

DELIVERABLE

D30 – Pilot Planning Report



**iWebCare : Integrated Web
Services Platform for the
Facilitation of Fraud Detection in
Health Care**

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Abstract:

This report has been produced as a result of the EU review of the iWebCare project on 30 January 2007 and a recommendation that the consortium should describe its plans for the pilot of the iWebCare platform in a draft deliverable to be delivered in month 18 of the project, with the final deliverable to be delivered in month 30.

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Healthcare, e-health, e-gov, fraud, RBH, NHS, TSAY, dataset, pilot application

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****Nature: R-report, P-prototype, D-Demonstrator, O-other**

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Revision History

Date	Version	Description	Author
28/03/2007	V1.1	Draft D30 submitted to project meeting for review (numbered D17a/D18a)	RBH/TSAY
17/07/07	V1.2	Draft D30 circulated to partners for comments	RBH
30/07/07	Final V1.3	Draft D30 amended in the light of comments received from ICCS, Agilis and Intrasoft	RBH
20/11/07	V2.1	Draft D30 amended in the light of comments from 2 nd review and contribution from TSAY and ICCS (received by RBH 4/12/07)	TSAY/ICCS
10/12/07	V2.2	Draft D30 amended in light of comments from 2 nd review	RBH
11/12/07	V2.3	Draft D30 enriched with TSAY's contribution concerning the pilot and data preparation	TSAY
11/12/07	V2.4	Draft D30 finalised for submission to EU	RBH
13/2/08	V2.5	Suggested revisions to document	Intralnt
16/2/08	V2.6	Some further comments on suggested revisions	RBH
03/3/08	V2.7	Document enlighten with comments received at the Project's meeting in London	RBH, TSAY
31/5/08	V3	Final version amended in light of comments received on final draft	RBH

Abbreviations

Agilis	Agilis SA, Greece
BS	British Standard
CFSMS	Counter Fraud and Security Management Services, UK
D	Deliverable
DEM	Data Mining Expert
EHFCN	European Healthcare Fraud and Computer Network
Epsom & St Helier	Epsom & St Helier University Hospitals NHS Trust
EU	European Union
FEC	Fraud Expert (Consumer)
FEM	Fraud Expert (Maintenance)
FEP	Fraud Expert (Provider)
HQ	Headquarters
ICCS	Institute of Communication and Computer Systems, Greece
IntraInt	Intrasoft International SA, Belgium
Lewisham	The Lewisham Hospital NHS Trust
M	Month
Marsden	Royal Marsden NHS Foundation Trust
Mayday	Mayday Healthcare NHS Trust
Moorfields	Moorfields Eye Hospital NHS Foundation Trust
NHS	National Health Service, England
RBH	Royal Brompton and Harefield NHS Trust
TCDT	Typical Cost of Drug Treatment
TSAY	Social Security Body of Health Care Professionals, Greece
UC	Use Case
WP	Work Package

Executive Summary

This report describes the activities to be carried out as part of the pilot (WP7).

Section 1 describes the purpose of this report and the aims and objectives of the pilot activities.

Section 2 describes the pilot application at the RBH/NHS user site. This section starts with a description of the fraud context chosen by RBH for application of the iWebCare platform. This is followed by a summary of the organisation of the pilot at the user sites, which includes information on the locations for piloting, the personnel who will contribute to these activities and the data to be used.

Section 3 describes the pilot application at the TSAY site and includes the same information as that which is given in section 2 for the RBH/NHS user site.

Information on further activities to be carried out in order to prepare for and conduct the pilot is given in Section 4, including a GANTT chart giving an overall schedule for these activities and a detailed breakdown of the different tasks to be accomplished.

The methodology to be used for piloting, which will include a log of critical events, statistical data generated by the platform itself, a diary of usage, questionnaire surveys and interviews, is then described in Section 5 of this report.

The report ends with some general conclusions in Section 6.

1 Introduction

The overall aim of the iWebCare project is “to design and develop a flexible fraud detection web services platform, which will be able to serve e-government processes of fraud detection and prevention, in order to ensure quality and accuracy and minimise loss of health care funds¹. This report describes the activities to be performed by user organisations (RBH and TSAY) as part of the piloting of the iWebCare platform in the latter stages of the project. It has been prepared to ensure that all the necessary activities are identified and allocated to appropriate consortium members to enable the pilot to meet its overall aims and objectives. Additionally, it addressed the request of EU reviewers who asked for an additional deliverable to be added to **WP7 (D30)** describing how the pilot will be carried out. The document will serve as a briefing document for members of the user organisations and those directly involved in the piloting so that they have a good understanding of their role, the timescale for this work and the input required from them.

Since the pilot activities for **WP7** are dependent on the outcome of the integration, deployment and testing stage (**WP6**), adjustments to the plans for the pilot will be made in response to comments received from those involved in **WP6** and to reflect the progress made in this work package.

WP7 focuses on piloting the platform at the end-user sites. Users, with the help of the technology integrators and software development team, will evaluate the full range of services offered by the integrated iWebCare web services platform as well as the functionalities offered by each of the main modules². The main goals of this phase of the project are:

- to use and validate the web services offered by the integrated iWebCare platform
- to test out the methods for user authentication and authorization
- to create, update and delete rules stored in the rules repository
- to upload and submit datasets
- to apply rules using the validation engine’s services
- to preview the results of the validation process and create meaningful reports
- to assess the effectiveness of the self-learning module
- identify different types of users or *actors* who would need to access and use the iWebCare platform at the two different sites if the platform was implemented fully, eg to maintain user accounts and rule profiles, to submit data for validation, to view rules and reports identifying potential fraud or to view rules and fraud cases of other agencies to compare with their own.

¹ iWebCare Annex I – Description of Work. 17 October 2005 (revised in July 2007).

² iWebCare modules:

- iWebCare Web Service module which interfaces with e-gov applications which are responsible for submitting the datasets (eg prescriptions) to be checked for fraud
- Self-learning module which will provide a facility to ‘learn’ from the submission of data sets and creates/updates rules in the rules repository
- Health care ontology module which is responsible for mapping domain concepts with datasets and with variables and rules in the rules repository
- Fraud detection (validation) engine module which will use domain specific rules in order to validate an incoming dataset and produce reports
- Rules repository module which will store available rules and rule sets

- to provide feedback on:
 - ease of use and user-friendliness of the web-based user interface
 - the robustness of the system
 - interoperability with legacy systems (manual as well as electronic systems)
 - access and security issues
 - validity of the rules
 - ease of interpretation of validation results
 - the benefits of using the iWebCare platform
 - how well the platform performs and meets the requirements identified in earlier work packages
 - whether the platform has been effective in identifying potential fraud, the estimated value of the types of potential fraud identified and what further investigation would be needed to determine whether there was an intention to commit fraud (including the viability and feasibility of further investigation and an estimate of the likelihood of such action being taken)
 - whether users have identified any additional data which might enhance the usefulness of the platform
 - the barriers and critical success factors to implementing the platform on a wider scale
- to produce reports on the results of the pilot (**D17** (RBH)/**D18** (TSAY)) which will include the results for each organisation as well as some overall conclusions and recommendations.

Following completion of the reports on the outcome of the iWebCare pilot in month 34, an iWebCare platform overall assessment report and feasibility studies in other application domains will be carried out (Task 8.3 – **D24c** (M36)). A board of experts consisting of individuals with expertise in various application domains (other than health care) will produce a report analyzing the implications of the evaluation of the two pilots for other e-gov application domains.

