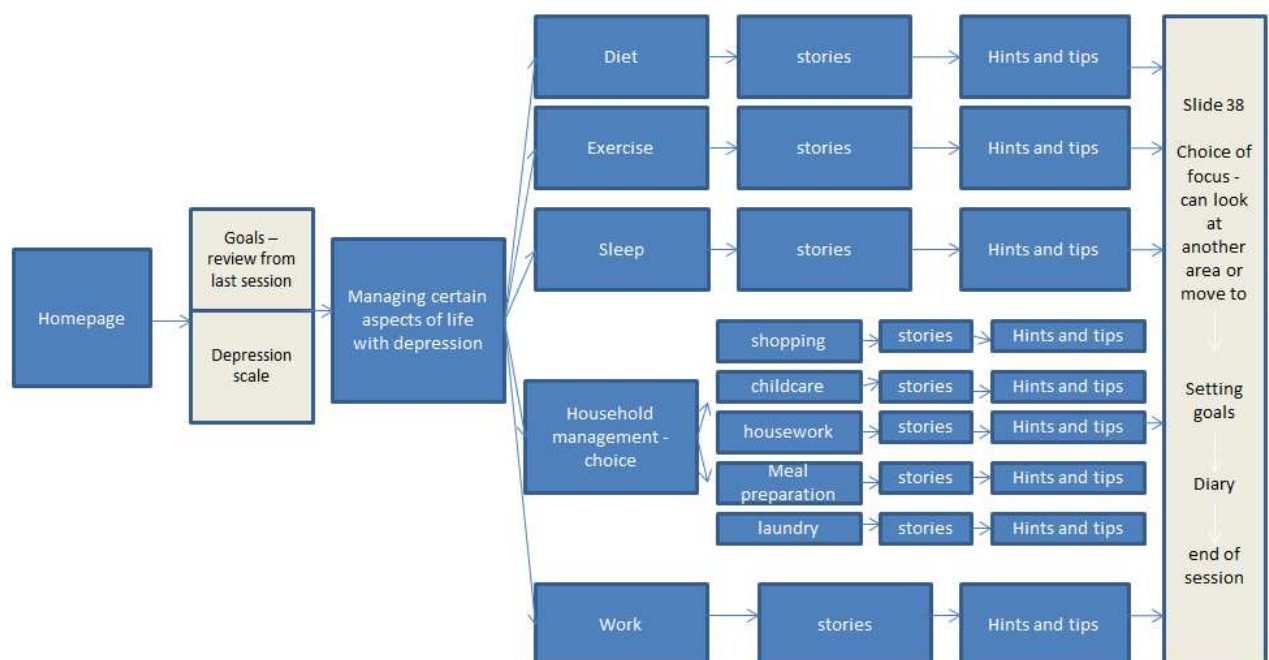
- Add **Next** buttons and **Back** buttons on pages (some end-users may not be aware of the **Back** button located in their internet browser). We find that having the **Back** button on the left and the **Next** button on the right (like a music or dvd player), and placing the buttons in the same place on each page can be helpful to end-users. Remember that users may not be aware of the need to scroll up or down to find buttons.
- When adding links to external websites, put these links at the end of the session, otherwise you may lose end-users to other websites half-way through a session! Making these links appear as pop-ups will allow users to come back to your intervention easily.
- Pop-up windows or tabs may confuse some end-users and they may not know how to come back to your intervention. If you are using pop-ups to link to other pages in your intervention, you can minimise any confusion by putting a button on the pop-up page and adding the text **Back to Main Website** on the button (this is called a **Close pop-up in LifeGuide**). It can also be useful to provide instructions to your users that the link they are clicking on will open a new window and that closing it will bring them back to the main website

Planning the navigation using flow charts

It is a good idea to create flow-charts before you begin creating your intervention, especially if you are creating a complex intervention. Flow charts are extremely helpful because:

- They will help you to see the bigger picture including how pages are linked and the different paths end-users can take when using your intervention.
- They can really help you with writing logic.
- They can help you to see where problems in the navigation or logic may occur before you've wasted a lot of unsuccessful development time.
- They are a key part of testing your intervention and ensure you test every possible use of your intervention. It is good practice for other people to test your intervention (see Section 4 of this document, 'Thinking about testing') and flow charts are a really good way of showing them how the intervention should work.

