



Public Health
England

Protecting and improving the nation's health

Latent TB Infection (LTBI) testing and treatment national data entry templates

A user guide for general practitioners (GPs), clinical commissioning groups (CCG) and their clinical support centres

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

For queries relating to this document, please contact: ayaan.gedi@phe.gov.uk

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Introduction

The national Latent TB Infection (LTBI) testing and treatment programme is one of ten key actions specified in the NHS England/PHE Collaborative TB Strategy for England, 2015-20 which aims to reduce TB in England. The majority of active TB cases diagnosed in England are a result of reactivation of persons with LTBI. Nearly two thirds of all notified TB cases in England are in non-UK born persons. We expect the systematic identification and treatment of new migrants with LTBI to significantly decrease the incidence of TB in England.

This programme aims to identify new migrants 16 to 35 year olds who recently arrived in England (ie in past five years) from countries with a high incidence of TB. Testing will be carried out in primary care where eligible patients will be identified as they register with their GPs. GPs are expected to offer a blood-based testing, Interferon-gamma Release Assay (IGRA) and to refer those with positive results to secondary TB services.

Purpose

This user guide is intended for use by GPs, clinical commissioning groups (CCGs) and their commissioning support centres. It provides instructions on how to activate or upload bespoke LTBI templates into GP clinical systems. For secondary TB services, there are instructions on how to access and enter data into the PHE web-based form. We expect data to be entered in an accurate and timely manner. Many data variables are already present in GP systems and therefore the new templates only include a limited list of additional variables.

This document also includes the data extraction queries for both EMIS WEB and provides instructions on how data files should be sent to PHH using a secure file exchange system called CyberArk.

This document is correct as of January 2016 however there may be changes to the system alongside ongoing development work.

Overview of the LTBI programme

This section provides an overview of the national LTBI testing and treatment programme.

Who is eligible for testing within the national LTBI testing and treatment programme?

Individuals who were:

- born or spent > 6 months in a high incidence country (≥ 150 per 100,000 or Sub-Saharan Africa. See appendix) and
- entered the UK with the last 5 years and are
- aged 16-35 years and
- have no history of TB (either treated or untreated) and
- have never been tested for LTBI in the UK

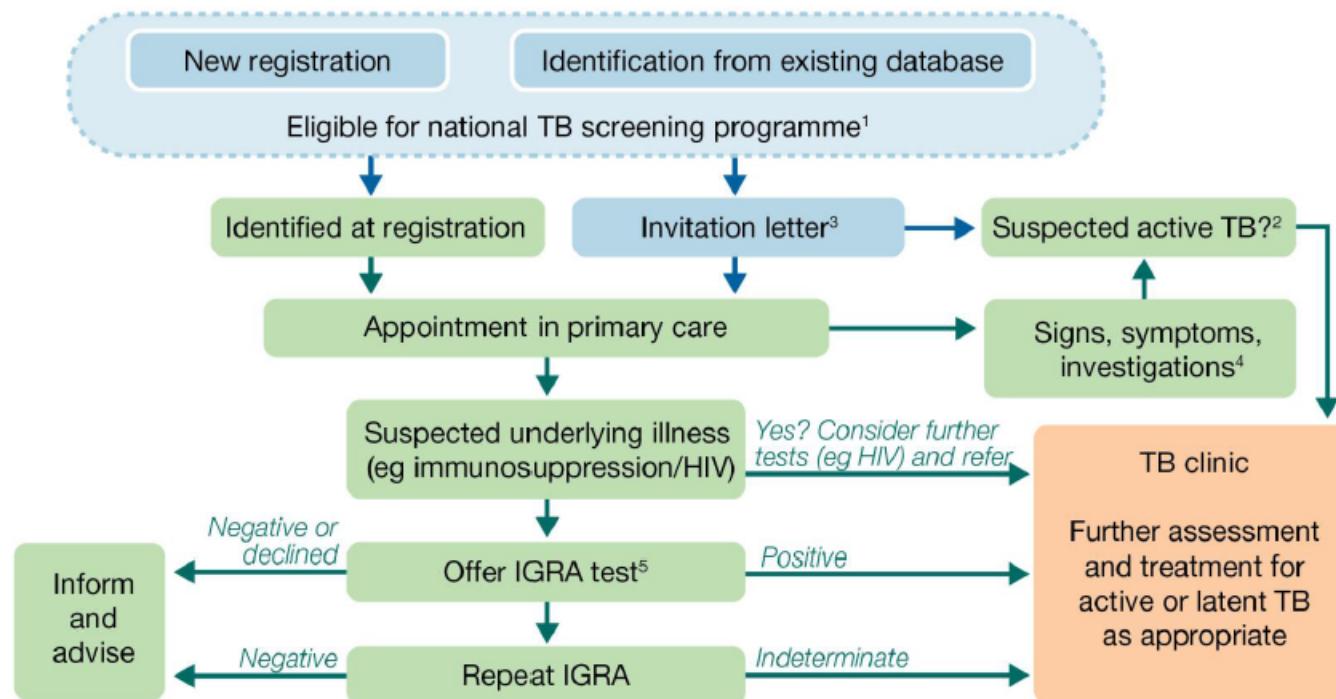
Where will testing occur?

Usually, testing will be conducted the in primary care setting. GP practices will be responsible for identifying eligible new migrants during the new patient registration. In the initial phase of the programme, GPs are encouraged test eligible new migrants prospectively ie when they first register with the practice. Once robust systems are in place for this group, GPs may begin to test eligible patients in their register. A clinical assessment of patients for LTBI should include a brief history and symptom check to rule out active TB. If TB is suspected, patients should immediately be referred to local TB services for further evaluation. Patients without symptoms will be given a form to receive a single blood test for interferon gamma release assay (IGRA). Specific arrangements for laboratory analysis should be performed according to local arrangements.

Where will treatment occur?

Most patients with positive IGRA test should be referred to secondary TB services for further clinic work-up including blood test for liver function and a chest X-ray prior to treatment initiation. The recommended treatment regimen is 3 months rifampicin/isoniazid combination therapy or 6 months isoniazid monotherapy.

Figure 1: Algorithm for LTBI testing and treatment programme



1 Full eligibility criteria a) Born or spent >6 months in high TB incidence country (150 cases per 100,000 or more/Sub-Saharan Africa); b) Entered the UK within the last 5 years (including where entry was via other countries (eg within EU/EEA); c) Aged 16-35 years; d) No history of TB either treated or untreated; e) Never screened for TB in UK. Also review indication for LTBI screening using NICE guidance (eg if outside age group)

2 TB contacts should be referred to the local TB service. TB suggestive symptoms include a) Cough > 3 weeks; b) Haemoptysis (cough with blood); c) Night sweats; d) Unexplained weight loss; e) Unexplained fever; f) Lymph node swelling (especially cervical).

3 The invitation letter advises patients to seek clinical care if they have symptoms of TB

4 The recommended investigations prior to referral will depend on local arrangements, but might include CXR and sputum collection as appropriate NB- colours of the boxes denote location and responsibilities: blue- systematic identification mechanism; Green- Primary Care; Orange- Secondary Care

5 Also offer HIV test according to BHIVA/HPA recommendations and consider hepatitis B/C testing where appropriate

Data flow summary

This section provides an overview of the programme data flows. Data for the national LTBI testing and treatment programme will be collected from GPs and secondary care TB services and sent to PHE for monitoring and evaluation purposes.