The following activities were carried out in order to produce this document:

- interviews with key stakeholders/experts in user organisations
- consultation and feedback from iWebCare consortium members and from the EU's review team
- a review of iWebCare deliverables
- research into the experience of other projects which included piloting of web-based platforms
- a short literature review into piloting activities

2 Pilot application at RBH/NHS user site

2.1 Background

2.1.1 Fraud context for application of the iWebCare platform

The Royal Brompton & Harefield NHS Trust (RBH) is an NHS hospital trust which provides specialist acute health services for patients with heart and lung disease across the UK. The context selected by RBH for the iWebCare project was procurement fraud, and in particular, conflict of interest in procurement fraud. This area is not currently covered by existing fraud detection systems which include 'tip offs' from the public using a fraud reporting telephone line, staff reports and Audit Commission reports, and the topic also has wide applications outside the health arena³.

Data to be used on the platform has been extracted from two systems:

- Payroll systems (including employee name, surname, address, date started in employment, date left, number of hours worked)
- Finance systems – creditors' payment history and standing data (including creditor name, address, VAT registration number, invoice numbers, invoice dates, payment amounts)

A full description of the data set can be found in **D05** NHS and TSAY Datasets.

The reasons why this data was chosen for the pilot are explained in some detail in **D01** and **D05**.

In addition to RBH, a number of other NHS Trusts will participate in the project by contributing data and evaluating the platform during the pilot stage.

Through using the iWebCare platform to identify potential matches between sets of data it is envisaged that three types of potential fraud may be identified, including two types of fraud relating to *procurement* and one relating to *payroll*:

- fraud specifically relating to *conflict of interest (failure to disclose inappropriate relationships)*, ie there is a relationship between an employee and a creditor which is identified by the platform, eg an employee shares the same address as the creditor
- fraud carried out by creditors not relating to conflict of interest (*external false representation*), eg the creditor invoices twice for one order
- potential *payroll* fraud (*misappropriation of funds*) (eg an employee claiming payment for full time work at more than one NHS Trust).

Further information on the fraud contexts, business processes, data sources and potential sources of fraud can be found in **D01** (the complete business model of e-government processes dealing with fraud detection in the health care domain).

³ The scenario being tested at RBH is different from the one described in the original iWebCare project Technical Annex dated 17 October 2007. The procurement scenario was chosen in response to a request from the EU during contract negotiations to select a topic which had wider applications outside the e-health arena, rather than focusing on prescribing which was identified in the original proposal.

2.1.2 iWebCare data mining and validation

Drawing on the iWebCare rules repository, the iWebCare system will generate a number of reports on potential fraud. **D06** provides further information on the fraud detection rules applicable to the health care domain. Additional rules will be identified by the self-learning module.

2.2 Organisation of pilot activities

The pilot application at the RBH/NHSNHS site will validate the services of the integrated iWebCare platform in the context of procurement and potential conflict of interest.

Based on the information provided above, staff from a number of NHS Trusts will use and validate the web services offered by the integrated iWebCare platform. All services will be provided via the Internet and will be accessible after proper user authentication and authorization. More specifically RBH/NHS will:

- Upload and submit datasets containing information on creditors and payroll information
- Apply rules (similar to those described previously) using the validation engine's services
- Evaluate existing rules and modify rules according to weighting
- Use the self learning engine to generate new rules and then ask experts whether these new rules are useful to identifying potential fraud
- Preview the results of the validation process and create meaningful reports

Deliverable D17 'Pilot application at RBH/NHS evaluation report' will be created by RBH which will summarise all problems encountered during pilot operation of the iWebCare platform and evaluate independently all the services offered.

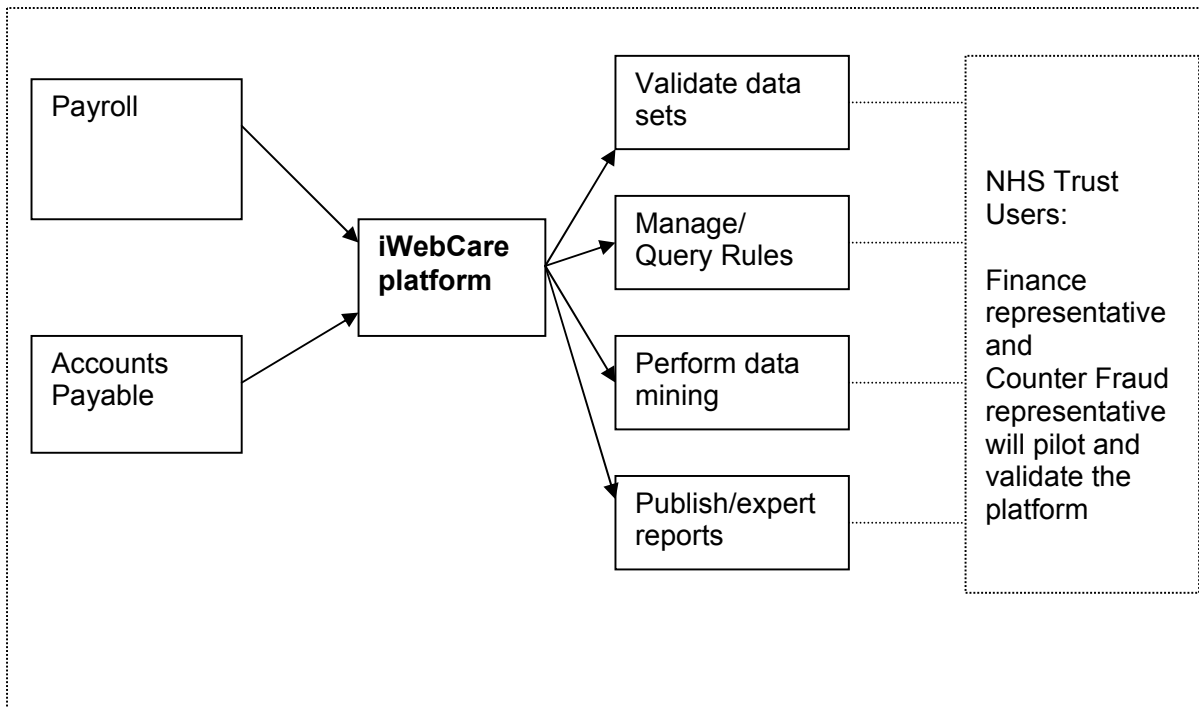
2.2.1 Arrangements at user sites

Where will pilot take place?	RBH The Royal Marsden NHS Foundation Trust Thames Audit which provides a counter fraud service to a range of Trusts
Who will be involved in piloting the platform	iWebCare project team Members of counter fraud team from Thames Audit Finance representatives at different Trust sites (Approximately 6-8 users)
What data will be used for pilot?	Data provided by Trusts in January 2007 Payroll: Between 2,000 and 5,000 staff members per Trust Creditors: Up to 35,000 creditors per Trust and up to 250,000 creditor entries Only historical data will be used for the pilot for RBH and the platform will be used to detect potential fraud rather than as a 'live' fraud prevention tool, although information will be gathered as part of the pilot on the whether it would be possible to use the system on an ongoing basis for fraud prevention and the implications of such a change.

How will pilot be run?	Pilot users will be trained to use the system. They will then be asked to complete a diary every time they use the system and then a questionnaire at the end of the pilot.
When will be pilot be run?	Between July and September 2008 A briefing to introduce the platform and discuss the pilot was held in February 2008

2.2.2 RBH/NHS Trusts Workflow Diagram

The RBH workflow diagram for the pilot is set out below.



3 Pilot application at TSAY user site

3.1 Background

3.1.1 *Fraud context for application of the iWebCare platform*

TSAY is the social security organisation of healthcare professionals in Greece. Its main headquarters (HQ) are in Athens. The context selected by TSAY for the iWebCare project was prescription and drug reimbursement fraud. Every year a big percentage of public health money is consumed for these purposes and therefore this issue is considered to be one of the most essential in government health care.

At the present time very few of the approximately 170,000 prescriptions received per month are examined. The present prescription inspection system consists of TSAY inspectors verifying the correctness of information submitted by pharmacy associations (which submit prescriptions in bulk at regular intervals) and inspecting a small random sample of prescriptions. The system used by TSAY is very similar to that used by other health insurance organisations in Greece.