This is an example of a flowchart which shows how pages in an intervention connect (you may have a diagram like this one for each session/section in your intervention):



Designing your intervention

It is important to finalise your template before you start creating pages. Making changes to the overall look once you have started is time consuming and should be avoided.

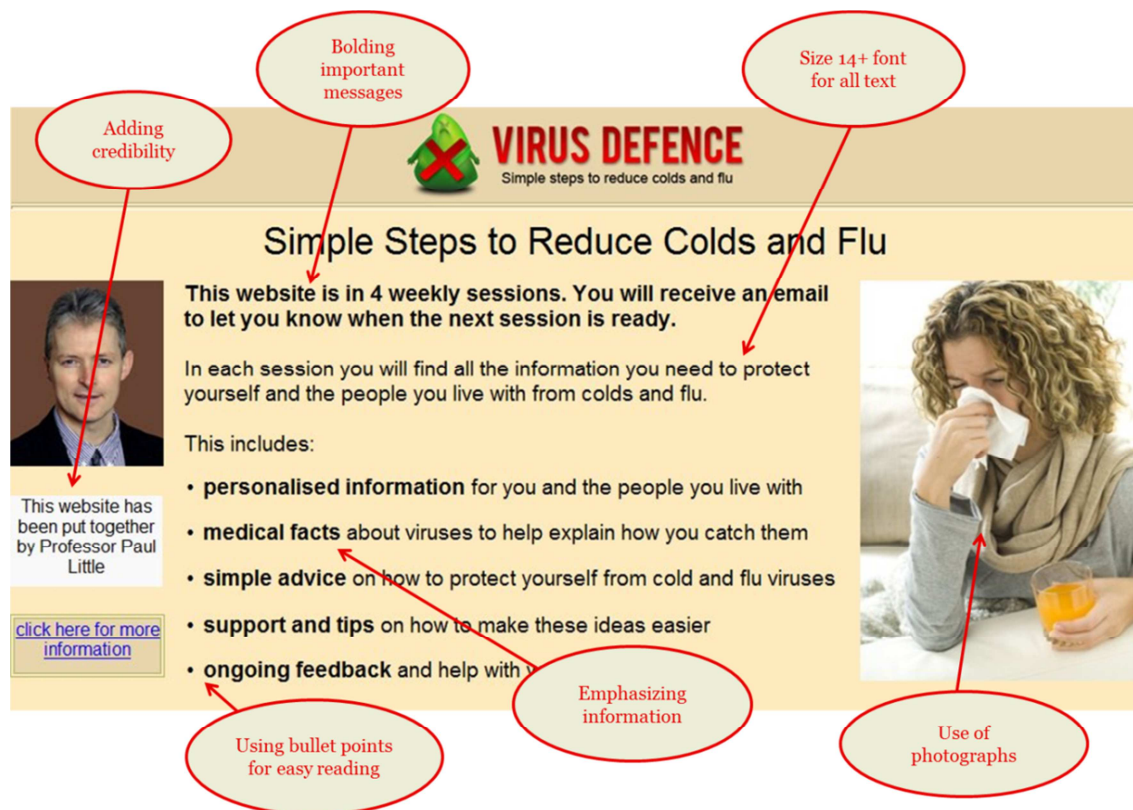
If you need some ideas for layouts, colour schemes, logos, etc., you can look at our demo interventions on the LifeGuide community website <https://www.lifeguideonline.org>

They'll also give you an idea of how much information to put on a page and the type of language to use. A simple but key finding in our qualitative work on various online interventions is that **people won't and don't read long pages of text in an online intervention**. They generally don't read webpages word by word in the way they read a book. Instead, they scan the page, pick out individual words and sentences and look at images. It is best to keep the language simple and to a low reading age so that people with poor communication skills, poor reading skills and learning disabilities can understand the information.

