



D.3.1 Validation and Effectiveness Plan



Gamified Collaborative Platform for the Promotion of Sustainable Care and Independent Assisted Living

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Abstract	The purpose of this document is to describe the approach, tools and protocols we will use in order to run the pilots and evaluate the effectiveness of the MyMate solution with all types of end users.
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1 INTRODUCTION

This document sets out the approach that we will take to assessing the impact of the MyMate technology on end users. The document is designed both as a reference for the validation but also as a working 'toolkit' that can be used as the basis for setting up, preparing for, running and analysing the results of the three validation projects that will be run in the second half of the project.

The document first provides an analysis of existing models of evaluation and validation that we might learn from. We then go on to explain the various 'dimensions' that we intend to evaluate through our pilots. And then we present a workplan that sets out the various steps that pilot owners and researchers will need to undertake in order to complete the validation in line with the structure and principles set out here.

The scope of the validation will be further defined in Section 3 of this document. However, we will principally be seeking to answer the following research questions:

- Does MyMate have a positive impact on the quality of life of Primary End users?
- Does MyMate increase the motivation and achievement of volunteer Secondary End users?
- Does MyMate help Tertiary End users do their job better/more effectively/more efficiently?
- How usable is the MyMate technology (both the app and the dashboard)?
- What improvements could/should we make to the MyMate technology/solution in order to make it more effective?

Ultimately, the purpose of answering these questions is to validate the MyMate solution as a viable and impactful approach to addressing the challenges of aging that we are setting out to address. Ultimately, we want to answer the question 'does MyMate work?' Through doing this, not only will we build a base of evidence that MyMate is a viable option for care organisations and others but also we will identify recommendations for improvements, both to the MyMate technology and to the approach as a whole. We want to find out how we can we make MyMate work better and how we can increase our positive impact. Finally, the approach will generate inputs for the commercial approach and business models that we are currently developing and will help to inform the consortium as to how should we prepare MyMate for the market?

It is important, at this stage, to define exactly what the MyMate solution seeks to do as this will be the basic hypothesis that we will be testing during the validation phase. Although a work in progress, the MyMate 'proposition' is as follows:

"MyMate is designed to mobilise and motivate a community of elderly volunteer carers who will engage with other seniors in their neighbourhood, build new relationships and help tackle the challenge of loneliness and isolation. MyMate is a gamified volunteering platform - based around an end-user app and a management 'dashboard' - that facilitates interactions between senior volunteers and older people living alone and in need of friendship, engagement and activity. MyMate is about connecting members of the same community together and building better, stronger support networks for an ageing population at a local level."





Through our interactions with primary, secondary and tertiary users, we will evaluate the extent to which we are achieving the vision set out in the above statement.

Our methodology will be informed by a number of key principles (which we detail in Section 4 of this document):

- Evaluation of impact with all three user groups we will be giving equal weight to an
 evaluation of impact with seniors in their own homes (primary users), elderly care
 volunteers (secondary users) and authorities/care centres responsible for providing
 care (tertiary users). It is only if all three groups are well served by MyMate that we
 know the approach is successful.
- Pre- and post-testing where possible, we will be benchmarking to ensure that we will be able to demonstrate the difference that we are making, particularly with primary and secondary users. Because of the nature of the MyMate solution and its uniqueness in the market it will not be possible to run a control group so benchmarking is the best approach available to us.
- Continuous monitoring and evaluation we believe that a process of continuous monitoring will enable us to understand better the way in which the MyMate solution is being used and will allow us to track any issues that arise. If we leave all evaluations until the end of the pilot process, we risk missing data capture opportunities that will be vital in the final analysis.
- Mix of qualitative (interviews/focus groups) and quantitative (surveys/data capture etc.) The whole evaluation process will be undertaken using a mix of research techniques. Although we are keen to gather comparable data (for which quantitative methods are generally used), we also recognise the importance of having a dialogue with our users throughout to ensure that they are feeding back their experiences, in their own words and at their own time. We will also be using app tracking technology to gather usage data and to explore usability issues through this data.

The research tools and protocols that we will be using across the three pilot test sites are referenced in the workplan in Section 4 and are included as appendices to this document. Implementation of this plan will result in the production of D3.3, a full report on validation and effectiveness monitoring that will inform future developments for MyMate both technically and commercially.





2 LITERATURE REVIEW

In preparation for creating a robust and coherent validation plan a number of areas have been explored to provide background and inform the process. Firstly looking at the project so far, it is important to build on the methodology and results of the user consultations undertaken and use what has been learned from these elements as the validation plan is developed. Secondly, by considering other similar projects under the AAL umbrella, we can learn from their experiences and refine an approach accordingly. And finally, it is also useful to look outside the AAL domain at other sectors and industries. As backdrop to this, the relevant literature and research materials underpin the development of the validation plan methodology.

A number of AAL validation plans were reviewed including those for the following projects; Breathe, Mobile Old, ElderSpaces, ELF@home, MyGuardian, AALuis and Elisa which although all differing from MyMate in a number of ways, each demonstrated some commonalities to provide comparison and elements of the structure and methodology could be used to inform the MyMate plan.

The plan will be validating all aspects of the MyMate product, setting out the approach to evaluate all its elements. Methods of evaluation for different elements, or 'dimensions', vary depending on what is being measured, and these will be explained in more detail in the next section. But we can learn from examination of other projects, that the whole approach should be coherent and well organised in order to maximise the output and make best use of the results.

MyMate is a product that aims to have a positive impact on users on a number of different levels and the specification of the dimensions will give more detail, but we can see from other AAL projects that one of the key elements is to identify which users will be required to participate. For MyMate, the validation plan should cover the impact on primary, secondary and tertiary users. Some elements of evaluation should be around the technology; its usability, user experience, efficiency etc., and some elements will be around emotional impact; the response of both individuals and organisations. It is important that all of these dimensions are included if we are to have a thorough and meaningful validation plan. It is through examining similar projects in the AAL framework that we can start to build the plan.

The AAL project, Elf@home, proposed am ICT based service to automatically generate a personalised fitness programme based on the health status and continuous monitoring of the user through a wearable activity sensor specifically aimed at seniors. Although very different to the MyMate product, some lessons can be learned in terms of the seniors involved in the process. Elf looked at seniors in a care home environment, and compared them to users living independently to evaluate if there was any commercial value in the latter.