The prescription data which will be used on the platform includes the following information:

- Information on the patient (ie TSAY member or a member of his family⁴) for whom the medication has been prescribed (TSAY membership number, year of birth⁵, address⁶, percentage of cost of the prescription which must be paid by the patient)
- Information on the diagnosis leading to the issuance of a prescription (ie ID code of doctor making diagnosis and issuing prescription, date, information on each diagnosis)⁷
- Information on the medication which has been prescribed (eg amount, price per unit, total value, amount paid, barcode)
- Information on the filling of the prescription (date, signature of pharmacist, pharmacist's TSAY number)

A full description of the data set can be found in **D05** NHS and TSAY Datasets. The reasons why this data was chosen for the pilot are explained in some detail in **D01** and **D05**.

Through using the iWebCare platform to identify potential matches between sets of data it is envisaged that two types of fraud or 'declension' may be identified:

⁴ Member of family not always denoted on prescription

⁵ Date of birth information is sometimes missing from prescription

⁶ Address information is often out-of-date

⁷ Up to three different diagnoses are allowed on the same prescription and these are given as a circumlocutory expression rather than as a unique code

- fraud related to *prescription rules violations*, eg prescription value is artificially inflated to increase reimbursement
- fraud relating to *process deviations*, eg failure to reject prescriptions which have not been completed properly or which should be rejected (eg a prescription which includes more than three diagnoses and drugs or a prescription on which the contribution percentage is too low)

3.1.2 iWebCare data mining and validation

Drawing on the iWebCare rules repository, the iWebCare system will generate a number of reports on potential fraud. **D06** provides further information on the fraud detection rules applicable to the health care domain. Additional rules will be identified by the self-learning module.

3.2 Organisation of pilot activities

Based on the information acquired from TSAY experts, the pilot will validate the web services offered by the integrated iWebCare platform. During this e-government scenario TSAY will establish a pilot group which will include representatives of the following groups:

- doctors authorized to prescribe (drugs) for the TSAY members (patients) in a predetermined pilot area.
- pharmacists authorized to process prescriptions issued for TSAY members (located in the pilot area)
- A team of experts from the Control Department of the HealthCare expenses, which will be based at TSAY headquarters.

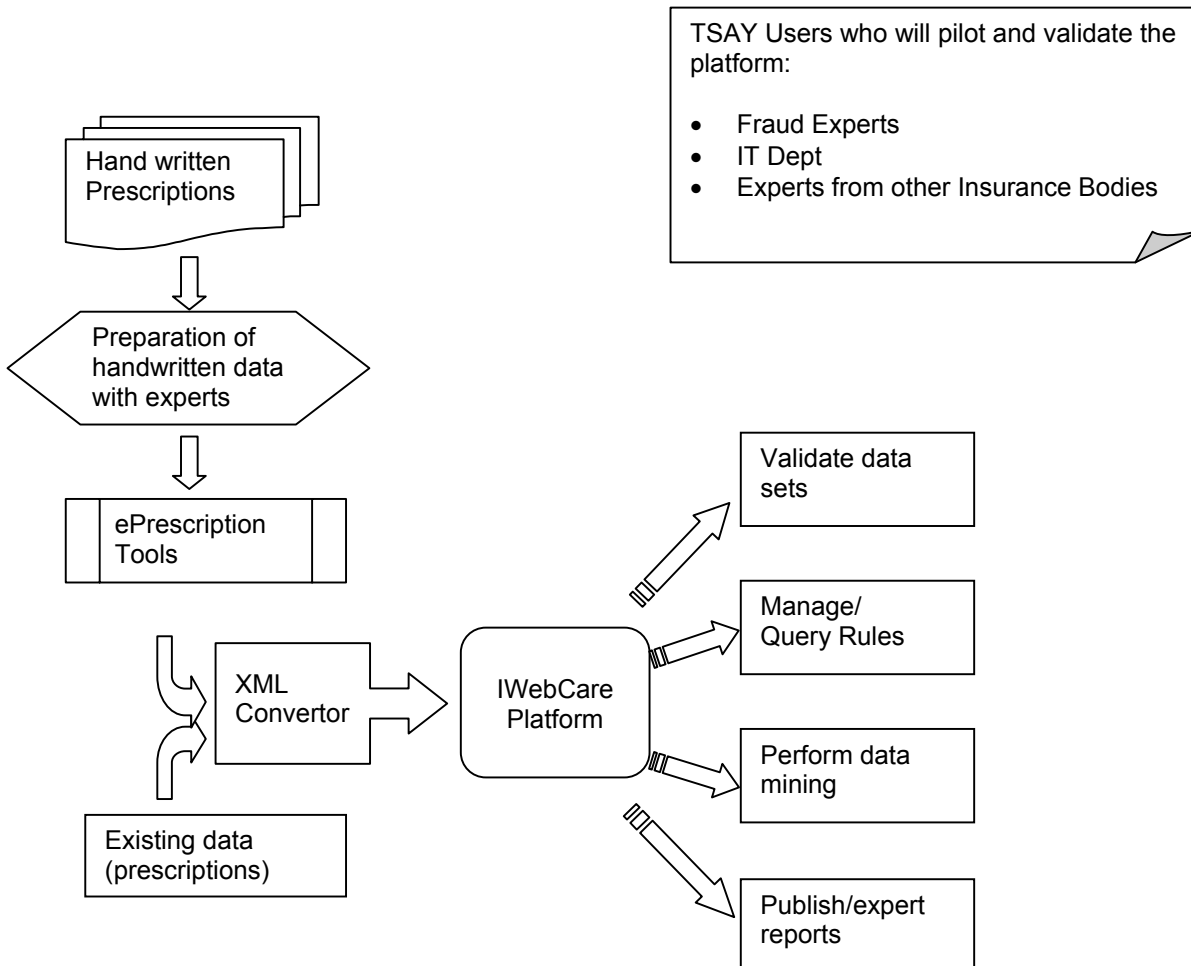
3.2.1 Arrangements at user site

Where will pilot take place?	TSAY Headquarters (HQ) in Athens. This is mandatory because all prescriptions that are filled in any pharmacy within the country, are gathered together each month at the HQ of TSAY
Who will be involved in piloting the platform	iWebCare project team TSAY group established for this purpose and comprising one medical doctor, one pharmacist and one or two members of the Prescriptions Auditing Group. There will also be some involvement of TSAY's IT Department, and experts from other Social Security Bodies will be invited to participate. (Approximately 4-5 users)
What data will be used for pilot?	25% of the prescriptions which have been converted into electronic format for the iWebCare project (approximately 15,000 e-prescriptions) will be used for the pilot. Although the data will be 'real' data, it will be historical data similar to the data used to develop/educate the platform. However in addition live data will be used. This will comprise approximately 500 prescriptions which are issued during the pilot period in the same geographical area as the other data. This data will be digitized and fed into the system for validation and investigation as appropriate.

How will pilot be run?	Pilot users will be trained to use the system. They will then be asked to complete a diary every time they use the system and then a questionnaire at the end of the pilot.
When will be pilot be run?	Between July and September 2008 A briefing to introduce the platform and discuss the pilot was held in March 2008

3.2.2 TSAY workflow diagrams

A copy of the TSAY workflow diagrams illustrating the main actors who will be involved in the pilot are set out on the following pages.