We suggest the following:

- Use a page width of 1024 pixels. (See the wiki for how to change the page width in the logic file).
- Use large font – we find most people like font size 14 or larger, and this helps people with mild visual impairments.
- Simplify the language, use short sentences and be concise.
- Use clear font styles – avoid unusual and complex styles.
- Cut text into smaller paragraphs (even using one sentence per paragraph if it helps). This can help the page feel less text heavy.
- Simplify the language, use short sentences and be concise. You can use this readability test tool <http://www.read-able.com/> to measure the reading age of text, and to ensure you keep it as low as possible.
- You may also want to use the BDA dyslexia styling guide for accessibility found at <http://www.bdadyslexia.org.uk/about-dyslexia/further-information/dyslexia-style-guide.html> which contains a simple list of styling decisions that can be made to keep content accessible. The guide is written from the perspective of dyslexia accessibility but much of it is also good general styling advice.
- Use lots of empty space (e.g. between borders and text).
- Use bullet points to break text up – people will be more drawn to reading a concise bullet pointed message than a wordy paragraph.
- Use bolding to highlight the main points on the page – even if they don't read the whole page they can still get the main message from what is bolded on the page.
- Prioritise information – put the main points at the top of the page.
- Put non-essential information (this is information that will not affect the use of the intervention or isn't key to the behavioural techniques being studied) as an optional click-through allowing interested users to pick and choose what they are interested in.
- Images can be used to break up text and reinforce meaning – people love pretty pictures on a website. We are told this on a regular basis in our qualitative work.
- It is uncomfortable to have to read text going across the whole screen so keep the text width short. You could use boxes or lines to break the text into smaller columns.
- Try to fit what needs to be conveyed on a page so that end-users don't need to scroll down too much.

The screenshot below shows how the above advice was used to create a page for an intervention:



Using templates

Within the Authoring Tool you can create page templates. You can have many templates and these may have the standard header, border, footer, back and next buttons. Creating templates will save you time and help your website to look more professional.

Important things to remember when creating pages

- When you create a new page, you will need to give it a unique name. This name will appear at the top of the browser for end-users. If you would like another name to appear to end-users, you can type it into the box labelled **Page title** in the authoring tool.
- Pages are listed in the authoring tool in alphabetical order so use a prefix for each page to make it easier to find and remember page names. For example, if you have several sessions in your intervention, prefix each page with the session number, then add a content related name, e.g. s1_goal_setting.
- When creating pages for questionnaires or for recording other responses from end-users, do not use the same page at different times in the intervention (e.g. do not use the same page at baseline and at the end of study) because this will make it difficult to analyse the data.

You can create a duplicate of the page very easily by using **Save as** in the authoring tool, and showing one page at baseline and the other at the end of the study.

- If different groups answer the same questionnaires at baseline, it is fine to use the same page for different groups (when you analyse the data, you will know which group end-users are in).
- Likewise, all images should have a meaningful name. Blind and partially sighted people may use screen reader software to identify and interpret what is on the screen. This software will use the name of the picture.
- Screen reader software will also read information from beginning to end. Therefore it is important that items are listed in the order you would like them to be read. Please see the wiki page on **Ordering items** for more information on this.
- When you add text to a page, it is very important to make sure the text box is bigger than the text inside the box. This is because some computer and internet browsers may automatically adjust the text to make it bigger. If the text box is not large enough, the text will move onto the next line and may overlap other text below it, which will make the text unreadable.
- The order in which you create your interactions on a page will be the order that they appear in the Excel spreadsheet when you download the data (more information about your data is provided in section 6). Be aware of this when you are moving interactions around on the page because it may be confusing later on if items are in a different order than you expected. Check to make sure that each of your questions is next to the correct interaction.
- Creating error messages will ensure end-users provide you with information that is crucial to you. The error messages you create will appear when users try to continue without entering a response to a question or instruction. See the wiki for more detailed information about error messages.

Using interactions

You will need your end-users to input information/answer questions throughout your intervention. The place where they input this information is called an 'interaction'. Interactions you can use include Single-choice, Multiple-choice and Numeric value (see the wiki for more information about interactions and which one you should use in each situation).

It is important to give your interactions short meaningful names because you will refer to them when writing the logic and they will become the variable names for your data analysis.

Important points to remember when naming interactions are:

- They need to be unique to a page.
- They are case sensitive. We recommend only using lowercase letters when naming interactions so that all of your logic can be written in lowercase letters and you don't need to remember when to use uppercase letters.
- They must start with a letter, and after that can contain alphanumeric characters, hyphens and underscores only.