For MyMate, the primary user seniors may be living either independently or within a formal care environment, and the secondary user seniors will be volunteers who are active and living independently, but this highlights the necessity to include a variety of seniors where possible to provide as many possible scenarios for the validation process. Furthermore it underlines the importance of testing users in both a controlled environment where they can be observed, and a less formal environment where they can use the tool as they would in a





real life situation. For MyMate it is important to gauge the response of the secondary users in a both sets of circumstances in order to achieved fully rounded results.

Looking at other validation plans, we can see that some of them are highly technical (Mobile. Old, AALuis) and it must be remembered that although MyMate is a technology based solution, the validation process is not a bug-fixing exercise, rather a holistic plan for trialling the solution in both controlled and real environments. The technology aspect of the validation process relates, for MyMate, to the usability of the app for the secondary users and the management dashboard for the tertiary users. A number of good examples of usability testing can be found amongst other AAL projects, as well as in the 'AAL Toolbox: Methods of End User Integration' and these combine with the processes already used in earlier MyMate user testing to inform the validation plan.

We have learnt from previous user testing within MyMate and from wider reading, that a key to user testing in the validation process will be to use ethnographic methods, namely observation of the users in different environments. We have seen that there are advantages to observing user testing in the controlled environment, but also there may be some value in video recording one to one interviews to look more closely at the behaviours and responses of the seniors. Remote monitoring of usage of both the app and the management dashboard will further support the breadth and depth of data gathered.

The AAL project, MyGuardian has some similarities to MyMate in that it is an app connecting informal care givers with seniors, albeit those with mild cognitive impairments. It is clear from the approach to validation on this project that the focus is centred around user acceptance and quality of life of the seniors. Although these areas are clearly important for MyMate and will form part of the validation plan, it highlights that one of MyMate's key elements is distinctive and specific to MyMate and as such should be given the necessary weight within the plan, namely the impact on the motivation of the secondary users, the volunteer informal care givers. This will be explored more in the next section, but this element of MyMate relates to is the objective to increase and improve motivation amongst the secondary users, through use of the app. As a key dimension of the plan, it will be important to ensure that this area is thoroughly measured and analysed, through an initial and final benchmarking process and this can be achieved through qualitative methods previously used, such as surveys, interviews and focus groups.

Looking at the AAL project BREATHE, which developed an ICT solution for assisting and enhancing informal care giving for seniors, the detailed validation plan highlighted the benefit of a two phase approach, with a pre-trial phase before the full trials. This supports the approach of taking what we learn from methodologies used in the previous user testing, but furthermore points to ensuring that an iterative method is embraced, and helps to confirm the advantage of staggering the timing of the validation process across the user centres to allow for results to be fed back in to the process.

Looking further afield than AAL, as part of good practice for pharma, biotech and medical device companies, validation plans outline and define which processes and equipment are to be validated, the priority and order in which this will be done, as well as who is responsible for each stage of the validation process. Many examples of guidance notes and suggested protocols for validation plans can be found and provide good perspective, which can be especially helpful since this industry is highly regulated so processes must be justifiable and





within a specified framework. Although of course the regulations are specific to those industries, it is reassuring to see that the basic format used is similar to that developed for MyMate, including headings for scope, facility/product description, selection/recruitment of participants, dimensions to be examined, work plan, and materials/equipment/instruction protocols. We can learn that a methodical and thorough approach must be deployed, taking into account any regulatory matters. For MyMate specifically, the framework of data protection regulations should be considered across the entire validation plan with a view to ensuring a security protocol is available for each user centre.

To conclude, the background work undertaken has brought together the various elements explored and the following sections set out the detailed validation plan that has been developed. Taking into account the specific requirements and functions of MyMate, the essential areas to highlight are:

- The validation plan will involve all users, primary, secondary and tertiary, in all three user centres
- Dimensions will be clearly defined
- A detailed workplan will set out roles and responsibilities for all partners
- The trial period will be staggered to allow for outcomes to be fed back in to the process
- The validation will involve both quantitative and qualitative methods
- Any surveys and questionnaires will be developed specifically for the validation process, based around previous examples used for MyMate or standardised approaches (e.g. WHO well-being questionnaire)
- The process will involve both user testing in the controlled environment of the user centres, and field trials in real environments.





3. USER CONSULTATION PROCESS AND PROTOCOL

During the validation trial period the User Centres will be measuring and recording a number of dimensions across all of the different users at various points of the 6 week period. This section of the plan outlines each of the dimensions, how they will be measured and recorded and what each user centre will need to do. For each dimension, this section will set out:

- a) the specific research questions that will be addressed,
- b) the staged process and assessments within the 6 week timetable,
- c) the tools that the user centre will need.

3.1 Dimension 1: Impact on Primary End Users

The impact of the introduction of the MyMate solution on the senior (primary user) is clearly a key element of assessment during the field trials and there are two areas that will be examined that are explained below. The trial period gives the opportunity to monitor the seniors' response over a longer time frame, allowing the users to get used to what MyMate brings to their life. Through a combination of short surveys and interviews, the primary users' feedback will be gathered at the beginning and end of the validation period. Taking into account the potential needs and physical limitations of the seniors involved the surveys may be read out to them and responses recorded, and the interviews may be conducted in their own home and, with the correct permissions in place, may be video recorded which will also allow for observational commentary.

1.1.1 Quality of Life

Measurement and analysis of the quality of life of the primary user will clearly be aiming to record a positive outcome. The process will involve taking a benchmark at the beginning of the trial period, and then a final assessment at the end of the 8 weeks, with the intervening weeks exposing the primary user to a period of interaction with the volunteer based around the MyMate experience.