A critical step in order to successfully run the PILOT at TSAY is the preparation of handwritten data (prescriptions) and conversion to digital data ready to be consumed by the iWebCare platform. For that purpose (see also table in section 4.1) during M28 and M29 the following procedure will take place at TSAY: One administrative person at TSAY from the Prescriptions Auditing group will select a batch (500-1000) of handwritten prescriptions (of the first trimester of 2008) using the following criteria:

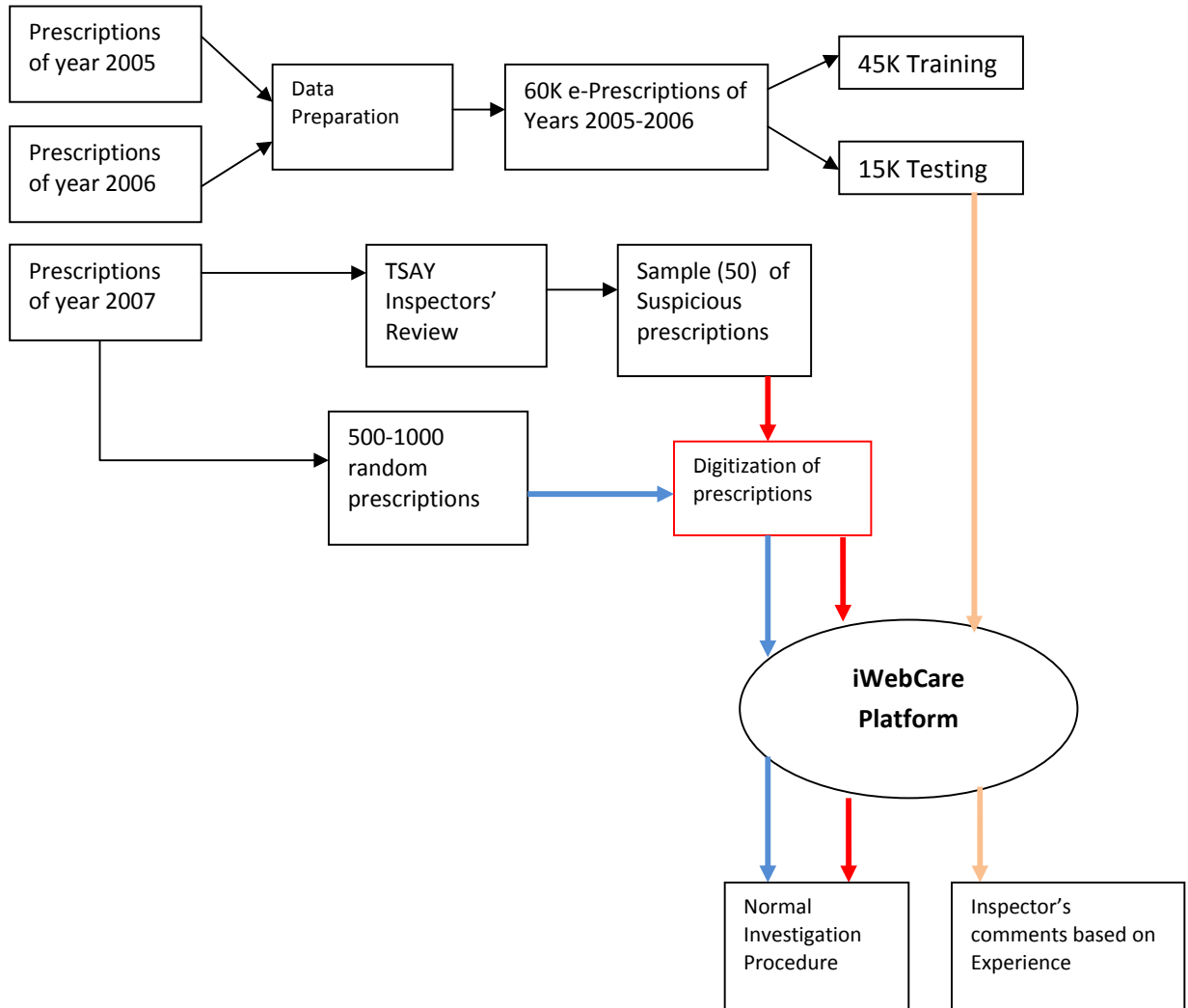
- Easy to digitise (that is clearly written)
- Rich in terms of data (more than one drug prescribed)

Following selection of the batch, one person from the Prescriptions Auditing Group (preferably a pharmacist) will check these prescriptions against the “typical” criteria used in TSAY to accept the prescription (is it signed and stamped by the doctor? Has the doctor’s stamp the correct format etc?)

Last but not least, the Doctor of the Prescriptions Auditing Group will mark the prescriptions as Non-Fraud, Fraud or Potentially fraud, in order to have this information available for the system. At the same time the pricelist of the drugs will be updated for TSAY

The prescriptions will then be digitised.

Prescription Handling



4 Pilot schedule and breakdown of activities and responsibilities

4.1 Overall schedule (Milestones in bold text)

	M26 Feb	M27 Mar	M28 Apr	M29 May	M30 Jun	M31 Jul	M32 Aug	M33 Sep	M34 Oct	M35 Nov	M36 Dec
Present fraud detection engine to users											
Testing of platform											
Set up Helpdesk arrangements											
Set up access arrangements											
Bug Fixes – Fine Tuning											
TSAY data preparation											
Deliver training (and “on the job” training)											
Finalise and submit D30											
Final prototype ready for pilot											
Launch pilot											
Pilot											
Evaluate pilot results											
Prepare and submit D17/18/19											
Dissemination workshop to share results of pilot and overall results of project											

4.2 Summary of activities and responsibilities

As already identified in section 1 of this report, users will be required to:

- prepare data for inputting onto platform
- TSAY only – establish links between platform and other data management systems (eg providing information on doctors' specialties and contact details)
- convert data to XHTML format
- test out the methods for user authentication and authorization
- create, update and delete rules stored in the rules repository
- upload and submit datasets
- apply rules using the validation engine's services
- preview the results of the validation process and create meaningful reports
- assess the effectiveness of the self-learning module
- assess whether or not cases of potential fraud are worth further investigation
- contribute to the evaluation of the pilot by completing diary and questionnaire and participating in telephone interviews if required

A summary of the key activities is set out in the table below. This is followed by a further breakdown of some of the preparatory activities highlighted in this table.

Task	Description	Responsible	Other partners involved	Timescale
Platform integration	Integration of platform components/modules	IntraInt	Agilis	M25-28
Testing of platform	Testing and user acceptance test at RBH and TSAY sites	ICCS/IntraInt	RBH/TSAY/Agilis/FhG	M26-28
Helpdesk	Set up Helpdesk arrangements (and see 4.3 below) and provide ongoing Helpdesk support to ensure the pilot is completed effectively	RBH/TSAY/IntraInt	Agilis	M27-33
Access arrangements	Organise access to platform for users involved in pilot	RBH/TSAY	IntraInt	M28
Fine tuning	Fine tuning and bug fixes	IntraInt	FhG/Agilis	M28-29
Data Preparation	Select an adequate sample of handwritten prescriptions to be digitised and used for the pilot	TSAY	ICCS	M28-M29
Training	Training for pilot users	Agilis	RBH/TSAY/IntraInt	M29-30
User manual	Development of user instructions	IntraInt	RBH/TSAY/Agilis	
D30	Finalise and submit final version of D30	RBH	TSAY/other partners	M29

Task	Description	Responsible	Other partners involved	Timescale
Launch pilot	Meetings with NHS and TSAY representatives to launch the pilot phase	RBH/ TSAY	NHS Trusts	M30
Pilot	Users pilot the system	RBH/ TSAY	NHS Trusts	M30-33
Evaluation of pilot results	Collation and analysis of results of pilot	RBH/ TSAY	IntraInt/ ICCS/ UniNaDMS	M31-33
D17/D18	Preparation and submission of reports on pilot application at NHS (D17) and TSAY (D18)	RBH/ TSAY	All partners	M31-33
D19	Consolidation of reports – evaluation and assessment	IntraInt/ UniNaDMS	All partners	M33-34
Dissemination	Workshop to share results of pilot with user organisations	RBH TSAY		M35