- They do **NOT** need to include the page name (when exporting the data you can choose to add the page name before or after the variable name)

Keeping track of your interactions using an interaction key can be very useful for writing logic and data analysis.

Tailoring

You can tailor the information end-users see. You can base this tailoring on a number of things including on their gender, age, randomisation group, or the information they may have put into an interaction.

Randomisation

When deciding on the design of your study, you will need to decide how your end-users will be randomised. Please see the wiki for advice on randomisation logic.

If they are going to be randomised within the intervention, you will need to add an extra line of logic to ensure that if end-users click the back button, they cannot be randomised again. There is more information about this in the wiki, but below is an example of how this might look:

```
265
266 #GROUP ALLOCATION
267 show login_start
268 #Logic to ensure users aren't randomised twice
269 after login_start if (loadvalue(username, "group") = "leaflet") goto login_bookletgroup
270 after login_start if (loadvalue(username, "group") = "intervention") goto login_interventiongroup
271
```

You will also need to add extra logic to ensure that if people close their browser before they are randomised, they go back to the point before randomisation next time they log in, so they can be randomised. Please see the wiki for more detailed instructions.

Questionnaires

You can administer questionnaires within LifeGuide, but there are a few important things to consider:

- How many questionnaires are you going to ask your end-users to complete and over what time scale? (e.g. One at baseline, one after 6 weeks and one after 3 months)
- How long will you allow for end-users to complete each questionnaire? (e.g. 4 weeks per questionnaire)
- Ensure the questions are all relevant to your data analysis, as you do not want your users to lose interest due to long questionnaires. You may want to only make specific questions mandatory so that end-users can complete each questionnaire without answering every single question.

Prioritising your intervention features

Since it is difficult to be sure how long development will take (but it always takes longer than you expect!) it is useful to prioritise the functions you wish to include in your intervention. You can use the MoSCoW approach to identify functions you want:

- **'Must have'** (essential)
- **'Should have'** (important, but can be worked around if necessary)
- **'Could have'** (nice to have but not critical)
- **'Would like'** (for future projects).

Credibility

Credibility is important as users often don't know who is behind a website and they may be unsure about whether they can trust the information. You can increase the credibility of your intervention by good writing - check for grammar and spelling mistakes, use high-quality graphics and include university/research council logos. A page which shows the members of your team and their area of expertise can also help to boost the credibility of your website.

2. Thinking about user accounts

Creating user accounts

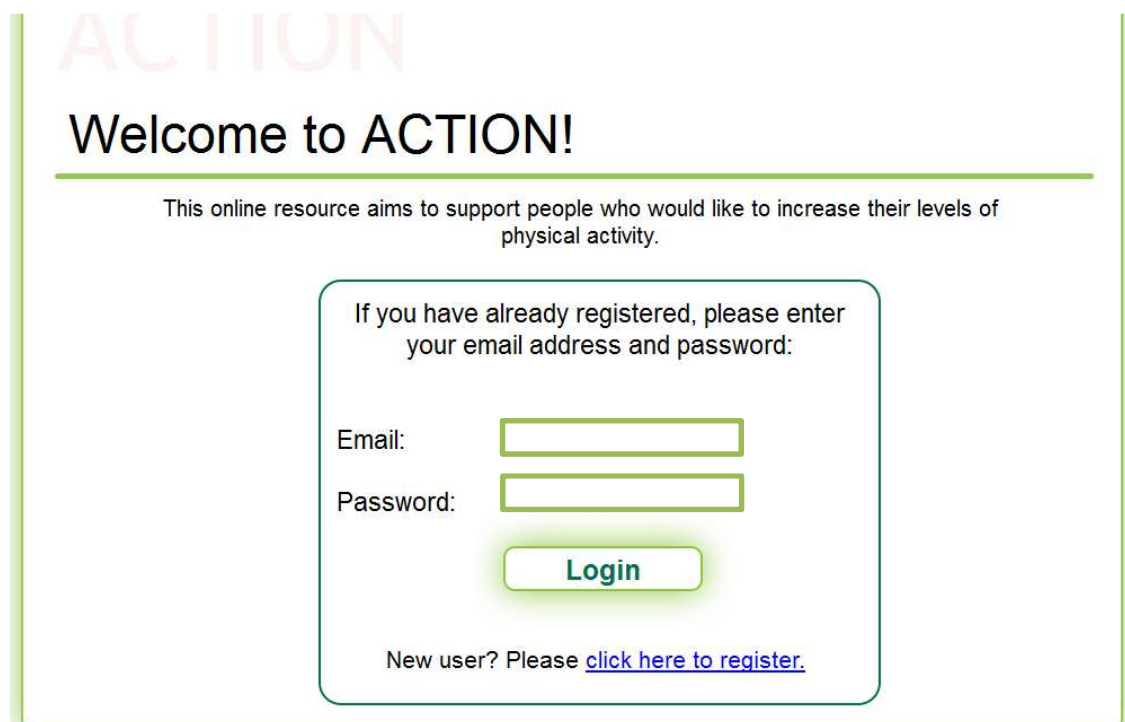
If you have several sessions in your intervention, you will need to add pages where end-users can create a user account and log back in. Users often find this more difficult than you might expect!