GP data collection

GPs are responsible for collecting and entering information on LTBI into their existing GP systems. LTBI data collection templates are now available for EMIS Web and SystmOne users. GPs that do not use EMIS Web or SystmOne should enter patient data using a web-based form prepared by PHE. Details on how to access this form is provided on page 23 of this document. A template for Vision is under development.

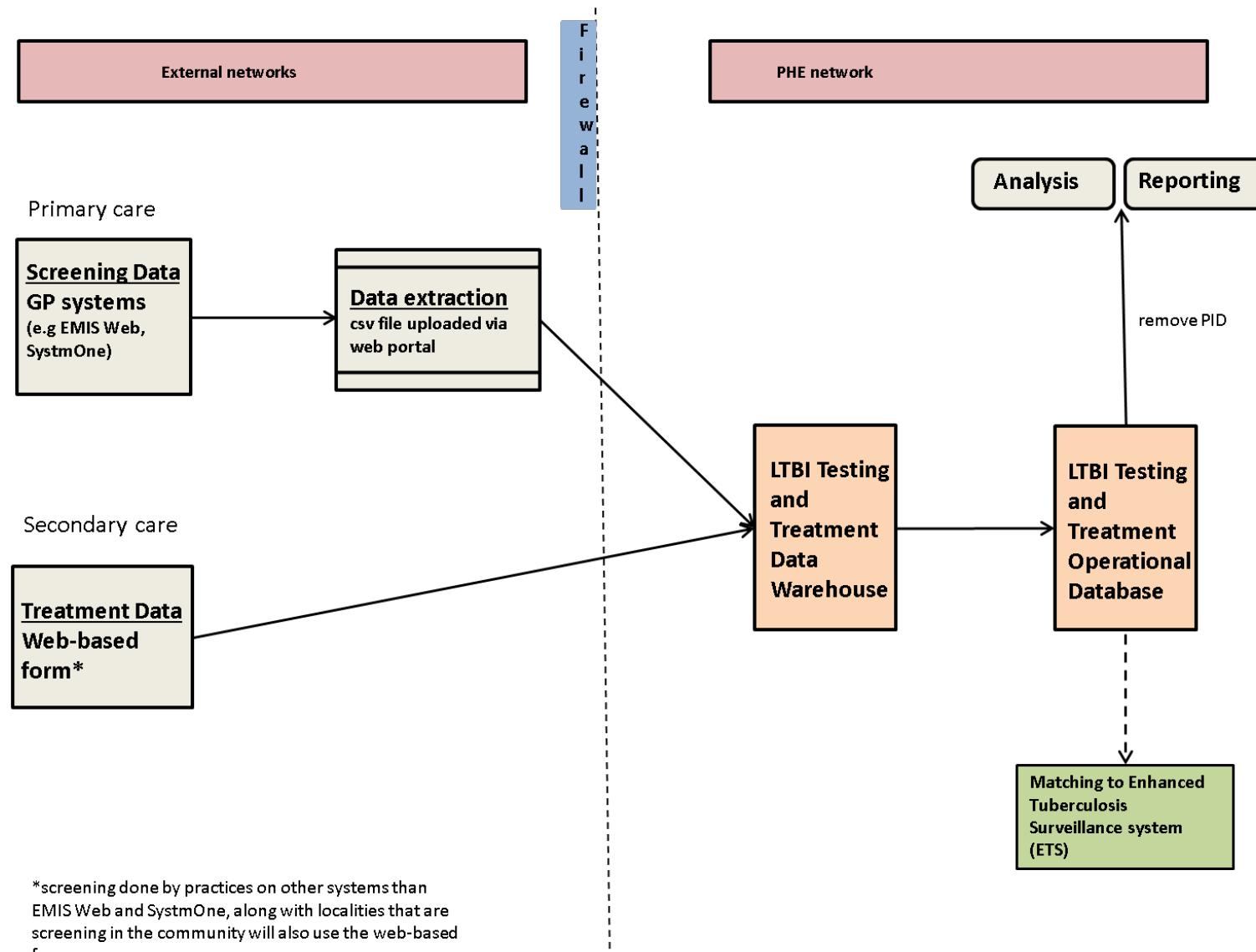
Secondary TB services data collection

Most GPs will refer patients with a positive IGRA test to local secondary TB care services for further medical evaluation and treatment initiation. TB nurses or administrations staff will enter LTBI treatment data into a web-based database prepared by PHE. This data base is currently being developed by our System Development Unit (SDU). In the interim, secondary care TB services should enter information in our temporary web-based form which is available and useable now. Details on this form are on page 23.

Data extraction

GP data will be extracted by locality using their usual commissioning support centres (ie Clinical Commissioning Groups or clinical effectiveness groups). Data extraction queries have been prepared for EMIS Web and SystmOne and are included in this document. All data extraction must include variables included in the LTBI data set. See appendix B for a full list of data variables.

Figure 2: Data flow for national LTB testing and treatment programme



Information Governance

Data flow between parties involved in the LTBI programme is subject to the Data Protection Act and information governance rules. It is lawful and appropriate to move the data in the manner described for in this guide, so long as all stated processes are complied with.

PHE has obtained approval to receive and process confidential patient information without first obtaining patient consent for the LTBI programme under Regulation 3 of The Health Service (Control of Patient Information) Regulations 2002 (as made under Section 60 of the Health and Social Care Act 2001 and amended by Section 251 of the NHS Act 2006). This legislation provides for the common law duty of confidentiality to be set aside to allow confidential patient information collection without patient consent to be processed for purposes related to “communicable disease and other risks to public health”. This approval means that GPs will not be in breach of common law duty of confidentiality when they share the requested LTBI data with PHE. They would of course still be responsible for complying with all other relevant data protection laws.

GPs satisfy ‘fair processing’ by giving patients a copy of the patient information leaflet which tells them how their data will be used. Once patients are aware of this, they can write to the address provided on the leaflet and request their information to be deleted from the LTBI database. This means is that patients can opt to exclude their information from the database. The leaflet can be found at the LTBI guidance website
<https://www.gov.uk/government/publications/latent-tb-infection-ltbi-testing-and-treatment>

How can I get more information about TB?

If you want more information you can contact the following:

Your doctor or nurse
(Free translated information and interpreting services available)

Public Health England-Latent TB Testing and Treatment
<https://www.gov.uk/tuberculosis-screening#latent-tb-infection-ltbi>

The Truth About TB website
<http://www.thetruthabouttb.org/what-is-tb/latent-tb/>

NHS Choices
<http://www.nhs.uk/conditions/tuberculosis/pages/introduction.aspx>

Public Health England
133-155 Waterloo Road
Wellington House
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_UK
Facebook: www.facebook.com/PublicHealthEngland



Latent TB testing and treatment: Information for patients



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EMIS LTBI template

About EMIS Web and the LTBI template

EMIS Web is web-based clinical system which is used by many GP surgeries across the country. EMIS Web is a cloud-based system, meaning GPs connect into the system remotely using issued role based username and passwords. Some of the system features include patient records, appointment details and prescriptions.