The method of measuring quality of life will be based on standardised questionnaires and will be aimed at gauging the general well-being of the primary user against the backdrop of the MyMate solution. The short multiple choice questions are designed to evaluate how the primary user has been feeling, and give a number score. One-to-one interviews will also be arranged to allow for more in depth feedback and to allow for general observations of the seniors. The involvement and feedback from the formal carer (i.e. not the secondary user) of the senior will also be a valuable part of the information gathered, specifically through a one-to-one interview at the end of the period.

a) Research questions:

Has the introduction of the MyMate solution had a positive impact on the primary user's quality of life?

b) Process:

Week no.	Assessment





1	Primary User – Quality of Life survey
	Primary User one-to-one interview
	Formal Carer one-to one interview
2-6	Ongoing feedback from secondary user via app Anecdotal feedback from tertiary user/formal carer interactions with primary user (normally by phone)
6	Primary User – Quality of Life survey Primary User one-to-one interview Formal Carer one-to one interview

C) Tools:

Tool	Appendix no.
Primary User Quality of life survey	1
Primary User Interview – guidance questions	2
Primary User Observations – guidance	3
Formal Carer Interview – guidance questions	4

1.1.2 Impact on lifestyle

Where this element of the dimension differs from the previous quality of life element, is that the area of interest is around the level and type of activity that the senior is involved in, and how this may change, if at all, given the backdrop of the MyMate. It is clear that levels of activity may of course have a direct effect on more general well-being but examining this element in its own right will provide useful feedback. Through surveys and interviews that take account of the seniors' lifestyle at the beginning and comparing it to information gathered at the end of the period will measure any changes that occur.

a) Research questions:

- Has the introduction of the MyMate solution had a positive impact on the activity levels of the primary user?
- Has there been a significant change in the lifestyle of the primary user?
- What did the primary user enjoy most about the MyMate experience?
- Did the primary user have any feedback on the variety and type of missions that MyMate offers?

b) Process:

Week no.	Assessment





1	Primary User – Quality of Life survey Primary User one-to-one interview Formal Carer one-to one interview
2-6	Ongoing feedback from secondary user via app
6	Primary User – Quality of Life survey Primary User one-to-one interview Formal Carer one-to one interview

c) Tools:

Tool	Appendix no.
Quality of life survey	1
Primary User Interview – guidance questions	2
Primary User Observations – guidance	3
Formal Carer Interview – guidance questions	4

1.2 Dimension 2: Impact on Secondary End Users

The secondary end user will be exposed to MyMate through use of the app on their device and, once they have been trained in how to use it, will have full use of the platform for the period of the field trial for setting up and completing missions, making arrangements with the care organisation, and earning points/credits on their profile account. The secondary users participating in the process will be experienced volunteers who will be able to give meaningful and valuable feedback on the MyMate solution. As well as general responses to the MyMate experience, the validation process will have particular regard to opinions of the secondary users on the effect on their levels of motivation towards volunteering activities. A key area of interest is how the MyMate format and its gamified element may have a positive impact on volunteers' levels of engagement.

In order to examine and analyse this crucial element of the MyMate proposal, secondary users will participate in interviews and focus groups, as well as multiple-choice surveys. Furthermore, to ensure a deep understanding of the observations and opinions of the secondary users, as well as benchmarking at the beginning and end of the process, there will be an element of on-going feedback that will be built into the app itself, through both usage data and short interim surveys.

3.2.1 Motivation and engagement with volunteering activities

a) Research guestions:

 Has the introduction of the MyMate solution had a positive impact on the Secondary Users' motivation to participate in volunteering activities?





- Assess the Secondary Users' feedback on the overall MyMate experience
- Specifically assess the role of gamification in relation to the Secondary Users' experience with MyMate.

b) Process

Week no.	Assessment
1	Secondary User Pre-Pilot Motivation Survey Secondary User one-to-one interview Secondary User focus group
2-6	Ongoing monitoring of Secondary User experience through app including usage data and feedback questions built into the app Mid-term focus group to understand experiences and address any barriers
8	Secondary User Post-Pilot Motivation Survey Secondary User one-to-one interview Secondary User focus groups

a) Tools:

Tool	Appendix no.
Secondary User Pre-Pilot Motivation Survey	5
Secondary User Interview – guidance questions	6
Secondary User Focus Group – guidance questions	7
Secondary User Post-Pilot Motivation Survey	8
Secondary User Post-Pilot Motivation Survey	8

3.3 Dimension 3: Impact on Tertiary User (Organisation/Institution)

Ensuring that the MyMate solution useful and effective for the care organiser adds important commercial value when considering bringing the product to market. The tertiary user or its funder will potentially be the target customer for the product and it is therefore important to gauge the impact on the organisation and ensure that there is value in what MyMate offers.

The following three key areas will be taken into account when considering the overall impact of MyMate on the care providing organisations.

3.3.1 Effectiveness and efficiency of MyMate as a tool to improve management of care in the community programmes





The efficiency of the organisation responsible for arranging the care for the senior is of fundamental importance to the viability of MyMate as a commercial product. The value that MyMate can potentially add to saving on time and resources will be a recognisable advantage when it comes to marketing the solution. This specific area of interest will explore whether and how the MyMate solution has an impact on administering and management of the volunteers and their regular interactions with the seniors. It will be important to look at this element both at the beginning and at the end of the pilot, and initial interviews will be used to benchmark organisational responsibilities and roles.

a) Research questions:

- Has the introduction of the MyMate solution had a positive impact on the organisations management of volunteers caring for seniors?
- Has the MyMate tool increased efficiency in the organisation?
- What are the areas of the organisation where 'pains' could be reduced and how does MyMate address these?

(Time spent on comms, lack of response from volunteers, lack of enthusiasm/commitment from volunteers)

- What are the areas where the organisation would like to see 'gains' and how does MyMate address these?

(Easy to use of technology, more efficient use of technology, better interaction with volunteers)

b) Process

Week no.	Assessment
1	Tertiary User Interview
7	Tertiary User Post-Pilot Survey Tertiary User Interview

c) Tools:

Tool	Appendix no.
Tertiary User Interview Guidelines	9
Tertiary User Post-Pilot Survey	10

3.3.2 Impact on organisation

Where this area of research differs from 3.3.1 is in its broader view, looking at not just how MyMate impacts on the specific area of the management of volunteers themselves, but also on the wider impact on the organisation as a whole. This will include views of





both management and staff on the general acceptance of MyMate and how it effects all areas of the organisation, if there are any consequences, either positive or negative, for the whole establishment. Surveys and interviews will be undertaken at the beginning of the trial as well as at the end point.