We recommend that you make end-users use an email address as their username when they create an account because:

- This stops end-users from registering the same username multiple times.
- End-users are less likely to forget their email address.

On the home page you will need to facilitate new users and existing users. Existing users need a 'Login' button and it needs to be obvious to new users how to register.

Sometimes end-users try to register multiple times when all they want to do is login, which causes real problems as it makes it impossible for the system to link them with their previous sessions and data. For this reason, we suggest a prominent 'login' button and a less obvious 'registration' or 'new user' button. Your home page may look something like this:



The image shows a web page with a light green border. At the top, the word 'ACTION' is written in large, light pink, semi-transparent letters. Below it, the heading 'Welcome to ACTION!' is displayed in bold black text, underlined by a thin green line. A paragraph of text follows: 'This online resource aims to support people who would like to increase their levels of physical activity.' In the center, there is a rounded rectangular box with a green border containing a login form. The form has the text 'If you have already registered, please enter your email address and password:' at the top. Below this are two input fields: 'Email:' followed by a text box, and 'Password:' followed by a text box. A green 'Login' button is positioned below the password field. At the bottom of the box, it says 'New user? Please [click here to register.](#)' in blue text.

Once you have created your user accounts you can save data specific to the user. For example, if a user enters a goal in session 1, this can be saved and shown to them later in the session, or in a later session.

If you need to have more than one registration system, for example, one for participants and one for nurses, we recommend you do not put two 'Registration' or 'login' buttons on the same page. Even if you clearly explain that one is for the registration/login of nurses, and the other is for participants, there will be confusion. We recommend instead that you send the nurses a link to the first page of their registration, and leave the single 'New User' or 'Registration' button on the home page for participants.

Order of pages for new users

When new users first see the website, information should be presented to them in the following order:

1. Information about the study
2. Consent form
3. Questions on demographics
4. A page for them to create an account (email address and password)
5. Baseline questions
6. Randomisation (if applicable)
7. Session 1 (if applicable)

End-users need to be given information about the study before they are asked to give informed consent. We ask for demographic information before they create an account so that if they decide they do not want to create an account (some users don't like to give their email address), we have some demographic information about end-users who chose not to take part in the study.

3. Thinking about emails

The role of emails in LifeGuide interventions

Emails are likely to play a large part in the running of your intervention. Emails are usually sent to both end-users and the study team. Some of the most common emails sent to end users are to inform them of the following:

- Welcome to the study, your participant number is XXX.
- Your next session/questionnaire is now ready for you to complete.
- Reminder – your next session/questionnaire is waiting.

The study team will receive emails to inform them of end-user activity. For example:

- A new participant has just registered.
- Participant XXX has not completed the questionnaire.
- Participant XXX has completed the study.

Tips for creating emails sent by LifeGuide

The emails sent out by LifeGuide are automatically generated through the logic (see the wiki for more information about writing email logic). Some end-users may think these emails have been sent to them by a researcher. To minimise the number of end-users who reply to these emails, you can insert some text at the bottom of each email asking them not to reply to the automatic emails, e.g. **‘This is an automatic email. Please DO NOT reply to this email as any reply will not be received.’**

If you are running a study, we recommend that you set up two new email accounts to receive study related emails:

- One for end-users to contact you when they have questions or issues concerning the website.
- One for automated emails sent from LifeGuide regarding the end-users in a study, e.g. emails telling you that a new user has signed up or a user has not completed a questionnaire.