The EMIS Web LTBI template was developed by the Clinical Effectiveness Group (CEG), Blizzard Institute in collaboration with Newham CCG and PHE. It is available to all GPs using EMIS Web. CEG has also developed an accompanying template guide which can be found here <http://www.blizard.qmul.ac.uk/ceg-resource-library/emis-web-materials/templates/screening-and-prevention.html>

The screenshot shows the Blizzard Institute website interface. At the top, there's a dark header with the institution's logo and names. Below it is a navigation bar with links for Home, About, Research, Study, Clinical Specialities, Staff, Events, and Contact. A secondary navigation bar shows the current page path: Home > Resource Library > EMIS Web Materials. On the left, a sidebar for the Clinical Effectiveness Group lists links to CEG Home, Resource Library (with sub-links for Clinical Guidance, EMIS Web Materials, and Webcasts/Videos), and other sections like Screening and Prevention Documents and At Risk Childhood Asthma, City & Hackney, Template Guide. The main content area displays several template guides with their titles, icons, and publication details. One specific template, 'Latent TB Screening and Treatment, Newham, Template Guide, CEG (vr5), Dec 2015', is highlighted with a large blue oval.

Blizard Institute

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Home Resource Library EMIS Web Materials

CLINICAL EFFECTIVENESS GROUP

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Clinical Guidance

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Webcasts/Videos

Screening and Prevention Documents

Adult Immunisations, Template guide, CEG (vr2) June 2014
Published on 02 June 2014 • Modified on 19 June 2015

At Risk Childhood Asthma, City & Hackney, Template Guide, CEG (vr3) October 2014
Published on 04 September 2015 • Modified on 08 September 2015

Follow up A+E Unplanned admissions, City and Hackney, Template Guide, CEG (vr2) July 2015
Published on 08 September 2015 • Modified on 24 November 2015

Latent TB Screening and Treatment, Newham, Template Guide, CEG (vr5), Dec 2015
Published on 04 December 2015

How to use the template

The LTBI template is designed to collect data specific to the LTBI testing and treatment programme. It is designed to be embedded into the GP clinical systems and to be used alongside other existing templates ie new patient registration or health check templates. The LTBI template does not collect patient demographic details such as the patient name, date of birth, address and NHS number. These would be available in EMIS through the main patient record.

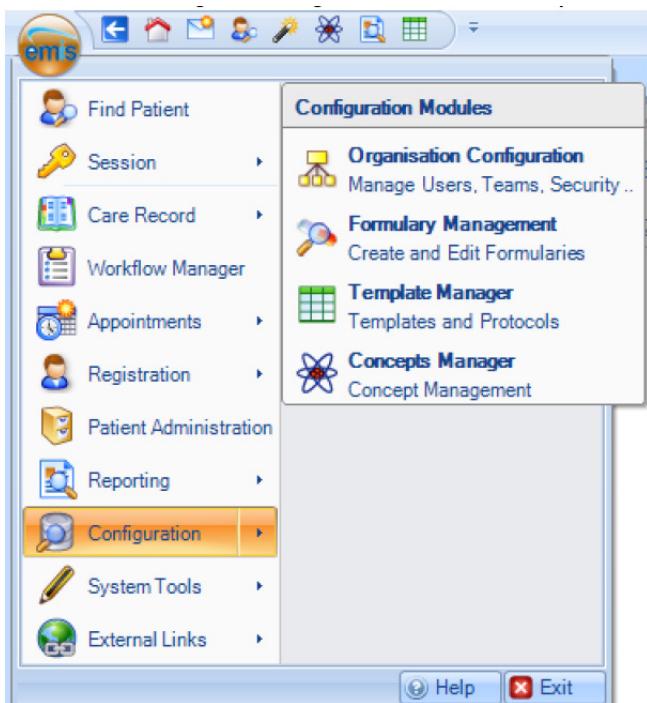
GPs and CCGs are encouraged to work together to meet any training needs for GP clinic staff. All new patients who register with the practice should be assessed for eligibility.

How to activate the EMIS Web LTBI Web Template

To activate the CEG LTBI template in the EMIS Library please follow the instructions below.

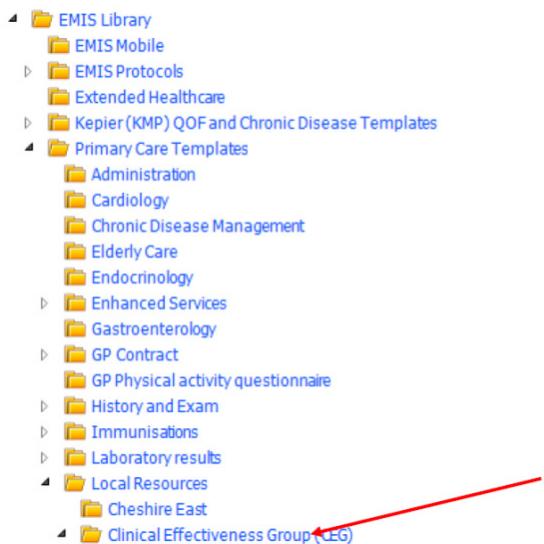
1. From the EMIS start button go to configuration and then the **Template Manager**. If you do not see **Template Manager**, you probably do not have the right user permissions. Please contact your local EMIS Web support team.

You only need to activate the template once. It will then be available for you to use alongside your other routine templates.



If you do not see the **Template Manager**, contact your local EMIS support team

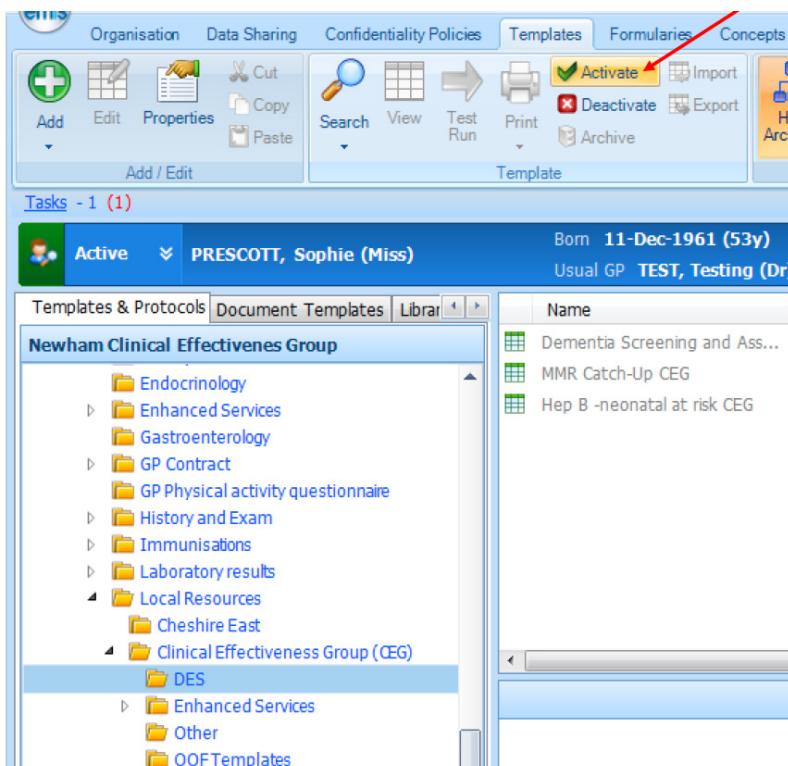
2. Navigate to the Primary Care Templates folder.