- a) Research questions:
 - Has the introduction of the MyMate solution had an impact on the organisation as a whole?

Use of resources, efficiency, cost, support, training

b) Process

Week no.	Assessment
1	Tertiary User Pre-Pilot Survey Tertiary User Interview
7	Tertiary User Post-Pilot Survey Tertiary User Interview

c) Tools:

Tool	Appendix no.
Tertiary User Interview Guidelines	9
Tertiary User Post-Pilot Survey	10

3.3.3 Commercial model

Engaging with the professionals in the field of elderly care with a particular regard to their thoughts on the commercial viability of MyMate will be a valuable and important part of the validation process. The process will encourage the participation of senior management in strategic administration and planning roles to discuss their opinions on exploiting the commercial aspect of MyMate to its full potential.

- a) Research questions:
 - How will MyMate be best exploited as a commercially viable tool within the senior care sector?

b) Process

Week no.	Assessment
1-6	No action required





7	Tertiary User Interviews
	Tertiary User Focus Groups

c) Tools:

Tool	Appendix no.
Tertiary User – commercial model interview and focus group guidelines	11

3.4 Dimension 4: Mobile App Usability (Secondary End Users)

A key element of the field trials is ensuring the usability of the technology, verifying that it is appropriate for the participating secondary users and is enhancing their MyMate experience. Through a combination of on-going monitoring of the users' experience as they continue through the 8 week trial, and surveys, focus groups and interviews at the end stage of the trial period, a broad spectrum of feedback and user data will be gathered.

3.4.1 Usability

- a) Research questions:
 - Gauge the ease of use
 - Quality of interface?
 - Stumbling blocks?
 - How intuitive?

b) Process

Week no.	Assessment
1-6	Ongoing monitoring of Secondary User experience through app - usage data - interim user survey
7	Secondary User usability survey Secondary User interviews Secondary User focus groups

c) Tools:

Tool	Appendix no.
Secondary User Usability survey	12





Secondary User Usability Focus Group/Interview Guidelines	13
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3.5 Dimension 5: Management Dashboard Usability (Tertiary End Users)

The expectation will be that users of the MyMate dashboard will be employees of the tertiary end user who are appropriately qualified to use the technology and who will be fully trained and supported for the field trial process. These users will be relatively experienced and regular users of similar technology. Their feedback on usability will therefore be valuable in relation to the Management Dashboard but will be less intensively gathered than for the secondary users, and will consist of a usability survey at the end of the trial period which will include a number of open questions. This will combine with data collected through built-in feedback and usage options on the dashboard itself.

3.5.1 Usability

- a) Research questions:
 - Gauge the ease of use
 - Quality of interface?
 - Stumbling blocks?
 - How intuitive?.

b) Process

Week no.	Assessment
1-6	Ongoing monitoring of Tertiary User experience through dashboard - usage data - interim user survey?
7	Tertiary User Usability survey

c) Tools:

Tool	Appendix no.
Tertiary User Usability Survey	14





4. WORKPLAN

4.1 INTRODUCTIONS AND OVERVIEW

The following workplan is designed to be used as the basis for the running of the pilots. It sets out the process by which each pilot needs to be run and offers a timetable for completing each pilot activity. It is critical that all aspects of the evaluation are completed in line with these guidance notes. This will enable us to compare data across the three pilots and ensure we have a large enough dataset to validate the MyMate solution.

In terms of an overview, the key facts in relation to each pilot are as follows:

- There should be a target of 20 primary users involved in the pilot, 20 secondary users and 5 tertiary users
- The pilot should be run as a two-stage process with two cohorts (each one involving 10 primary and 10 secondary users)
- The length of each pilot should be around 6 weeks per cohort with a gap of around 1-2 weeks between cohorts – this means that the whole process from start to finish should take around 3 months to complete
- We will attempt to stage the pilots across different sites so that they are not all running at the same time; however, a final timetable will be agreed collectively between the consortium members and user centres
- We will aim to start the first pilot cohorts in February 2018 with completion planned for June/July 2018 to give us time to produce final deliverables before the end of the project in October 2018
- All issues of informed consent and any ethical requirements need to be addressed at local level and must adhere to local standards and processes
- Data protection issues (in relation to the collection and storage of user data) will be dealt with centrally by the technology partners and will be implemented in accordance with European data protection rules
- Partners White Loop and Innovatec will oversee all pilot activities and ensure that all data is gathered and stored in an effective way
- It will be the responsibility of each user centre (or the partner assigned to that user centre) to translate any of the evaluation tools in the appendices into the local language and to ensure that any data collected is written up and provided to White Loop/Innovatec in English

The following sections outline, in brief, the steps that need to be taken by each pilot centre to prepare for and then complete the trials:

4.2 PREPARING FOR THE TRIALS





The first step in the preparation of the trials will be to agree specific responsibilities within the centre for all subsequent steps. MyMate partners will need to work in tandem with the user centres in order to complete the trials and this will involve the following:

- Recruitment of primary and secondary users (more of which below)
- Matchmaking of users
- Assigning tertiary users (staff at the user centre) to the pilot
- Agreeing timeframes for the two cohorts to be piloted
- Agreeing the approach to informed consent
- Agreeing roles and responsibilities in relation to the implementation of the research tools (which are included at the end of this document) and agreement on a timetable for the completion of all evaluation tasks
- Agreeing how data will be stored and accessed by MyMate staff

The second step in the preparation of the trials will be the provision and installation of technology (both dashboard and app) as per Task 3.3 of the DoW. This will be the following:

- Ensuring that there are sufficient numbers of mobile devices for the secondary users who will be involved
- Loading the MyMate app onto mobile devices and testing to ensure all apps are fully working and that full functionality is achieved on all devices
- Ensuring the ongoing maintenance of mobile devices (including addressing the impact of software updates) and providing necessary support to end users when required
- Creating end user access for mobile devices which will involve generating usernames and passwords and sharing these with relevant users
- Providing access to the management dashboard for all participating tertiary end users and ensuring that the dashboard functions correctly on local machines and browsers
- Providing any required technical support for the management dashboard prior to the trials beginning