When writing the emails, do not copy and paste from Word as punctuation will not be recognised and can cause serious problems for the intervention email system.

Please also see section 7 of this document, ‘Legal and security issues’, which explains the dangers of spamming.

4. Thinking about testing

The process of testing

An independent person must go through all questionnaires on the website and make sure that all the questions and response options are exactly the same as in the paper protocol. Check the website against the documents which have been approved by ethics to ensure everything is as it should be.

Testing is an extremely important part of development. It is a time-consuming and resource-intensive process, but well planned and detailed testing will ensure the smooth running of the website. This will help to increase website users' satisfaction and will also add credibility to the intervention.

When you are planning the project timescale, allow plenty of time for testing and the running of a pilot. We recommend that for interventions which have taken about 6 months to create, you allow a minimum of 1 month for testing and 2 weeks for changes. Be aware that once an intervention is live, any changes to the website cannot be made as this could result in losing data. It is therefore crucial to ensure that the intervention has been thoroughly tested before the final version is uploaded.

Before starting any testing, ideally before starting the development work, prepare a detailed flow diagram of the website. Although it may take a lot of time, it is priceless and saves much more time at the end stages of development. It allows you to see the whole website layout and ensures all parts of the website will be covered during testing. A flow diagram is also an extremely helpful tool for communication between website developers and testers.

The first step of testing is writing a detailed testing script based on the website diagram. The script should include every single operation that needs to be completed by the tester. Below is an example:

Example of a testing script

All pages

Every link and button on every page should direct to the correct page.

Check for typos.

Check for formatting issues (overlapping text or boxes, text being cut off the page, etc.) in different web browsers (Internet Explorer, Firefox, Chrome, etc.).

Check print buttons print pages properly, i.e. that the pages are correctly formatted on the printout.

Check you can press the tab key and enter responses in the correct order.

Specific pages/functions

Consent page – check it only allows you to continue with the study if you have clicked ‘yes’ to questions 1, 2 and 4 on the consent form.

All links to external websites on the resources pages should work and should open in a new browser.

Check functions – registration, creating account, resetting password, logging in at various points in the intervention.

Goal setting (optional part which is near the end of sessions):

Session 2: you can set one goal

Sessions 3-5: you can set up to 3 goals

Check that if you have set goals in one session, they are shown in the next session.

If you haven’t set goals in one session, you should not see the review goals section in the next session.

Randomisation

Check that if the study ID code is less than 500 (i.e. 000 – 499), participant should be in the leaflet group. If the study ID code is 500 or more, participants should be in the intervention group and can start session 1.

Questionnaires

Check questionnaires are available at the correct times:

- Baseline should be available immediately.
- 6 week questionnaires available 6-10 weeks from baseline. For testing purposes this will be 120 - 200 minutes.

If you close your browser whilst completing a questionnaire, you should be able to log back in and return to your previous position.

Emails

Check emails are received:

- When registration is complete
- When you’ve asked for a new password to be sent
- When each set of questionnaires are ready
- When each session is ready (intervention group only)

Perform as much of the testing as possible on the server that you will be using when the website is live. It is good practice to test specific parts or functions of the website separately. Testing too many things at the same time may lead to omission of issues and makes the testing process chaotic. Ensure the login process, consent process and baseline questionnaires are also tested thoroughly as these will be crucial to the running of your intervention. It is a good idea to test these processes using 'think aloud' interviews.

Ideally, the intervention would be tested in real-life timescale before deployment. However, especially with long-term interventions, it is not always possible. In this case, set the testing in the scale of a real life intervention. For example, if one day = 10 min, 1 week should be 70 min, etc. These timings can be amended depending on which specific parts or functionalities are tested.

Testing emails

Emails can only be tested when your intervention has been uploaded to the LifeGuide community website or other server – emails will not be sent out in Preview mode.

LifeGuide logic cannot recognise formatted characters, so if you see a '?' in your email content, this is because a character in your email has special formatting (the most common reason is because the text was copied and pasted from Word). To correct this, simply replace this character with a plain text one in the logic file (you can use the Find and Replace function to correct them all in one go).