4.3 Breakdown of preparatory tasks to be carried out by RBH/TSAY in consultation with other partners (M25-M29)

- Brief users on the aims and outcomes of these stages of the project
- Establish working group at each site to manage pilot activities
- Contact each site which will contribute to pilot to identify user representatives
- Agree detailed schedule for pilot activities (M30-32), level of input expected from users and methods for communicating on progress and on any issues which need to be shared between users
- Develop communication strategy for pilot
- Send out invitation to meeting to demonstrate prototype and consult on pilot activities (RBH/NHS meeting held on 22 February following iWebCare partner meeting with presentations from other partners, TSAY meeting held in March)
- Agree agenda for meeting and prepare presentations
- Consult all iWebCare partners on draft research instruments and revise for consultation with users before finalising majority of instruments for inclusion in final version of D30 (M29) (Note: interview protocol will be finalised in M33 following evaluation of preliminary results of the pilot as the interviews will be used to explore in more depth some of the results of the pilot)
- Clarify with technical partners how the platform and its various modules will be populated with data and the format of the data. The outcome of these discussions will be included in the training programme and advice available from the 'Help Desk'.
- Agree with technical partners exactly which *use cases* or operations need to be carried out by actors, eg:
 - Maintaining user accounts, giving access to those using the platform
 - Managing rules and their metadata, modifying rules by adding new rules or deleting selected rules

- Performing data mining by selecting data for data mining, specifying the required parameters of the data mining method and checking the quality of the data mining results
- Validating datasets against a rule or rules, publishing or exporting potential fraud case results and searching for rules
- Conduct training needs analysis and Help Desk requirements
- Agree nature and content of training and how it will be delivered to users
- Develop training programme for delivery in M29 (details to be included in final version of D30)
- Contribute to development of instructions for users, including how to upload data, how to populate the rules depository etc
- Clarify arrangements for 'Help Desk' support with other partners
- Provide Help Desk support on ongoing basis
- Liaise with RBH/NHS and TSAY IT departments to discuss any technical issues arising from access to system
- Schedule interviews to be carried out in M33
- Organise events to disseminate information on the outcome of the pilot

4.4 Deployment of the iWebCare platform

The users (TSAY or NHS) will access the iWebCare web server by http (ie using the Internet and a username/password).

4.5 Risk management strategy

Effective risk management will be vital to ensure the success of the pilot and its effective contribution to the overall iWebCare project.

Critical factors	Risk	Risk mitigation by	Risk mitigation strategy
Final prototype available and ready for testing	Prototype not ready in time for pilot	IntraInt	Prototype must be tested technically and by users by end M29
Co-operation and commitment from all users	Users fail to contribute fully to pilot activities	RBH/TSAY/ Other partners	Effective communications must be established with users and dissemination events held to demonstrate prototype system
Co-operation and commitment from all users	Users fail to contribute fully to pilot activities	RBH/TSAY	Plans for pilot need to be disseminated to users at an early stage so that time can be allocated for the pilot activities
Co-operation and commitment from all users	Users fail to contribute fully to pilot activities	RBH/TSAY	Users must be consulted on the plans for the pilot so that they can contribute to its design and planning
Pilot meets objectives	Users fail to carry out the pilot effectively	IntraInt/RBH/ TSAY	Effective training programme or materials must be designed and delivered by end M29

Critical factors	Risk	Risk mitigation by	Risk mitigation strategy
Detailed plan for pilot agreed by all partners	Key activities not identified or timing does not allow key activities to be completed	All partners	Draft plan for pilot (D30) circulated for comments and all partners will be strongly encouraged to make effective contributions to its preparation
Effective research instruments designed to evaluate platform	Research instruments are not effective or do not measure all the necessary outcomes	RBH/TSAY/ IntraInt/All partners	Draft research instruments designed at an early stage for full consultation with partners and piloting before they are revised and circulated to users involved in pilot
Effective ongoing support to users during pilot	Users encounter problems which prevent them from using the system or which make it difficult to use the system, which results in less use of the system than is needed for the pilot	RBH/TSAY	A training programme and 'manual' and some form of 'Help Desk' support is being developed to ensure users feel confident to use the system and that they have easy access to advice and support on an ongoing basis
Pilot meets its objectives	Pilot fails to make an effective contribution to the project	All partners	Regular meetings between project partners between M24 and M34 to review plans and progress and make changes in response to feedback to improve the outcomes
Access to data	Legal restrictions and rules about data confidentiality mean that data is not able to be accessed during pilot	RBH/TSAY	Legal implications of accessing data reviewed at an early stage of the project and permission obtained in writing to use the data

5 Methodology for pilot

The pilot will evaluate the iWebCare platform in two dimensions: the **technical** and the **business** dimensions:

- The **technical** dimension will encompass testing the platform's functionality to ensure that it is compliant with requirements and to address quality issues, eg on ease of use or on how information is displayed
- The **business** dimension will consider the platform's impact on the organization. This will look at how much potential fraud the platform was able to identify, the worth of the potential fraud and the impact of the platform financially, technologically and organizationally.

The pilot will employ a range of quantitative and qualitative techniques to triangulate the results as, due to the confidential nature of the data being used on the platform, it is not possible to test the platform with a large number of users.

5.1 Research instruments to evaluate technical dimension:

A range of methods will be used to gather data during the pilot:

- a **log** of critical events (technical 'bugs') linked to setting up access and using the platform – see Annex 1 – this will be completed by those partners from Agilis, RBH or TSAY who deal with technical problems relating to use of the platform and will include information on time taken to deal with faults, the nature of the fault, who dealt with it and why it occurred in order to provide a clear audit trail
- **statistical data** taken from the platform on usage levels, downtime etc produced by Agilis
- a **diary** kept by users participating in the pilot and those consortium members providing technical support during the pilot recording activities carried out when using the platform, key outcomes and any comments on the performance and usability of the platform – see Annex 3
- **questionnaire surveys** at the end of the pilot phase (M33) to gather quantitative data on performance and usability – see Annex 3
- **telephone interviews** with all users at each site to explore in more depth some of the findings from the questionnaire survey – an interview protocol will be developed in M24-26 and this will then be modified in M33 once the results of the questionnaire survey are known
- production of a **report** summarizing the findings for both sets of users and drawing together any common findings, conclusions and recommendations

5.2 Research instruments to evaluate business dimension:

A similar but more limited range of methods will be used to gather data during the pilot:

- a **questionnaire survey** to be administered before the pilot begins and after it ends to assess the impact of the platform and its acceptability (business dimension)
- **telephone interviews** with all users at each site who have been involved in the pilot activities and a small number of key stakeholders (eg Director of Finance, Director of Audit and Associate Director/Commercial Manager at RBH, key Directors at TSAY and national health contacts, eg Associate Director at the UK's Audit Commission and Head of Information Systems for the UK's Counter Fraud and Security Management Service (CFSMS)), to explore in more depth some of the findings from the questionnaire survey –

an interview protocol will be developed in M24-26 and this will then be modified in M33 once the results of the questionnaire survey are known

- production of a **report** summarizing the findings for both sets of users and drawing together any common findings, conclusions and recommendations

5.3 Critical success factors

The questionnaire survey and interviews will seek feedback from users on the **critical success factors**:

- the ease of use and user-friendliness of the web-based user interface in carrying out the above activities and on:
- the robustness of the system
- interoperability with legacy systems (manual as well as electronic systems) and, in the case of TSAY, how effectively the system deals with 'live' data
- ability to export information into other formats, eg Excel spreadsheets
- ease of producing reports
- whether the platform is able to deliver benefits such as:
 - improved data flow and information exchange between internal departments
 - improved data flow and information exchange with external agencies
 - improved inter-agency co-operation
 - faster and more efficient operations
 - reduced administrative costs to support current processes and improved effectiveness by automating tasks to deal with large volumes of data which would be difficult to process without the use of such systems
 - use of data mining techniques to identify potential fraud cases which require further examination either to eliminate them from further investigation or to justify a follow up
 - enhanced fraud prevention/detection processes to minimise loss of funds and ensure that funds are directed towards improving patient care
 - being able to prioritise results for further investigation (eg by being able to identify high, medium and low risk cases or high, medium and low probability cases)

5.4 Additional information requirements

In addition the survey and interviews will seek feedback on:

- access and security issues
- validity of the rules
- interpretation of validation results
- any IT issues relating to access, eg ability to access site by those with disability, and compliance with industry standards, eg UK's BS7799 standard on information security management
- how the platform fits with existing procedures and processes and what adaptations would be required in order to use the iWebCare platform on an ongoing basis.
- potential barriers and critical success factors to implementing the platform on a wider scale
- whether users have identified any additional data which might enhance the usefulness of the platform
- the effectiveness of the platform in identifying potential fraud (including information on the estimated value of the types of potential fraud identified, what further investigation would be needed to determine whether there was an intention to commit fraud, the

viability and feasibility of further investigation and an estimate of the likelihood of such action being taken)

- what organisations might be prepared to pay for access to the platform.