3. Open the Local Resources folder

- Open the Clinical Effectiveness Group folder
- Open the Enhanced Services folder
- Open the Newham folder

4. To activate the Newham LTBI template folder select the template name and choose Activate from the menu on top.



Entering data into EMIS Web LTBI template

Once the template is activated existing patient information collected elsewhere in EMIS Web will automatically be populated. You only need to complete the relevant fields. The LTBI template has two main data entry screens:

- Screening Offer
- Assessment and Treatment

Screening Offer

Template Runner

Pages <>

Latent TB Template **Signifies Locality Payment/Quality Indicators

CEG
Clinical Effectiveness Group

Barts and The London School of Medicine and Dentistry

Screening Offer

Newham EPCS payment/quality indicator:

- Country of birth
- Ethnicity
- Date of entry to UK
- IGRA test invitation (or declined)

and for patients with a positive IGRA test result, also:

- Positive IGRA test result (Please use Assessment & Treatment page of this template to record)
- Positive IGRA counselling consultation done

**Country of birth (high risk for TB):
19-Jun-2014 Born in Afgha... »
23-Sep-2014 British or mix... »
05-May-2014 »
14-May-2014 »
No previous entry

**Ethnicity:
Text

**Date of entry to UK:
18-Dec-2014

**Tuberculosis contact:
Text

**IGRA test invitation or decline:
Text

This section collects additional demographics such as country of birth and date of entry to the UK:

- country of birth (this field is also proxy for Country of origin)
 - Option includes only countries that met the criteria of a TB incidence rate of 150/1000 or countries in Sub Sahara Africa
 - Select country if a patient has lived in a high incidence country for more than 6 months
- date of entry to UK
 - The national programme targets new migrants who entered the UK within the last five years. Enter the date period determined by your GP and CCG. This date should be selected and communicated with GP staff before the start of screening
- tuberculosis contact
 - Please indicate if the patient has ever been a contact to an active case (in the UK or else where)
- IGRA test invitation
 - Make at least three attempts to invite eligible patients to take an IGRA test, unless the patient has declined the test. Please indicate how many times a patient has been contacted

Assessment and treatment

- IGRA test result
 - Please enter all IGRA test results here
 - Check with your local IGRA laboratory analysis provider to determine how results will be added into EMIS. Often, most laboratories will send results electronically and patient records will be updated accordingly
 - If a patient has an existing IGRA results it will appear on the top right hand side of the template

Template Runner

Pages <>

Screening Offer

Assessment & Treatment

IGRA Test Result

**IGRA test result: 18-Dec-2014

No previous entry

Once a diagnosis of Latent TB has been made, we would recommend that the diagnostic code '65Y9' (Latent TB) is entered into the medical record.

If patient is sure they have completed a full course of treatment for LTBI or TB, tick the following box, don't offer treatment but still screen for active TB infection.

TB chemotherapy 18-Dec-2014 No previous entry

Pre-Treatment Assessment (to assess if 'high risk' or 'low risk')

This assessment consists of:

- 1) checking symptoms
- 2) considering medication
- 3) entering test results received
- 4) referring for a CXR, FBC and ESR blood tests

**Positive IGRA counselling consultation done No previous entry

Check Symptoms

If any one of the following symptoms has been present for more than 3 wks OR more than one symptom is present:
patient may be 'high risk' for Tb. Please discuss with secondary care.

Cough present? No previous entry

Fever present? No previous entry

Drenching Night sweats No previous entry

Abnormal weight loss No previous entry

Lymphadenopathy present? No previous entry

Include chest examination.

Please indicate any previous treatment of TB here

Previous IGRA records will show up here

- Please note that a patient with an existing IGRA test should not be tested again
- Patients with who have previously been treated for TB should not offered IGRA testing either
- If a patient has a positive IGRA test please indicate whether or not GP consultation has been done

- pre-treatment assessment

- Questions in this subsection include:
 - symptoms
 - laboratory tests
 - chest X-ray (CRX) results
 - adverse reaction to treatment
- Symptom checks should be conducted for all patients being screened
- Where TB is suspected based on clinical signs and symptoms, patients should immediately be referred to secondary TB services for further evaluation and action. This should be done even if IGRA tests have not been performed and/or are negative
- If you receive information from secondary TB services, please make sure any relevant information is updated in the patient records

Latent Tb Screening and Treatment - Camden CCG - Template Runner

MOUSE-TESTPATIENT, Christine -Mickey- (Miss)

Born 01-Jan-1960 (55y) Gender Female EMIS No. 17 Usual GP LING, Karen (Dr)

Template Runner

Pages <>

Assessment & Treatment

IGRA Test Result

**IGRA test result: 25-Nov-2015 20-Nov-2015 Interferon g... [»](#)

Once a diagnosis of Latent TB has been made, we would recommend that the diagnostic code '65Y9' (Latent TB) is entered into the medical record.

If patient is sure they have completed a full course of treatment for LTBI or TB, tick the following box, don't offer treatment but still screen for active TB infection.

TB chemotherapy: 25-Nov-2015 No previous entry

Pre-Treatment Assessment (to assess if 'high risk' or 'low risk')

This assessment consists of:

- 1) checking symptoms
- 2) considering medication
- 3) entering test results received
- 4) referring for a CXR, FBC and ESR blood tests

**Positive IGRA counselling consultation done: No previous entry

Positive IGRA referral to respiratory specialist nurse: 25-Nov-2015 No previous entry

Diabetes: 25-Nov-2015 Text: No previous entry

Any chest damage?: 25-Nov-2015 Text: No previous entry

Any liver damage?: 25-Nov-2015 Text: No previous entry

Current smoker?: 25-Nov-2015 Text: 18-Sep-2015 Current smo... [»](#)

Check Symptoms

- All other laboratory tests performed by the GP should be entered here. These results will automatically populate if they have been entered in other templates

Test Results

Plasma C reactive protein	mg/L	18-Dec-2014	No previous entry
Serum total bilirubin level	umol/L	18-Dec-2014	12-Dec-2013 25 umol/L
ALT/SGPT serum level	IU/L	18-Dec-2014	12-Dec-2013 45 IU/L
Click for lab parameters			
HIV status		18-Dec-2014	No previous entry
Hepatitis B status		18-Dec-2014	No previous entry
Hepatitis C status		18-Dec-2014	No previous entry

Investigations

Patient should be referred for CXR, FBC and ESR.

CXR result	18-Dec-2014	No previous entry	
Erythrocyte sedimentation rate	mm/h	18-Dec-2014	No previous entry

Consider Medication

Adverse reaction to Rifinah 18-Dec-2014 01-Apr-2014

[Click for adverse reactions guidance](#)

Please update patient records when information is received back from TB nurses or the respiratory consultant.

- referral to Secondary TB
 - Please indicate whether a patient with positive IGRA results has been referred for secondary TB services
 - Note treatment in primary care is only being carried out in Newham.
 - All other localities will refer to secondary care
 - Ignore the question on consent to share data with PHE. As a pilot site, this is applicable to Newham only

Referral to Secondary Care

Consider referral to secondary care for the following conditions:

- Hepatitis B
- Hepatitis C
- Heavy alcohol use
- Malnutrition or albumin below 25
- Cirrhosis or any other chronic liver disease
- Pregnancy
- Immunosuppression

If abnormal blood results, repeat after 2 weeks. If remain abnormal, discuss with secondary care.