The third step will relate to the selection, recruitment and training of participants (primary, secondary and tertiary users) as per Task 3.2; this will involve the following:

- Identifying individuals (primary and secondary users) who are willing and able to take part, approaching them and providing them with all the information they need in order to make a decision regarding their participation setting the expectations amongst primary and secondary users
- Completion of any informed consent processes in relation to primary and secondary users consents need to be gathered in line with national guidelines
- Creation of basic user profiles in line with requirements set out within the management dashboard and including all relevant demographic information as well as information relating to user interests





- Training of secondary users in how to use the MyMate app (which will be done in partnership with the relevant MyMate partner)
- Selection and training of end user centre staff to participate in the MyMate pilot (training to be supplied by relevant MyMate partner)

The fourth step will relate to the matchmaking of primary and secondary users and the launch of the MyMate pilot. This will involve the following:

- Identifying which primary users should be paired with which secondary users from both the user profile data gathered and the knowledge and experience of tertiary staff
- Running matchmaking events (if required) to bring together primary and secondary users
- Introducing primary and secondary users to each other, either through a series of home visits or through common events held at the user centre or another central location
- Ensuring that the matches that have been made are acceptable to both primary and secondary users and that any users who are unhappy are reassigned accordingly
- Ensuring the completion of all benchmark evaluations prior to the introduction of the MyMate solution
- Launching of the MyMate pilot (which will include the creation and assigning of the first set of missions for secondary users).

Once these steps have been completed, the user centre should be well-prepared for the launch of the pilot and can move into the next phase, which is outlined below.

A suggested timetable for the preparation of pilots is below:

WHEN?	TASK?	RESPONSIBLE?
Week 1	Agree responsibilities for pilots between user centre	User centre
	and local MyMate partner	MyMate local partner
Week 1	Upload and test MyMate app on all devices	MyMate local partner
Week 1	Provide training to tertiary end users in the use of the	User centre
	management dashboard	MyMate local partner
Week 2	Identification and recruitment of primary and	User centre
	secondary users; gathering of user profiles; collection	
	of informed consents	
Week 3	Creation of MyMate user accounts for primary and	User centre
	secondary users	MyMate local partner
Week 3	Training of secondary users in MyMate app; task-based	User centre
	usability assessments	MyMate local partner
Week 4	Completion of benchmark evaluations for Primary	User centre
	Users to include: Quality of life survey; one to one	MyMate local partner
	interviews; formal carer interviews (relating to Primary	
	Users)	
Week 4	Completion of benchmark evaluations for Secondary	User centre
	Users to include: Motivation survey; one to one	MyMate local partner
	interviews; secondary users focus groups	
Week 4	Completion of benchmark evaluations for Tertiary	User centre
	Users to include: Tertiary User management survey;	MyMate local partner
	Tertiary User management interview; Tertiary User	





	staff survey;	
	Tertiary User staff interview	
Week 4	Matchmaking of primary and secondary users; creation	User centre
	of initial missions; launch of pilot	

4.3 TRIAL SESSIONS, DATA COLLECTION, ANALYSIS AND FEEDBACK

As mentioned previously, the pilot sessions will be run as a partnership between the MyMate local partner and the user centre. The intention should be to take as much of the responsibility off of the user centre as possible and, in this regard, the agreement of roles and responsibilities is key.

In general, the responsibility of the user centre during the trials will be as follows:

- Create and assign missions to secondary users (initially and ongoing)
- Monitor the progress of secondary users in completing and reporting back on missions (via management dashboard)
- Support the evaluation processes throughout
- Feed back to the MyMate local partner on any issues
- Provide relevant support to secondary users in terms of their use of the technology
- Address any issues between primary and secondary users
- Help to organise and arrange evaluation meetings at the end of the process
- Provide inputs into the final analysis of the impact of the MyMate solution on end users and on the user centre itself

The responsibility for implementing the different parts of the evaluation plan set out in Section 3 of this document will be split between the user centre and the local MyMate partner. The table below sets out a timeframe for all of the activities that need to be run during the 6 week pilot with a focus on the specific evaluation activities that need to be completed and who will take responsibility for these activities. Please note that benchmark evaluations will have been addressed prior to the start of the 6 week pilot and are outlined in the previous table.

WHEN?	TASK?	RESPONSIBLE?
Week 1	Ensure all secondary users have active missions assigned	User centre
Week 1	Check that all secondary users are 'active' in the system and have accepted a mission	User centre
Week 1 – 6	Ensure all completed missions are closed and comments have been provided by secondary users	User centre
Week 1 – 6	Monitor and ensure all secondary users always have active missions to accept and are not left 'waiting' for missions	User centre
Week 1 – 6	Gather anecdotal feedback from secondary users regarding the trial and any issues they may be having	User centre
Week 3	Direct engagement (face to face or over the phone) with participating Primary Users to gather feedback and ensure users are happy to continue with the trial	User centre
Week 7	Support to run final Primary User evaluations to include: Quality of life survey; one to one interviews; formal carer interviews (relating to Primary Users)	User centre Local MyMate partner
Week 7	Support to run final evaluations for Secondary Users to	User centre





	include: Motivation survey; one to one interviews; secondary users focus groups; task-based usability evaluations; usability surveys	Local MyMate partner
Week 7	Involvement of management and staff in completion of evaluations for Tertiary Users to include: Tertiary User management survey; Tertiary User management interview; Tertiary User staff survey; Tertiary User staff interview; dashboard usability survey	User centre Local MyMate partner
Week 8	Involvement of management and staff in completion of commercial evaluation activities	User centre Local MyMate partner

Within the context of this plan, the role of the MyMate Consortium will be to do the following

- ensure that all relevant materials (including support materials for information, training materials and other relevant information) is provided to end users in a format that is usable (including any required translations).
- work with the user centre to ensure the safe collection, storing and validation of all data, particularly that which is gathered by hand (like completed surveys) as well as video or audio-recorded data
- provide the wider MyMate consortium with relevant data and reports in a format that can be amalgamated with other data from other pilots

Alongside the qualitative data that we will collect before, during and after the pilots, we will also be gathering data both directly from the MyMate system components and from questions embedded in the technology. This data will be as follows:

- usage data from across the duration of the pilot reflecting how Secondary Users have used the app
- responses from the embedded questions within the app relating to usability for Secondary Users
- responses from the embedded questions within the management dashboard relating to usability for Tertiary Users

At the end of each pilot this data will be gathered up and analysed to understand, from a usage and usability perspective, how successful the MyMate technology has been in terms of user acceptance.