6 Conclusions

The processes which are being tested by the iWebCare platform focus on two very different areas – procurement (which has applications outside the health arena) and prescribing (which deals with health records only).

The two user organisations have very different levels of computerisation for fraud detection and web-based services have not been traditionally used. Currently the process used by TSAY for dealing with prescriptions is a manual one and prescriptions are submitted in paper form (normally in batches from pharmacy associations). As a result, inspectors have to look through very large volumes of paper prescriptions in order to identify mistakes or potential fraud cases. In cases where potential fraud is suspected, further investigation is carried out. RBH and its partner Trusts, on the other hand, have automated systems for payroll and invoice payment, although the data is held on separate and very different data systems. There is currently no attempt to use this information to identify potential fraud within NHS Trusts.

Although potential fraud may be identified through use of the iWebCare platform, further investigation⁸ will be required before fraud can be confirmed. In the case of RBH, it will not be possible to conduct investigations within the short time available for the pilot, particularly since such investigations can take several months or even years to complete and it is often necessary to involve the police service in such investigations. The pilot led by RBH is therefore unlikely to be able to confirm whether fraud has been identified or not, although users will be able to give an opinion of the likelihood of fraud for instances of potential fraud identified through use of the iWebCare platform. In the case of TSAY, however, a sample of the suspect prescriptions will be investigated to conclude whether there is fraud or not.

It is vital to obtain feedback on the platform from users in an operational environment as this is the only way to validate the technical work and test out whether the iWebCare platform can offer added value to existing legacy systems. Furthermore, an operational pilot will act as a credible reference site to feed into exploitation and dissemination activities. Organisations such as the European Healthcare Fraud and Corruption Network (EHFCN), the UK's Counter Fraud and Security Management Service (CFSMS), the UK's Audit Commission and a number of health insurance companies have already expressed an interest in hearing about the results.

For these reasons, it is vital that the pilot activities are well organised and that the results provide a detailed and accurate picture of the potential of the iWebCare platform in supporting fraud prevention and fraud detection. The success of the piloting activities will be dependent on good relationships and communications between partners involved in the pilot and the production of this report outlines the detailed steps to be taken to facilitate inter-agency working during these stages of the project.

Changes will be made to this document to reflect feedback from users and consortium members in the coming months and during the prototype development and testing period. The final deliverable (D30) will be submitted in M30 (June 2008).

⁸ Investigating staff must complete a professional, accredited counter fraud qualification offered by the NHS Counter Fraud and Security Management Service (CFSMS)

Assessment of the project outcomes for domains outside the health domain will be carried out as part of WP8 (D24c M36).

References

iWebCare Annex I – Description of Work. 17 October 2005

iWebCare Project. 2007. *D01 – Complete business model of e-government processes dealing with fraud detection in the health care domain (Revised July 2007)*. <http://www.iisa-innov.com/iwebcare/>

iWebCare Project. 2007. *D03 – Overall Architecture (Revised July 2007)*. <http://www.iisa-innov.com/iwebcare/>

iWebCare Project. 2006. *D04 - Generic methodology for the determination of fraud in different application domains of e-gov services*. <http://www.iisa-innov.com/iwebcare/>

iWebCare Project 2006. *D05 – NHS and TSAY Datasets*. <http://www.iisa-innov.com/iwebcare/>

iWebCare Project. 2006. *D06 - Fraud detection rules applicable to the health care domain*. <http://www.iisa-innov.com/iwebcare/>

Regulation of Investigatory Powers Act 2000. <http://www.opsi.gov.uk/acts/acts2000/20000023.htm>

TERREGOV: Impact of eGovernment on Territorial Government Services. Project IST-507749. 17 May 2005. *D5.1 Requirements and Preliminary Mock-ups (V3): The AS IS Analysis*

CRITICAL EVENT REPORT

INSTRUCTIONS:

Who is this report for? For those members of the team from RBH, TSAY and Agilis who will be dealing with technical issues/problems ('critical events') encountered either when setting up access to the iWebCare platform at pilot sites or those reported by users when they are piloting the iWebCare platform which have prevented them from using the platform, ie when users not been able to resolve the issue locally. [Note: A similar pro forma report will be included in the Diary to be kept by users in the pilot sites. This will be filled in for critical events encountered by users which do not have to be escalated to one of the project team for resolution.]

When should report be completed? An individual report should be filled in for every event (preferably at the time when the event is dealt with).

Who should complete the form? The first part of the form will be completed by the person to whom the critical event is reported. The rest of the form will be completed either by the same person or by the member of the team who resolves the issue if the event has to be escalated to another member of the team.

Where should the report be sent to: Critical event reports will be sent to carol@jollie.fsworld.co.uk and George.Karagiannis@rbht.nhs.uk (for events relating to pilot activities at RBH) or smarin@tsay.gr (for events relating to pilot activities at TSAY) who will then try to resolve the issue locally and complete the report. If the event/problem cannot be dealt with locally, the report will be sent on to Thomas.Dimakopoulos@agilis-sa.gr for completion and return to the local site (Carol and George at RBH or Stathis at TSAY) so that they can be incorporated into the reports describing the outcome of the pilot.

Name of person who identified critical event		
Name of organisation		
Date on which fault occurred		
Type of fault	<input type="checkbox"/> Navigation (moving around platform between modules) <input type="checkbox"/> Software (eg problems uploading or extracting data) <input type="checkbox"/> System performance (eg very slow or platform crashing) <input type="checkbox"/> Communication (eg problems with accessing platform)	<input type="checkbox"/> Unintelligible output (eg user is able to use platform and view output but does not understand meaning of results) <input type="checkbox"/> Do not know
Name of person to whom fault was reported		
Date on which fault reported		
Name of person who has resolved issue		
Date on which fault resolved		

Input source (what was person reporting the problem trying to do?)		
Description of expected output/outcome of the person reporting the critical event		
Time taken to resolve issue	<input type="checkbox"/> Up to one hour <input type="checkbox"/> 2-4 hours <input type="checkbox"/> 5-7 hours	<input type="checkbox"/> Longer - please specify length of time below:
System function output (what were the problems encountered)		
Please enter details on how problem was resolved: [It may be useful to copy a screenshot of the error message here (if applicable).]		
Other comments (eg if person resolving issue was not the person to whom the event was originally reported, why did the problem have to be escalated and what skills were needed?)		



iWebCare : Integrated Web Services Platform for the Facilitation of Fraud Detection in Health Care

User Diary for Pilot

Name	
Organisation	
Email address	
Telephone number	

INSTRUCTIONS:***Who is this diary for?***

NHS Trust and TSAY users who are piloting the iWebCare platform between June and September

When should diary be completed?