For secondary care advice, email: Heinke.Kunst@nhs.net (If including patient identifiable data, must email from an 'nhs.net' account.)

Referral to secondary care

Text

Treatment Protocol

GP to issue 3x 1-month prescriptions, dated 1-month apart, of:
Rifinah 150 3 tablets od if less than 50kg
or Rifinah 300 2 tablets od if more than 50kg
and Pyridoxine 25mg 1 tablet od
and send by electronic prescribing.

[Click for drug interactions guidance](#)

Consent

Verbal consent obtained for treatment

Consent given to share patient data with specified 3rd party

Text Pharmacy: 04-Jul-2014

Ignore question on consent. This is applicable ONLY to Newham CCG

SystmOne (TPPS) LTBI template

About SystmOne

SystmOne GP is an electronic medical system used by many GPs across the country and some secondary care services. Similar to EMIS Web, SystmOne is web-based and allows patient records to be accessible to health care staff via the internet. SystmOne offers a variety of functionality including appointments, document management and reports for commissioning and monitoring. The SystmOne Latent TB Screening template was developed by colleagues at Hounslow CCG in collaboration with PHE. A template guide is currently being developed will be available soon. Please check the PHE LTBI guidance web-pages for updates.

How to install the SystmOne LTBI template

Similar to the EMIS Web template, this LTBI template is designed to be embedded into the GP clinical systems and to be used alongside other existing templates. CCGs can assist with the installation of the template.

The SystmOne LTBI Screening template is not available system wide. It needs to be installed manually at each GP practice. The template can only be loaded by someone with system administrator rights. However it only needs installing once.

1. Email tbscreening@phe.gov.uk to request the SystmOne LTBI templates.
2. PHE will send you two **xml** files which look like below.



3. Save both files on to your computer.
4. Open SystmOne, ensuring that you are logged in as a user with **Template Manager Access** rights.
 - a. Click on "**Setup**" then click on -> "**Data Entry**" ->
 - a. Select "**New Template Maintenance**" menu
5. Choose an appropriate subfolder in your template tree.
6. On the Menu bar choose the "**Import Templates**" button.
7. Browse to the location where you saved the attachment in step 1 and choose "**Open**".

8. Your new template '**Latent TB screening**' should appear in the tree.
9. Go into "**Unpublished templates**" at the bottom of your tree.
10. Find the imported template, right click on it and choose "**Publish**" and locally publish the template ready for use.
11. Please contact your local CCG local CCG SystmOne service provider if you are unable to upload the template using these instructions.

Entering data into the template

The SystmOne LTBI template consists of four tabs:

- demographics and administration
- pre-test symptom screen and requests
- result/Counselling and referral
- treatment

Demographic and administration

This page collects information on country of birth, ethnicity, date of entry into the UK and risk factors for TB, as shown below:

- country of birth
 - Options on the list are not limited to countries with a TB incidence of 150/100,000. Please check the eligible countries of birth in Appendix A
 - The template allows for multiple entries for persons who may have lived in a high TB incidence country for more than six months in the past five years
- ethnicity
 - The options that appear here correspond to codes collected as part of QOF indicators
- risk factors
 - Includes drug and alcohol misuse, smoking, housing, and prison. Some of these variables also correspond to QOF indicators
 - Existing entries for risk factors ie alcohol misuse will automatically populate here once the template is uploaded and published

Click here to view recordings from other templates

To view recordings from other templates, check the box '**See recordings from other templates**' at the bottom of the page.

Latent TB screening

Demographics & administration | Pre-test symptom screen & requests | Result / counselling / referral | Treatment

Birth country and any other countries of residence for longer than six months in the last five years.

23 Sep 2015... Born in Burundi (XaG34)	Country of birth R X
23 Sep 2015... Afghanistan (Ua075)	2nd country R X
23 Sep 2015... Tanzania (Ua067)	3rd country R X
23 Sep 2015... India (Ua078)	4th country R X
23 Sep 2015... England (Ua089)	5th country R X

12 Feb 2015... Date of entry to United Kingdom (XaZst) **Date of entry to UK**

24 Jan 2013... British or mixed British - ethnic cat... **Ethnicity** **R X**

Tuberculosis risk - factors, exposure, vaccination.

Drug / alcohol misuse

21 Sep 2006... Alcohol intake (136.)	Intravenous drug user (if ever) <input type="checkbox"/>
22 May 2008... Misuses drugs (Ub0mt)	Alcohol abuse <input type="checkbox"/>
27 Jan 2012... Alcohol intake within recommended sen...	Smoking status <input type="checkbox"/>
03 Jul 2013... Alcohol intake (136.) 30 Units/...	Ever homeless (1st date) <input type="checkbox"/>
23 Sep 2015... Intravenous drug user (Ub0nA)	Last housed > 1 year <input type="checkbox"/>

Smoking status

23 Sep 2015... Ex-smoker (Ub1na)

Housing

06 Jul 2015... Lives in residential hostel (XE0p2)

Prison record?

Latent TB screening administration.

23 Sep 2015... Latent tuberculosis screening invitatio... **Screening invited / declined**

New Letter

Show recordings from other templates
 Show empty recordings

Event Details | Information | Print | Suspend | Ok | Cancel | Next Page >>

Pre-test symptom screen and requests

Information collected includes:

- symptoms
 - The national LTBI guidelines indicate patients being screened for TB should be asked brief questions on symptoms to rule out active disease.
The template collects information on
 - Cough
 - Fever
 - Night sweats
 - Abnormal weight loss
 - If any previous recording of symptoms exists in EMIS it will show up on the right hand side of the template
- tests relevant to TB risk
 - This includes tests for co-infections such as Hepatitis B and Hepatitis C, and HIV
 - The template collects information on whether a test was offered, done or declined
 - Results of tests cannot be viewed in this template

Active TB symptom screen. Capture this at point of test request. Ask GP if any symptom >3 weeks or more than one present.

Cough present?

Fever present?

Night sweats (drenching)

Abnormal weight loss

Blood borne viruses relevant to Latent TB risk and consequence if test positive.

HIV
23 Sep 2015... HIV screening test (Xalon)

Hepatitis B
23 Sep 2015... Hepatitis B screening declined (XaLND)

Hepatitis C
24 Sep 2015... Hepatitis C screening (XaJh4)

HIV Screening

Hep B Screening

Hep C Screening

New Electronic Pathology/Radiology Request

Public health - HIV testing for new registrants.

Cough present?

Date Selection ...

24 Feb 2014 Cough (XE0qn)
24 Feb 2014 Cough (XE0qn)
24 Feb 2014 Cough (XE0qn)
23 Sep 2015
24 Sep 2015

Show recordings from other templates

Show empty recordings

Laboratory tests results are not displayed in the template.
To view these please go to the relevant templates

Result, counselling and referral

Information collected includes:

- IGRA results
 - Enter all IGRA results in this page including whether or not a GP counselling has been performed
 - If the result is positive please enter a diagnosis of Inactive tuberculosis in the template
- chest X-ray (CXR)
 - Select the appropriate CRX result code
 - A chest-x-ray should be performed on patients with a positive result to rule out active TB disease

Latent TB screening

Demographics & administration | Pre-test symptom screen & requests | Result / counselling / referral | Treatment

Latent TB screening result

IGRA result: [dropdown menu]

Investigation result counselling:

Inactive tuberculosis:

If result positive, counsel patient, code latent TB as inactive, examine further, arrange CXR to exclude active TB, and arrange further bloods to prepare for treatment.