4.4 PRODUCTION OF FINAL REPORT

The final report (D3.3 Validation and Effectiveness Monitoring) will amalgamate all the data collected from the three pilot sites and from the 2 cohorts of users studied at each of those sites. The purpose of this report will be to look holistically at the impact of the MyMate technology on each of the three target end user groups as well as to identify any areas for improvement within the technology or the wider approach.

The report will also highlight any differences notable between the results from the three different participating countries and make recommendations based on these differences.





This is likely to have implications for the commercial modelling of the MyMate solution as well as for further iterations of the solution.

The final report will focus on a set of clear recommendations but will include, in a referenced appendices, all of the data gathered throughout the pilot evaluations.





APPENDICES – THE EVALUATION TOOLS AND PROTOCOLS

Appendix 1: Primary User Quality of Life Survey

WHEN: Before the beginning of the pilots

AND

Shortly after completion of the pilots

WHO: All participating primary users (20 in total)

HOW: Survey provided to primary users in paper form and returned to local

researcher; data from survey then uploaded into spreadsheet; the per-pilot

and post-pilot survey will be exactly the same.

QUESTIONS:

	Over the last 4 weeks	All of the time	Most of the time	More than half the time	Less than half the time	Some of the time	At no time
1	I have felt cheerful and in good spirits						
2	I have felt calm and relaxed						
3	I have felt active and vigorous						
4	My daily life has been filled with things that interest me						

		Not at all	A little	A moderate amount	Very much	An extreme amount	
5	How much do you enjoy your life?						
6	To what extent do you feel your life to be meaningful?						
7	How safe do you feel in your daily life?						
8	How connected to the world around you do you feel?						





		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	
8	How satisfied are you with your personal relationships?						
9	How satisfied are you with the support you get from others?						
10	How satisfied are you with your day to day life?						
11	How satisfied are you with the access you have to the world around you?						





Appendix 2: Primary User Interview - Quality of Life

WHEN: Before the beginning of the pilots

AND

Shortly after completion of the pilots

WHO: A minimum of 3 primary users per cohort (6 in total)

HOW: Face to face interview in the home of the primary user or at a convenient

location; interview should be audio recorded; key points from each interview

written up in English.

QUESTIONS:

The following questions are provided as guidance questions. The interviewer should feel free to take the conversation into any areas that they feel are useful for understanding the quality of life of the primary user. Some of the questions can be asked at both the beginning and at the end of the pilot but some will only be appropriate for the end of the pilot as they will reflect on the experience the primary user had with MyMate. Those questions are highlighted below.

Q1: How would you describe your quality of life?

Q2: What does a normal day look like for you?

Q3: What sorts of things do you enjoy in your day to day life?

Q4: Is there anything that you struggle with on a daily basis (in terms of your physical health or general wellbeing?

Q5: Do you ever feel lonely or isolated? What do you do if you have these feelings?

Q6: What sort of friendships do you have?

Q7: What role does your family play in your life?

Q8: If you could change one thing about your life, what would it be?

Post-Pilot Questions:

Og: Has MyMate changed anything about your life? Has it had an impact on your lifestyle?

Q10: Have you done more or less of anything as a result of being part of MyMate?

Q11: How would you describe the impact (if any) of MyMate on you and on your quality of

life?

Q12: How would you describe the relationship you have with your MyMate volunteer?

Q13: Do you think MyMate is a good idea for people like you? Why?

Q14: What would make MyMate have even more impact on your quality of life?





Appendix 3: Primary User Observations – Guidance

WHEN: Whenever possible during the 6 week pilot period

WHO: An observation record should be kept for every primary user taking part

HOW: Whenever the tertiary users or formal carers have direct contact with the

primary user during the pilot period, they should keep a brief record of anything important; this may be stimulated by specific questions or be noted as part of general conversation; notes should then be collated by the local

researcher and written up in English.

GUIDANCE:

The observations should focus on the following aspects:

- the general wellbeing of the Primary User
- their state of mind
- their mental and physical health
- their alertness and enthusiasm for life
- the degree to which they engage in conversation
- any comments/reflections they have on their experiences with MyMate





Appendix 4: Formal Carer Interview – Guidance Questions

WHEN: Before the beginning of the pilots

AND

Shortly after completion of the pilots

WHO: Any formal carers who have responsibility or relationships with any of the

participating Primary Users

HOW: Face to face interview with formal carers wherever is convenient; interview

should be audio recorded; key points from each interview written up in

English; first interview should focus on building a simple picture of the Primary User being discussed in terms of their general wellbeing, isolation, lifestyle etc; second interview (following completion of the pilot) should focus on whether any change has been detected, whether the Primary User has expressed views about MyMate or any other useful feedback that the carer

has noticed.

PRE-PILOT QUESTIONS:

Q1: What are your observations about the Primary Users that you care for?

Q2: What challenges do these individuals face?

Q3: What is the quality of life like for these individuals?

Q4: What type of support/help/services do they need?

Q5: What is available to them through the centre or through other health/social care services?

Q6: What is the health/social care system not able to provide?

Q7: To what extent is loneliness and isolation an issue for these individuals?

Q8: How best can the quality of life for these individuals be improved?

POST-PILOT OUESTIONS:

Q9: What impact did you observe MyMate having on the wellbeing of Primary Users?

Q10: Have you noticed any change in Primary Users since they took part in MyMate?

Q11: Do you think MyMate has helped to meet the needs of Primary Users in any way?

Q12: What do you think the experience of MyMate was like for Primary Users?

Q13: Were there any major differences between the experiences of MyMate Primary Users and if so, why do you think those differences were evident?

Q14: What do you think was the most positive impact that MyMate had on Primary Users?

Q15: What do you think was the most negative impact that MyMate had on Primary Users?