An entry should be completed every time you access the platform. A critical incident report (see Appendix 1) should be filled in every time you encounter a problem when using the platform. You should try to complete the diary as soon as possible after you have accessed the platform (preferably at the same time as using or trying to access the platform). Your contributions in the diary will help us with the report on the pilot we have to submit to the European Commission later in the year and it will also help you when it comes to completing the questionnaire which we will ask you to complete at the end of the pilot.

Where should the diary be sent to:

When you have completed your contribution to the pilot (after approximately 6 hours of use) please send an electronic copy to either:

- carol@jollie.fsworld.co.uk and George.Karagiannis@rbht.nhs.uk if you are piloting the iWebCare platform in the UK. Alternatively you can send a paper copy to Carol Jollie, c/o George Karagiannis, European Projects Office, Research Department, Royal Brompton & Harefield NHS Trust, Research & Development Office, Chelsea Wing, Level 2, Sydney Street, London SW3 6NP
- Stathis Marinis (smarin@tsay.gr) if you are piloting the iWebCare platform for TSAY in Greece.

It is recommended that you also keep a copy for yourself to help you complete a questionnaire which we will send you after you have finished piloting the platform.

What happens if I run out of pages:

Please copy and paste in extra pages if you run out of space. Alternatively you can contact Carol/George or Stathis to get extra pages.

SESSION 1

Date on which you accessed the platform		
Length of time		
What were you using the platform for?	<input type="checkbox"/> Managing user accounts (eg arranging access for users) <input type="checkbox"/> Managing/modifying rules <input type="checkbox"/> Uploading data <input type="checkbox"/> Validating data and producing reports	<input type="checkbox"/> Looking at reports and identifying cases for investigation <input type="checkbox"/> Other: please specify below:
Did you use any rules and if so, how useful were they?		
Comments on how well the platform fits with other processes used by user (eg producing and inputting data, using the data to identify fraud etc)		
Comments on performance of platform		
Comments on whether you identified potential improvements (eg in functionality or useful additional data)		
Other notes		

SESSION 2

Date on which you accessed the platform		
Length of time		
What were you using the platform for?	<input type="checkbox"/> Managing user accounts (eg arranging access for users) <input type="checkbox"/> Managing/modifying rules <input type="checkbox"/> Uploading data <input type="checkbox"/> Validating data and producing reports	<input type="checkbox"/> Looking at reports and identifying cases for investigation <input type="checkbox"/> Other: please specify below:
Did you use any rules and if so, how useful were they?		
Comments on how well the platform fits with other processes used by user (eg producing and inputting data, using the data to identify fraud etc)		
Comments on performance of platform		
Comments on whether you identified potential improvements (eg in functionality or useful additional data)		
Other notes		

SESSION 3

Date on which you accessed the platform			
Times: From		To	
What were you using the platform for?	<input type="checkbox"/> Managing user accounts (eg arranging access for users) <input type="checkbox"/> Managing/modifying rules <input type="checkbox"/> Uploading data <input type="checkbox"/> Validating data and producing reports <input type="checkbox"/> Looking at reports and identifying cases for investigation	<input type="checkbox"/> Other: please specify below:	
Comments on performance of platform			
Comments on whether you identified potential improvements (eg in functionality or useful additional data)			
Other notes			

SESSION 4

Date on which you accessed the platform		
Length of time		
What were you using the platform for?	<input type="checkbox"/> Managing user accounts (eg arranging access for users) <input type="checkbox"/> Managing/modifying rules <input type="checkbox"/> Uploading data <input type="checkbox"/> Validating data and producing reports	<input type="checkbox"/> Looking at reports and identifying cases for investigation <input type="checkbox"/> Other: please specify below:
Did you use any rules and if so, how useful were they?		
Comments on how well the platform fits with other processes used by user (eg producing and inputting data, using the data to identify fraud etc)		
Comments on performance of platform		
Comments on whether you identified potential improvements (eg in functionality or useful additional data)		
Other notes		

SESSION 5

Date on which you accessed the platform		
Length of time		
What were you using the platform for?	<input type="checkbox"/> Managing user accounts (eg arranging access for users) <input type="checkbox"/> Managing/modifying rules <input type="checkbox"/> Uploading data <input type="checkbox"/> Validating data and producing reports	<input type="checkbox"/> Looking at reports and identifying cases for investigation <input type="checkbox"/> Other: please specify below:
Did you use any rules and if so, how useful were they?		
Comments on how well the platform fits with other processes used by user (eg producing and inputting data, using the data to identify fraud etc)		
Comments on performance of platform		
Comments on whether you identified potential improvements (eg in functionality or useful additional data)		
Other notes		

SESSION 6

Date on which you accessed the platform		
Length of time		
What were you using the platform for?	<input type="checkbox"/> Managing user accounts (eg arranging access for users) <input type="checkbox"/> Managing/modifying rules <input type="checkbox"/> Uploading data <input type="checkbox"/> Validating data and producing reports	<input type="checkbox"/> Looking at reports and identifying cases for investigation <input type="checkbox"/> Other: please specify below:
Did you use any rules and if so, how useful were they?		
Comments on how well the platform fits with other processes used by user (eg producing and inputting data, using the data to identify fraud etc)		
Comments on performance of platform		
Comments on whether you identified potential improvements (eg in functionality or useful additional data)		
Other notes		

USER CRITICAL EVENT REPORT

Date on which fault occurred:		
Type of fault:	<input type="checkbox"/> Navigation (moving around platform between modules) <input type="checkbox"/> Software (eg problems uploading or extracting data) <input type="checkbox"/> System performance (eg very slow or platform crashing) <input type="checkbox"/> Communication (eg problems with accessing platform)	<input type="checkbox"/> Unintelligible output (eg user is able to use platform and view output but does not understand meaning of results) <input type="checkbox"/> Do not know
Name of person to whom fault was reported (if appropriate):	<input type="checkbox"/> Carol Jollie, RBHT <input type="checkbox"/> George Karagiannis, RBHT <input type="checkbox"/> Stathis Marin, TSAY <input type="checkbox"/> Other – please specify and include job title and organisation	
Date on which fault reported (if appropriate):		
Date on which fault resolved:		
Input source (what were you trying to do?):		
Description of expected output (what were you expecting to happen?):		
System function output (what problems did you encounter?):		
[It would be useful to copy a screenshot of the error message here (if applicable).]		
Other comments:		

USER CRITICAL EVENT REPORT

Date on which fault occurred:		
Type of fault:	<input type="checkbox"/> Navigation (moving around platform between modules) <input type="checkbox"/> Software (eg problems uploading or extracting data) <input type="checkbox"/> System performance (eg very slow or platform crashing) <input type="checkbox"/> Communication (eg problems with accessing platform)	<input type="checkbox"/> Unintelligible output (eg user is able to use platform and view output but does not understand meaning of results) <input type="checkbox"/> Do not know
Name of person to whom fault was reported (if appropriate):	<input type="checkbox"/> Carol Jollie, RBHT <input type="checkbox"/> George Karagiannis, RBHT <input type="checkbox"/> Stathis Marin, TSAY <input type="checkbox"/> Other – please specify and include job title and organisation	
Date on which fault reported (if appropriate):		
Date on which fault resolved:		
Input source (what were you trying to do?):		
Description of expected output (what were you expecting to happen?):		
System function output (what problems did you encounter?):		
[It would be useful to copy a screenshot of the error message here (if applicable).]		
Other comments:		