Further examination required if positive

Lymphadenopathy?

O/E - chest examination normal

O/E: BCG scar present

Further tests to exclude active TB / prepare for treatment. - Areas will vary whether requested by GP or hospital.

HIV: 23 Sep 2015... HIV screening test (Xalon)

Hepatitis B: 23 Sep 2015... Hepatitis B screening declined (XaLND...)

Hepatitis C: 24 Sep 2015... Hepatitis C screening (XaJh4)

Separately code CXR results with codes below.

Tuberculosis screening chest X-ray normal

CXR abnormal (use if abnormality related to TB)

CXR abnormal (use if abnormal but not TB)

Refer urgently if active TB, or for treatment unless locally agreed model is in primary care.

Referral to respiratory team:

IGRA result

Date Selection ...

23 Sep 2015
24 Sep 2015

Show recordings from other templates
 Show empty recordings

<<< Previous Page Next Page >>>

Event Details | Information | Print | Suspend | Ok | Cancel

Click here to open the referral wizard

Treatment

This collects information on the below:

- treatment initiation
 - Treatment start date and end dates are not collected in this template. This because the template was designed for screening and testing only
 - If you receive information on medications prescribed to patient, please update the patient records in the appropriate template
 - Please indicate if a patient develops an adverse reaction to any of the recommended treatment regimens. This information is available from the secondary TB service which is conducting the follow up visits

The screenshot shows a software window titled "Latent TB screening". The "Treatment" tab is selected. On the left, there's a list of conditions for secondary care referral if usually treated in community: Hepatitis B, Hepatitis C, Heavy alcohol use, Malnutrition or albumin below 25, Cirrhosis or any other chronic liver disease, Pregnancy, and Immunosuppression. Below this is a note about repeating results if abnormal. In the center, there's a "Referral to respiratory team" section with a dropdown menu and a "Referral Wizard" button. To the right, a "Referral to respiratory team" panel shows dates: 23 Sep 2015 and 24 Sep 2015. At the bottom, there are sections for "New Acute" and "Informed consent given for treatment", each with two checkboxes. A red arrow points from the text below to the "Informed consent given for treatment" section.

If a patient has an adverse reaction to Rofnah (combination of Rifampicin and Isoniazid) please **select both** boxes for isoniazid and rifampicin

Users without EMIS Web or SystmOne access

PHE is currently developing a web-based data entry tool which will be used for both testing and treating new migrant populations. This tool will also be available to GPs that are not using EMIS Web or SystmOne clinical systems. This new web-form system will be available soon. In the interim, a temporary web-based tool has been developed by PHE for immediate use. Data submitted through this form is secure. Secondary care providers do not have to send PHE additional file submissions (unless requested).

Temporary web-form

This temporary form was developed by PHE using a web-based application.

1. To access to the web-form simply click on the link provided below.
 - a. <https://surveys.phe.org.uk/TakeSurvey.aspx?SurveyID=latentTBscreening>
 - b. Save the URL on to your favourites or a place where you can access it easily
2. User logins and passwords are not required. Anyone who has access to the link can enter data on patients.
3. Only one entry at a time can be made.
4. The form has five main tabs:
 - a. Patient Information
 - b. Primary care latent TB health check
 - c. IGRA test result
 - d. Positive IGRA work up
 - e. LTBI treatment
5. The form questions include:
 - a. Single select drop downs
 - b. Multiple choice checkboxes
 - c. Open ended entry (or comment sections)
6. All required values are denoted with an astrix (*).

Entering data into the web-form

Please make sure you have all relevant information before starting the data entry process. All required fields on the first page will need to be populated before you can move on to the next pages. You can navigate back and forth either using the tabs or the navigation buttons at the bottom of the page. Only one record at a time can be entered.

This form should only be used for new migrants who meet the screening eligibility criteria. You will only have to complete relevant information. All entered information comes to PHE automatically. No data extraction function is required.

Patient Information

- Required information includes:
 - NHS number
 - Patient name
 - Date of birth
 - Gender
 - Year of entry to UK

PHE will use this information to merge with patient records received by GPs.

Click on the tabs to navigate between tabs or the navigation buttons provided below.

Latent TB Testing and Treatment

Patient information | Primary Care Latent TB Health Check | IGRA test result | Positive IGRA work-up | LTBI treatment

Page 1 of 5

Patient information

1. GP practice national code OR GP practice name
2. Patient's NHS number (no spaces)*
3. Patient's name*
surname _____
forename _____
4. Date of Birth*
5. Gender*
Female
6. Patient's post code
PI6 5TE
7. Eligible Country of Birth
Guinea
8. Year of entry to the UK The value must be between 2009 and 2015, inclusive.
2009
9. Is the patient present for screening or treatment?
 Treatment
 Screening

Next

Only if GP practice is entering information

Treatment Please check here if the patient has been referred to you for treatment only.

Primary care latent TB health check

This tab collects information on testing invitation, co-morbidities and/or risk factors.
Enter all relevant information thoroughly.

If you are performing a symptom assessment check all fields that apply.

Page 2 of 5

Primary Care Latent TB Health Check
To be performed by a practice Nurse or GP. If patient has symptoms suggestive of TB refer to local TB clinic.

10. IGRA test invitation accepted or declined?
-- None --

11. Date IGRA test accepted or declined
13/1/2016

12. Does the patient have any of the following co-morbidities?
Please select all that apply

immunosuppressive other existing chest condition (COPD, Asthma)
 blood-borne illness
 chronic liver disease
 chronic renal disease
 current smoker
 diabetes
 immunosuppressive therapy
 immunosuppression from any disease
 Other, please specify

13. Does the patient have any history or present experience with relevant social risk factors?
Please select all that apply

Homelessness
 Drug misuse
 Alcohol misuse
 Prison
 Other, please specify

14. Has the patient had a BCG vaccination?
 Yes No

15. Perform symptom check to rule out active TB (if patient has any symptom suggestive of TB, refer to local TB clinic)

16. Cough present
 Yes No

17. Fever Present
 Yes No

18. Drenching night sweats
 Yes No

19. Unexplained Weight Loss
 Yes No

20. Swollen neck glands present
 Yes No

If response is 'Yes' additional questions on symptoms will appear. Please check all that apply

Latent TB Testing and Treatment

Patient information | Primary Care Latent TB Health Check | **IGRA test result** | Positive IGRA work-up | LTBI treatment

Page 3 of 5

IGRA test result

21. Type of IGRA test used
— None —

22. IGRA test result
If IGRA test inconclusive, re-test.
— None —

23. Date patient was informed of IGRA test result
 

24. Date patient with positive IGRA was referred to local TB clinic
 

Back **Next**

IGRA test results

IGRA tests results will have to be entered manually. Results may have been performed by the GP. Please ask the patient for their referral letter or follow up on results with the GP. Do not repeat IGRA results.

For all other work-up blood tests, please enter all tests performed by your clinic.

Patient information | Primary Care Latent TB Health Check | IGRA test result | Positive IGRA work-up | LTBI treatment

Page 4 of 5

Positive IGRA work-up
These tests are to be done after the patient has a positive IGRA result, and should be entered where information is available.