Q16: How could MyMate be better designed/implemented to provide a more positive experience for Primary Users?





Appendix 5: Pre-Pilot Secondary User Motivation Survey

WHEN: Before the beginning of the pilots

WHO: All participating Secondary Users (20 in total, 10 per cohort)

HOW: Survey provided to Secondary Users in paper form and returned to local

researcher; data from survey then uploaded into spreadsheet.

QUESTIONS:

	How much do you agree/disagree with the following statements?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Q1	I am someone who regularly volunteers					
Q2	I volunteer occasionally					
Q3	I never volunteer					
Q ₄	I only volunteer for things I really care about					
Q ₅	I volunteer because it makes me feel good					
Q6	I volunteer to help others					
Ω ₇	It is difficult to organise volunteering opportunities					
Q8	I would volunteer more if it was easier to organise					
Q9	I would volunteer more if there were incentives for me to volunteer					
Q10	I volunteer because it is fun					
Q11	Volunteering allows me to develop new relationships					
Q12	Volunteering keeps me fit and active					





Appendix 6: Secondary User Interview – Guidance Questions

WHEN: Before the beginning of the pilots

AND

Shortly after completion of the pilots

WHO: A selection of participating Secondary Users (3 per cohort)

HOW: Face to face interview with Secondary User wherever is convenient; interview

should be audio recorded; key points from each interview written up in English; first interview should focus on exploring the motivation of the individuals, why they volunteer, what drives them to contribute, how much they volunteer, what stops them or gets in the way etc.; second interview (following completion of the pilot) should focus on whether any change has been detected, whether MyMate has improved their motivation or made it

easier for them to volunteer etc.

PRE-PILOT QUESTIONS:

Q1: How often do you volunteer?

Q2: What sorts of things do you volunteer for and why?

Q3: What motivates you to volunteer?

Q4: Is there anything that stops you from volunteering – what are the barriers?

Q5: How does volunteering make you feel?

Q6: Do you think volunteering is good for your health and wellbeing?

Q7: What stops you from volunteering more than you do?

Q8: Is there anything in particular that would drive you to volunteer more?

POST-PILOT QUESTIONS:

Og: How did being part of MyMate make you feel?

Q10: What did you like about the MyMate approach to volunteering?

Q11: Was the MyMate app useful or not in terms of helping you to organise your volunteering time?

Q12: The MyMate app gives you points when you complete a mission. Did you like this and did it make sense to you?

Q13: How much was the collecting of MyMate points a motivation for you to do more with MyMate?

Q14: What motivated you most when you were part of MyMate?

Q15: Do you feel differently about volunteering now you have been part of the MyMate project?





Appendix 7: Secondary User Focus Group – Guidance Questions

WHEN: Before the beginning of the pilots

AND

Shortly after completion of the pilots

WHO: A selection of participating Secondary Users (6 per cohort); preferably

different from those Secondary Users who have been interviewed

HOW: Focus group with Secondary Users wherever is convenient; group should be

audio recorded; key points from each interview written up in English; first focus group should focus on exploring the motivation of the individuals, why they volunteer, what drives them to contribute, how much they volunteer, what stops them or gets in the way etc.; second focus group (following completion of the pilot) should focus on whether any change has been detected, whether MyMate has improved their motivation or made it easier

for them to volunteer etc.

QUESTIONS:

The questions proposed for the interviews (in Appendix 6) can be used for the focus groups.





Appendix 8: Post-Pilot Secondary User Motivation Survey

WHEN: Directly after completion of the pilots

WHO: All participating Secondary Users (20 in total, 10 per cohort)

HOW: Survey provided to Secondary Users in paper form and returned to local

researcher; data from survey then uploaded into spreadsheet.

QUESTIONS:

	How much do you agree/disagree with the following statements?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Q1	MyMate has made me more likely to volunteer					
Q2	MyMate motivated me to be more involved in volunteering activities					
Ω3	MyMate was fun					
Q4	MyMate made me feel good					
Ω5	MyMate made it easier for me to organise and complete my volunteering activities					
Q6	MyMate helped me to develop new relationships					
Ω ₇	MyMate gave me incentives to do more volunteering activities					
Ω8	I was motivated to complete more missions because I wanted to gain MyMate points					
Ω9	MyMate helped me keep active and fit					
Q10	I was motivated to complete more MyMate missions because I wanted to help others					





Appendix 9: Tertiary User Interview Guidelines

WHEN: Before the beginning of the pilots

AND

Shortly after completion of the pilots

WHO: 2-3 participating Tertiary Users; should include both staff and management

HOW: Face to face interview with Tertiary Users wherever is convenient; interview

should be audio recorded; key points from each interview written up in English; first interview should focus on understanding how care is currently provided to Primary Users; how the centre manages volunteers (if at all); what systems are in place to monitor the health and wellbeing of Primary Users; what challenges the centre faces in completing their work; second interview (following completion of the pilot) should focus on whether any change has been detected, whether MyMate has improved the way in which Primary Users are monitored or given care; what the impact of the MyMate

technology has been on the centre and on the staff; any other observations

from a practical perspective.

PRE-PILOT QUESTIONS:

Q1: Thinking about the Primary Users who will be part of MyMate, what is the nature of the care and support that you give those individuals at the moment?

Q2: What are the challenges that Primary Users currently face?

Q3: How do you try to address their challenges through the services you provide?

Q4: Is volunteering part of the solution at the moment? If yes, how? If no, why not?

Q5: Do you see more of a role for volunteering in providing help and support to Primary Users in your community?

Q6: Do you monitor the health and wellbeing of Primary Users? If yes, how do you do this currently?

Q7: What are the main challenges you face in delivering services to those in the community who need your help?

Q8: What would help you to deliver your services in a more effective, cost-efficient way?

Q9: How do you currently use technology in the management and delivery of the services you provide?

POST-PILOT QUESTIONS:

Q10: Did MyMate change the way that you provide services to Primary Users? If yes, how?

Q11: Do you think that using MyMate could help you in providing a more efficient, more cost-effective service to those who are under your care?

Q12: Were there any practical challenges – within your own organisation – to implementing and using MyMate?