USER CRITICAL EVENT REPORT

Date on which fault occurred:		
Type of fault:	<input type="checkbox"/> Navigation (moving around platform between modules) <input type="checkbox"/> Software (eg problems uploading or extracting data) <input type="checkbox"/> System performance (eg very slow or platform crashing) <input type="checkbox"/> Communication (eg problems with accessing platform)	<input type="checkbox"/> Unintelligible output (eg user is able to use platform and view output but does not understand meaning of results) <input type="checkbox"/> Do not know
Name of person to whom fault was reported (if appropriate):	<input type="checkbox"/> Carol Jollie, RBHT <input type="checkbox"/> George Karagiannis, RBHT <input type="checkbox"/> Stathis Marin, TSAY <input type="checkbox"/> Other – please specify and include job title and organisation	
Date on which fault reported (if appropriate):		
Date on which fault resolved:		
Input source (what were you trying to do?):		
Description of expected output (what were you expecting to happen?):		
System function output (what problems did you encounter?):		
[It would be useful to copy a screenshot of the error message here (if applicable).]		
Other comments:		

USER CRITICAL EVENT REPORT

Date on which fault occurred:		
Type of fault:	<input type="checkbox"/> Navigation (moving around platform between modules) <input type="checkbox"/> Software (eg problems uploading or extracting data) <input type="checkbox"/> System performance (eg very slow or platform crashing) <input type="checkbox"/> Communication (eg problems with accessing platform)	<input type="checkbox"/> Unintelligible output (eg user is able to use platform and view output but does not understand meaning of results) <input type="checkbox"/> Do not know
Name of person to whom fault was reported (if appropriate):	<input type="checkbox"/> Carol Jollie, RBHT <input type="checkbox"/> George Karagiannis, RBHT <input type="checkbox"/> Stathis Marin, TSAY <input type="checkbox"/> Other – please specify and include job title and organisation	
Date on which fault reported (if appropriate):		
Date on which fault resolved:		
Input source (what were you trying to do?):		
Description of expected output (what were you expecting to happen?):		
System function output (what problems did you encounter?):		
[It would be useful to copy a screenshot of the error message here (if applicable).]		
Other comments:		

DRAFT IWEBCARE QUESTIONNAIRE

(to be revised during pilot in preparation for circulation in September)

Who is this questionnaire for? For those who will be piloting the iWebCare platform on behalf of RBH and TSAY and other interested parties who are able to make a useful contribution to the overall evaluation of the iWebCare platform

When should questionnaire be completed? At the end of the pilot and no later than September 2008

Who should complete the questionnaire? A circulation list will be drawn up by RBH and TSAY

Where should the report be sent to: Copies of all completed reports should be sent to carol@jollie.fsworld.co.uk, George.Karagiannis@rbht.nhs.uk for RBH and smarinos@tsay.gr for TSAY so that they can be incorporated into the reports describing the outcome of the pilot.

Please note: This questionnaire incorporates some of the questions used in the WAMMI questionnaire⁹ used to capture users' personal views on a website's ease of use.

1. General information on person completing questionnaire

Organization Name:	
Department:	
Describe your role:	
Are you involved in fraud detection/prevention and if so, describe your role:	
Do you use other on-line services? If yes, please name the most important.	

2. General feedback on using platform

Statement	Strongly Agree				Strongly Disagree
	1	2	3	4	5
Overall comments					
The iWebCare has much that is of interest to me					
I like using this web site					
I feel efficient when I'm using this web site					
It is difficult to tell if this web site has what I want					

⁹ <http://www.wammi.com/questionnaire.html>

Statement	Strongly Agree				Strongly Disagree
	1	2	3	4	5
Using this web site is a waste of time					
Navigation					
Learning to find my way around this web site is a problem					
It is relatively easy to move from one part of a task to another					
I can quickly find what I want on this web site					
This web site seems logical to me					
I get what I expect when I click on things on this web site					
There are too many steps required to get something to work					
Ease of use					
This web site needs more introductory explanations					
This web site helps me find what I am looking for					
I can easily contact the people I want to on this web site					
Remembering where I am on this web site is difficult					
Everything on this web site is easy to understand					
The instructions and prompts are helpful					
Learning to operate this software initially is full of problems					
It takes too long to learn the software commands					
Tasks can be performed in a straightforward manner using this software					
Functionality					
I found it easy to upload data					
I found it easy to apply rules					
I found it easy to manage and modify rules					
The rules were helpful in helping to identify potential fraud					
I found it easy to manage user accounts					
It found it easy to validate data and produce reports					
The reports were well structured and provided the information I required					
The reports were easy to download into other software, eg Excel, in order to reformat the reports and add information as required					
Use of the platform will result in improved data flow and information exchange between internal departments					

Statement	Strongly Agree				Strongly Disagree
	1	2	3	4	5
Use of the platform will result in improved data flow and information exchange with external agencies					
Use of the platform will result in improved inter-agency co-operation					
Use of the platform will result in faster and more efficient operations					
Use of the platform on a regular basis would reduce administrative costs to support current processes and improved effectiveness by automating tasks to deal with large volumes of data which would be difficult to process without the use of such systems					
Presentation					
The pages on this web site are very attractive					
This web site has some annoying features					
The way that system information is presented is clear and understandable					
There is never enough information on the screen when it's needed					
The organisation of the menus or information lists seems quite logical					
Reliability					
The platform has at some time stopped or crashed unexpectedly					
If this software stops, it is not easy to restart it					
Performance					
This web site is too slow					
I would not like to use this software every day					
Training and Helpdesk Support					
I do not find that the help information given on the platform is very useful					
I have to look for assistance most times when I use this software					
If I had a problem, the Helpdesk support team dealt with it promptly and efficiently					

Describe the types of activities which you used the platform for	
How useful was the platform for the purpose you used it for?	

<p>How often would you use this service if it was available to you in the future?</p>														
<p>How much would your service be willing to pay for this service if it was available to you right now?</p>														
<p>Would you recommend this platform to your colleagues? If so, which colleagues?</p>	<p>YES</p>		<p>NO</p>											
<p>What obstacles do you see in using the platform during your everyday work?</p>														
<p>What did you like the most about the platform?</p>														
<p>What did you like the least about the platform?</p>														
<p>What else other features would you have liked the platform to have?</p>														
<p>Was the information provided by the platform:</p>	<table border="1"> <tr> <td data-bbox="758 1310 1043 1350">Very Useful</td> <td data-bbox="1046 1310 1139 1350"></td> </tr> <tr> <td data-bbox="758 1355 1043 1395">Useful</td> <td data-bbox="1046 1355 1139 1395"></td> </tr> <tr> <td data-bbox="758 1400 1043 1440">Relevant</td> <td data-bbox="1046 1400 1139 1440"></td> </tr> <tr> <td data-bbox="758 1444 1043 1485">Somewhat relevant</td> <td data-bbox="1046 1444 1139 1485"></td> </tr> <tr> <td data-bbox="758 1489 1043 1529">Useless</td> <td data-bbox="1046 1489 1139 1529"></td> </tr> </table>				Very Useful		Useful		Relevant		Somewhat relevant		Useless	
Very Useful														
Useful														
Relevant														
Somewhat relevant														
Useless														
<p>Do you have any comments about the rules repository and use of the rules to validate data?</p>														
<p>Did you encounter any issues relating to access and/or security and if so, what were they are how were they resolved?</p>														

<p>What other information would you have liked to see on the platform?</p>				
<p>How does the platform fit with your other business processes (eg with the data you have available or with how to put the outputs into practice)?</p>				
<p>Please tells anything we can do to improve the platform</p>				
<p>What adaptations would be needed if you were to continue to use the platform?</p>				
<p>What additional data would have improved the outputs?</p>				
<p>Did the platform help identify potential fraud and if so: a) what is its estimated value b) do you plan to investigate further</p>	<p>YES</p>	<input type="text"/>	<p>NO</p>	<input type="text"/>
<p>Did the platform help you prioritise potential fraud cases for further investigation? If so, please give further information</p>	<p>YES</p>	<input type="text"/>	<p>NO</p>	<input type="text"/>
<p>What do you see as the potential barriers to implementing the platform on a wider scale and what are the critical success factors?</p>				
<p>Any other comments</p>				