To test emails, you should ideally create all the email addresses used during testing. The easiest way to do it is to obtain a free email alias subdomain with a catch-all email address. Check how often emails are sent from the server to find out what is the shortest testing time possible. If there are more than two types of emails, for example session reminders and monthly questionnaires, test them separately and together.

If you have more than one type of user account, for example, nurse accounts in addition to participant accounts, ensure the emails are tested for all groups of people.

The testing process

Every issue found during testing should be documented and reported to the development team. After the issue has been fixed, it needs to be re-tested. Be aware that changes to some parts of the website may affect other parts. Before the website is made available to users, the final version should be fully tested. Please see below for the order of the testing process and the testing checklist.

Testing process:

- Website diagram
- Testing while writing pages
- Writing testing script

- Testing specific elements (single pages, buttons, links etc.)
- Testing single sessions (if written separately)
- Testing integrated sessions
- Making changes
- Re-testing

Testing checklist:

- Appearance (e.g. overlapping text, location of page objects, etc.)
- typos
- tailoring
- interactions
- links (internal and external)
- buttons
- error messages
- email sending
- email cancellation
- deleting e-mails for participants
- registration process
- resetting password
- data saving
- data organisation
- data download
- randomisation
- printing options
- page order
- sessions and between sessions questionnaires order
- formats of dates/phone numbers etc.
- test website for various Internet browsers and their versions
- test for various operating systems

Prioritising problems

Testing may bring to light many issues to be improved. Problems need to be prioritised. For example, problems which affect the intervention use for study reasons (e.g. related to randomisation, baseline, follow-up data) will need to be given high priority. Whereas minor aesthetic changes will be much lower down the priority list. The MoSCoW analysis explained in Section 1 is useful for putting issues in order.

Running a pilot

The pilot of your intervention should be as real as possible and should be done when the intervention is complete. No major changes should be made after the pilot as these changes could affect other parts of the intervention, creating more work and testing.

5. Thinking about your data

You will need to think about the data that is needed for your analysis before you start putting together your intervention. Clearly lay out the questions you need to ask your end-users, and the feedback you need them to provide, and plan this into the layout of your intervention.

Check your data export before you go live

It is important to export your data before you go live to make sure that the data is in the format you want it to be. When you have uploaded your intervention onto the LifeGuide community website, you can export your data into Excel or a CSV file so you can see which variables are being saved and in what order. You can change the order the variables are saved (see the wiki for more information about ordering variables on a page).

Formatting cells in Excel

LifeGuide data is sometimes stored in a cell in Excel as **General** or **Text**. To use this data in a function in Excel or to import it into SPSS, you will need to change it to **Number** (right-click and select Format Cells).

Time split your data

LifeGuide allows you to look at how long each participant has spent on each page. However, if you have an intervention with many pages, it may be more appropriate to group pages together into meaningful sections and record the time participants spent on each section of your intervention. You can organise this in a way that best suits your analysis and the data you would like to obtain. Please see the wiki for information on the logic functions **begin** and **end**.

6. Thinking about legal and security issues

Spamming

Spamming is unsolicited email sent to a large number of addresses. It is illegal in many countries, including the UK.

It is good practice to send as few emails as possible to end-users so they do not feel as if you are spamming them. Generally, people do not like receiving a lot of emails and if they receive too many, they may not pay much attention to each one and may want to withdraw from the study. For more information, please see Murray, E., Khadjesari, Z., White, I., Kalaitzaki, E., Godfrey, C., McCambridge, J., Thompson, S., & Wallace, P. Methodological challenges in online trials. *J Med Internet Res.* 2009 Apr-Jun; 11(2): e9.

If you are sending emails to end-users, you must let them know how they can stop receiving emails. You can do this easily by adding an extra sentence at the end of the email which says to contact the research team if they would like to withdraw from the study. You can then delete all emails to a particular end-user by using the 'Delete emails queued for a specific participant' button in the Intervention Manager.

You can give end-users the option of deleting specific emails themselves, e.g. reminder emails for questionnaires (see the wiki for more information about allowing participants to delete queued emails).