Q13: What is your view of the MyMate model in terms of how it mobilises volunteer elderly carers? Do you think this is a positive and feasible approach to addressing some of the needs of those under your care?

Q14: How do you feel Primary Users responded to MyMate?

Q15: How do you feel Secondary Users responded to MyMate?





Q16: How do you feel other staff members responded to MyMate?

Q17: Would you consider implementing MyMate into your processes and into your service delivery?

Q18: How would MyMate fit into the services you already provide?

Q19: Are there any significant barriers to implementing MyMate within your organisation? If yes, what are they?

Q20: How would you change/improve MyMate so that it worked better for you and for Primary and Secondary Users?





Appendix 10: Tertiary User Post-Pilot Survey

WHEN: After the completion of the pilot

WHO: All participating Tertiary Users (5 in total); should include both staff and

management

HOW: Survey provided to Tertiary Users in paper form and returned to local

researcher; data from survey then uploaded into spreadsheet.

QUESTIONS:

	How much do you agree/disagree with the following statements?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Q1	MyMate improves the lives of those who use it					
Q2	MyMate can help to address the challenges of an aging population					
Ω3	MyMate was easy to understand and implement					
Q ₄	MyMate was well-accepted as a concept by Primary Users					
Ω5	MyMate really helped to motivate Secondary Users to volunteer					
Q6	The management of MyMate missions was simple					
Ω ₇	Staff at the centre found MyMate to be an effective way of managing volunteer carers					
Q8	I would not consider implementing MyMate in future					
Ω9	MyMate is too complicated and time consuming					
Q10	MyMate can help to address the challenges of an aging population					





Appendix 11: Tertiary User – Commercial Model Interview And Focus Group Guidelines

WHEN: Shortly after completion of the pilots

WHO: Ideally all participating Tertiary Users; should include both staff and

management; a number of additional Tertiary Users not involved in the pilots

HOW: Engagement can either be face to face interviews or a focus group, wherever

is convenient; interview/FG should be audio recorded; key points from each interview/FG written up in English; focus is on the commercial viability of the MyMate solution; how and where do they see MyMate fitting into existing approaches; what might be the price point; where would they see MyMate

gaining access to the local care market; etc.

QUESTIONS:

Q1: What is your view of MyMate as a solution to support your day-to-day work?

Q2: How viable do you think MyMate is in terms of implementing the solution within your organisation?

Q3: With a solution like MyMate, how would the technology typically be purchased? Who would make the decision to purchase MyMate, who would pay for it and how would that transaction take place?

Q4: Are you aware of other products/services that do something similar to MyMate?

Q5: What sort of commercial model would work best/be typical for something like MyMate? (i.e. subscription model/one-off payment/annual payment etc.)

Q6: To what extent would cost be a factor in whether you think MyMate would be purchased as a solution for your organisation?

Q7: What price point do you think would be realistic/achievable for a product like MyMate?

Q8: What would help us in convincing you/others to purchase MyMate?





Appendix 12: Secondary User Usability Survey

WHEN: Directly after completion of the pilots

WHO: All participating Secondary Users (20 in total, 10 per cohort)

HOW: Survey provided to Secondary Users in paper form and returned to local

researcher; data from survey then uploaded into spreadsheet.

QUESTIONS:

	How much do you agree/disagree with the following statements?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Usefulness					
Q1	The MyMate app helps me be complete my volunteering activities					
Q2	The MyMate app is useful and practical					
Ω3	The MyMate app saves me time when I use it.					
	Ease of Use					
Q ₄	The MyMate app is easy to use.					
Q ₅	The MyMate app is well designed and requires the fewest steps possible to accomplish what I want to do with it.					
Ω6	I can use the MyMate app without additional written instructions.					
	Ease of Learning (on how to use)					
Ω ₇	I learned to use the MyMate app quickly.					
Q8	I easily remember how to use the MyMate app					
	Satisfaction					
Ω9	I would recommend the MyMate app to a friend.					
Q10	The MyMate app is fun to use.					

Appendix 13: Secondary User Usability Focus Group/Interview Guidelines





WHEN: Directly after completion of the pilots. Can be done at the same time as the

survey is completed (Appendix 12)

WHO: All participating Secondary Users

HOW: Engagement can either be face to face interviews or a focus group, wherever

is convenient; interview/FG should be audio recorded; key points from each interview/FG written up in English; focus is on understanding the experience that users had with the app and how we might improve that experience in the

way we design the app.

QUESTIONS:

Q1: How easy did you find the app to use?

Q2: Was there anything you didn't understand about the MyMate app?

Q3: How could we improve the design of the MyMate app?

Q4: What did you like most about the MyMate app?

Q5: What was the worst thing about the MyMate app?

Q6: Any other comments?





Appendix 14: Tertiary User Usability Survey

WHEN: Directly after completion of the pilots

WHO: All participating Tertiary Users (5 in total)

HOW: Survey provided to Tertiary Users in paper form and returned to local

researcher; data from survey then uploaded into spreadsheet; comments

translated and added to the spreadsheet in English.

QUESTIONS:

	How much do you agree/disagree with the following statements?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Usefulness					
Q1	The MyMate dashboard helps me to do my job					
Q2	The MyMate dashboard is useful and practical in managing the MyMate process					
Ω3	The MyMate dashboard saves me time when I use it.					
	Ease of Use					
Q ₄	The MyMate dashboard is easy and intuitive to use.					
Q ₅	The MyMate dashboard is well designed and requires the fewest steps possible to accomplish what I want to do with it.					
Q6	I can use the MyMate dashboard without additional written instructions.					
Ω ₇	I can only use some parts of the MyMate dashboard but not others					
	Ease of Learning (on how to use)					
Q8	I learned to use the MyMate dashboard quickly.					
Ω9	I easily remember how to use the MyMate dashboard					
Q10	I would need more training in order use all elements of the MyMate dashboard					

QUESTIONS FOR COMMENT (ON PAPER):





Q11: How easy did you find the dashboard to use?

Q12: Was there anything you didn't understand about the MyMate dashboard?

Q13: How could we improve the design of the MyMate dashboard?

Q14: What did you like most about the MyMate dashboard? Q15: What was the worst thing about the MyMate dashboard?

Q16: Any other comments?