25. Chest X-Ray Result
Chest X-Ray Abnormal-TB related ▾

26. Work-up blood tests done?
Yes ▾ 

27. Plasma C Reactive Protein Test Result
-- None -- ▾

28. Serum total bilirubin level Test result
-- None -- ▾

29. ALT/ SGPT serum level Test result
-- None -- ▾

30. HIV test done?
 Yes No

31. HIV status
-- None -- ▾

32. Hepatitis B status
-- None -- ▾

33. Hepatitis C status
-- None -- ▾

If response is 'Yes' these additional questions will appear

Back **Next**

LTBI treatment

There are two questions relating to treatment initiation. Please enter responses for both:

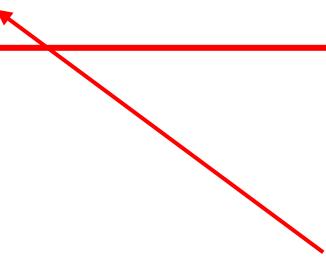
- what regimen was prescribed?
- was treatment started?

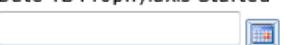
Patient information | Primary Care Latent TB Health Check | IGRA test result | Positive IGRA work-up | LTBI
treatment

Page 5 of 5

LTBI treatment

34. TB Prophylaxis regimen prescribed
6 months of Rifampicin ▼

35. TB Prophylaxis started
LTBI treatment commenced ▼ 

36. Date TB Prophylaxis Started 

37. TB Prophylaxis completed
- None -

38. Date Prophylaxis completed 

If LTBI treatment is started these additional questions will appear below

Back **Done**

Data submission

Required data returns

Timely data submission is a contractual requirement within the LTBI testing and treatment programme. Data is also essential for monitoring and evaluation of the programme and will form part of the information requirements for implementation of the TB Strategy. The LTBI minimum data set has 48 variables including personally identifiable data (PIDs). Please see appendix B for the full list.

Data extraction queries

The data extraction report queries will help CCGs and their clinical support centres to extract data from the back end of EMIS Web and SystmOne. The reports have been prepared by colleagues at the CEG Blizzard Institute and CWHHE Collaborative is the working partnership between Central London, West London, Hammersmith and Fulham, and Hounslow and Ealing clinical commissioning groups.

These queries should be used to extract data from the backend of the GPs' systems.

Please send a request to tbscreening@phe.gov.uk to get a copy of **EMIS** and **SystemOne** report queries.

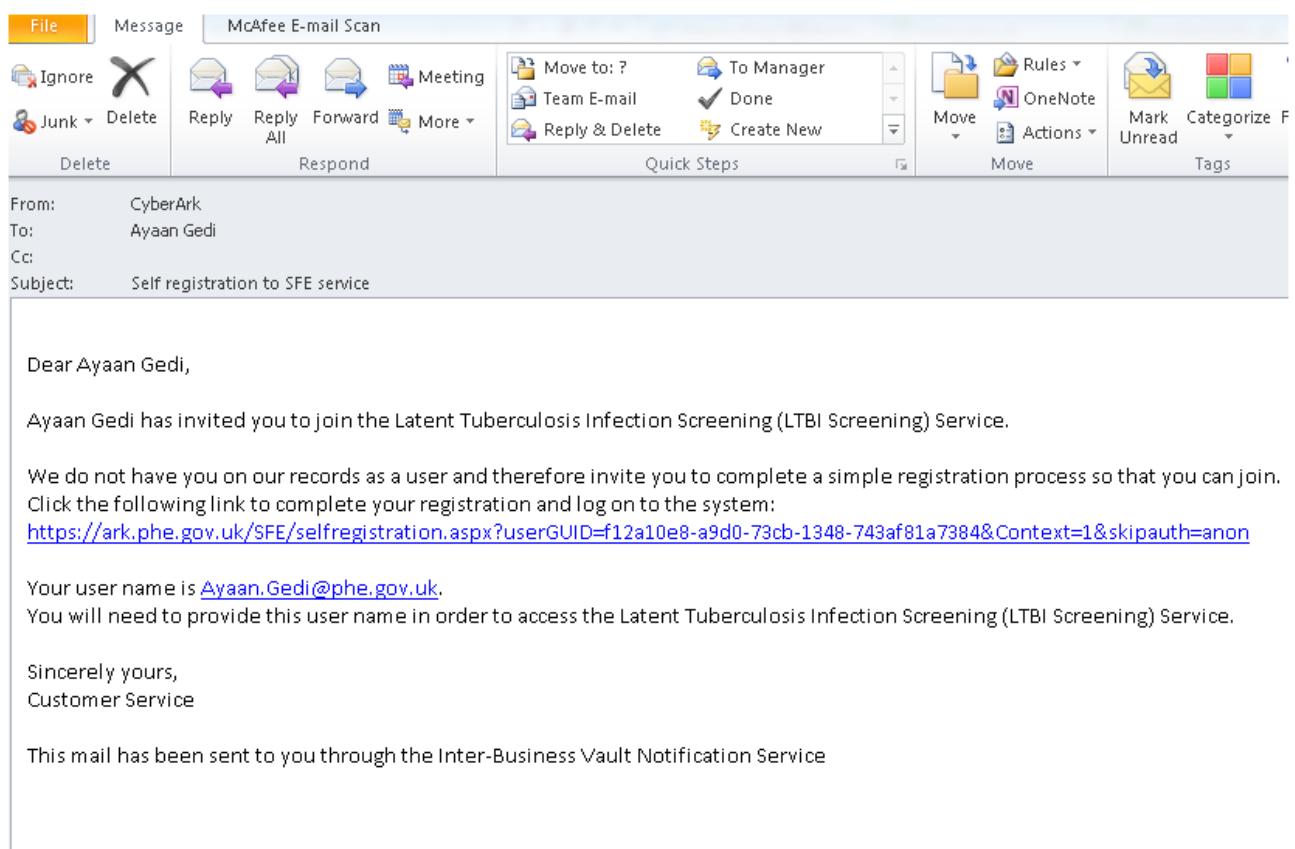
How to submit data to PHE using CyberArk®

Data for the LTBI programme should be submitted securely to PHE using CyberArk® which is a document exchange system that allows for the transfer of data between organisations. The Secure File Exchange (SFE) end user web access interface of this system enables end-users to transfer new files to PHE. All persons responsible for submitting data to PHE will receive an email invitation from CyberArk® to self-register and create a user login and password.