Privacy and Security issues

Some users may be concerned about the privacy and security of their data. To minimise the number of participants who fail to register because of these concerns, add a security page to the beginning of your intervention. This page should contain the following information/reassurances, along with any other security information relevant to your intervention:

- Your data will be available to the Research Team only.
- All data stored on computers will be password protected.
- Your data will be anonymised as far as possible using your Study ID.
- All paper study materials will be kept in a locked cabinet within a locked room.
- The University Firewall keeps the network as secure as possible.
- All our servers use HTTPS connection to improve security

7. Going live

How to 'go live'

Before going live you will need to download the 'application for use of server' form, which can be found on the contact page of the LifeGuide community website:

(<https://www.lifeguideonline.org/contact/index>)

Please email the completed form to the LifeGuide support team: LifeGuideSupport@soton.ac.uk

If the LifeGuide team approve your application, they will advise where you will need to upload your completed intervention to make it live.

If you are part of The University of Southampton please send a copy of your final intervention to the LifeGuide support team on the above address. The easiest way to do this is to send them an email with the link to the intervention and the details needed to login (e.g. study ID code if you have one).

Intervention Manager

Do not share the username and password to the Intervention Manager with too many people. The data in the Intervention Manager is confidential and can be seen and deleted by anyone who has the username and password details so it is important to restrict access to only those people who really need it.

8. Thinking about technical support

Contact for end-users

You will need to provide end-users with a contact email address and/or telephone number in case they need technical support. It is important to let users know if these lines of communication are not available 24 hours a day, 7 days a week.

Provide end-users with a 'Frequently Asked Questions' page

Think of the questions end-users may frequently ask and list the answers. This will cut down the amount of support you will have to provide. If you have lots of questions to list, group them by topic to make it easier for end-users to find what they are looking for. Please see an example FAQ page below. In this example, users are able to click on each heading to reveal the answers to each section. :

Frequently Asked Questions

- General RESTORE questions**
 - What is RESTORE?
 - What will I get from RESTORE?
- Technical questions**
 - What is an Internet Browser and which one should I use?
 - The website is really slow, is there anything I can do?
 - I accidentally closed the internet without finishing the session
 - MAC Users - advice
 - Tablets and Smart Phones
 - Why is there a back button, can't I just use my browser button?
 - There is a 'next' button but it is not working
 - Why can't I access all of the sessions at the moment?
 - Why can I only see the first one or two sessions?
 - How do I use and save my fatigue diary?
- Emails**
 - Why am I receiving emails?
 - I am not receiving emails
 - I have got an email to say a new session is ready but I have not finished the session before, what should I do?
- Non-technical user questions**
 - I have forgotten to use the website or check my emails for a while, does this matter?
 - I don't understand what to do after sessions 1 and 2
 - How much time do I have to do each session?
 - Can I go through sessions I've already done again?
 - Do I have to fill in the questionnaires and review my goals each week when I've done sessions 1 and 2?
 - Do I have to click on every option in each session?

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Obtaining relevant information from end-users about their problems

You can produce a list of standard questions to ask end-users when they contact the study team with a problem. These questions can be used when trying to help users by email or by telephone. For example, if they have a technical question the following information may be helpful:

- What is your study ID and your email address?

- Which browser are you using?
- Which page were you on when the problem occurred?
- Please describe the problem in as much detail as possible.

Standard email responses to user questions

It will save you time if you save some template emails to answer common questions. Although you may have tried to address as many issues as possible in your FAQ page, it is likely you will still receive some regular questions. For example, if a user emails you advising they are having trouble logging into the intervention, your standard reply could look like this:

Dear participant,

Thank you for your email. It is possible that a small error may have caused the problems logging in. I would recommend that you check the following:

- Have you clicked on the 'Login' button? (sometimes users accidentally click on the 'register' button in error).

-Have you entered the email address you used when you signed up to the study?

-Are all capital and lowercase letters being entered correctly in the password?

-Have you ensured there are no spaces entered into the email address or password?

Please do let us know if you are still unable to login and we can test the account and issue a new password.

Many thanks for your help with the study.

Best Wishes,

The Study Team

9. Other important considerations

Managing expectations

Some end-users will have high expectations of interventions and compare it to established commercial websites. It may help to let your end-users know that it is a study website that they are testing and not a commercial website.

Likewise, the expectations of the wider study team (e.g. study co-ordinators) may be very high. It is a good idea to make the limitations of LifeGuide very clear from the outset.