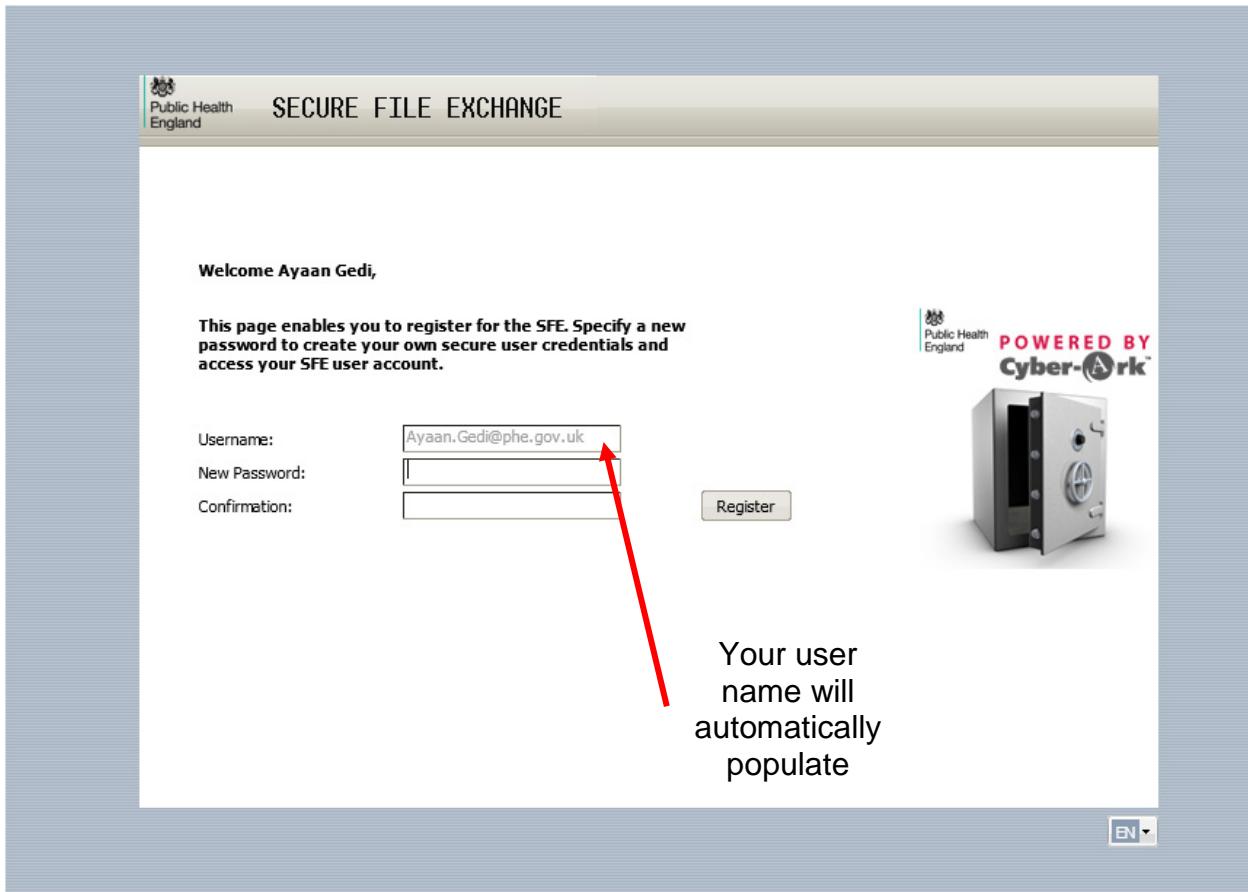
If you need to submit data to PHE and have not yet received an email invitation from CyberArk®, please contact tbscreening@phe.gov.

Registering with CyberArk®

1. You will receive an email invitation from CyberArk asking you to register.
2. Click on the link provided within the email.
3. Your username will be the email details you provided PHE. It will be displayed in the email message. You will need to provide this user name to access the latent tuberculosis infection screening (LTBI screening) service.
4. Please do not wait more than 1 day to respond to the invitation as it is set to expire after 2 days.



5. The secure file exchange (SFE) registration page will open.
6. Enter your '**User name**'.
7. Enter your '**New password**'. Must contain 6 mix use characters ie Test123.
8. **Confirm** your password.
9. Click '**Register**' to complete the process.



Sending data files using CyberArk®

The main SFE page is divided into two sections:

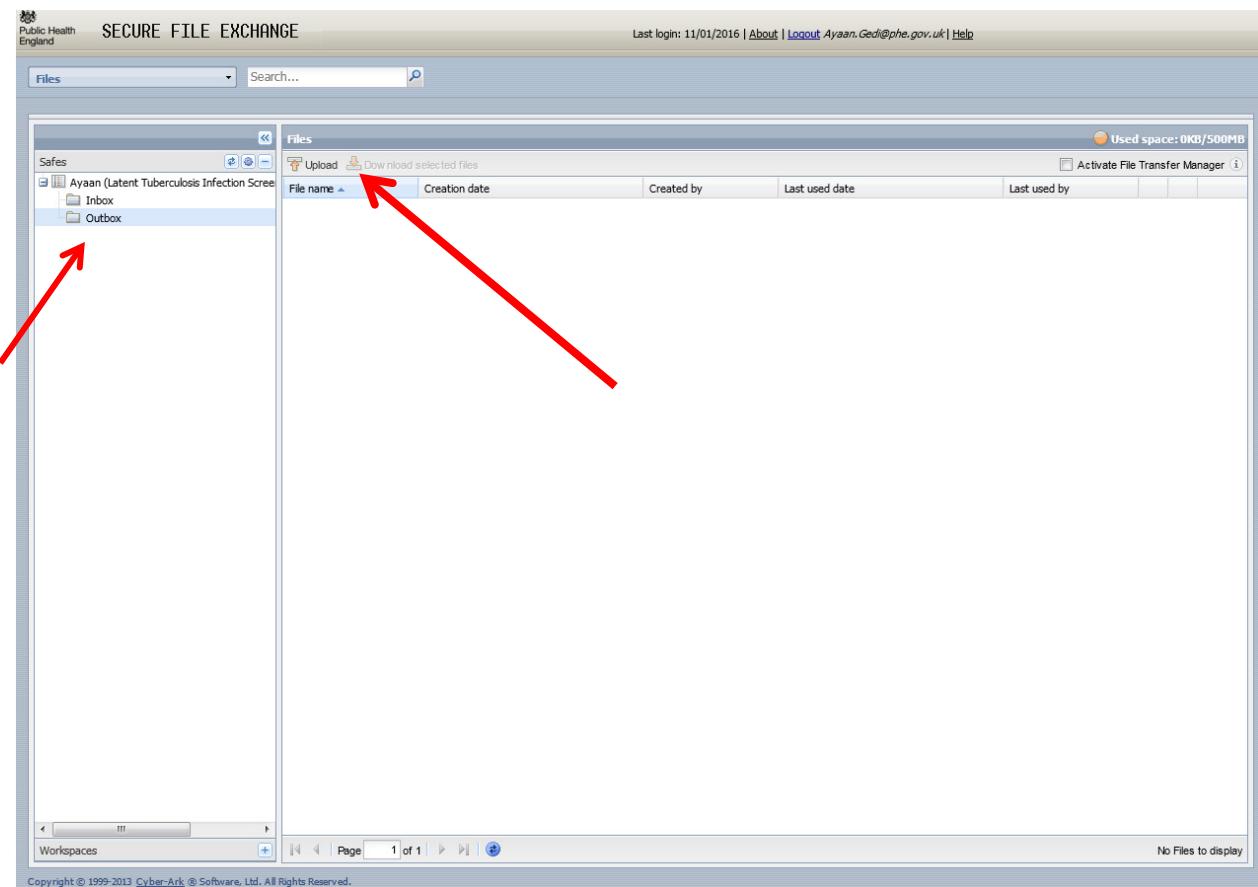
- the Workspaces/Safes, which displays the folders you have access to
- the Files grid, which displays the files you can access and a summary of details for each file. Depending on your SFE configuration, you will be able to see either or both panels

You will only be able to see your own files.

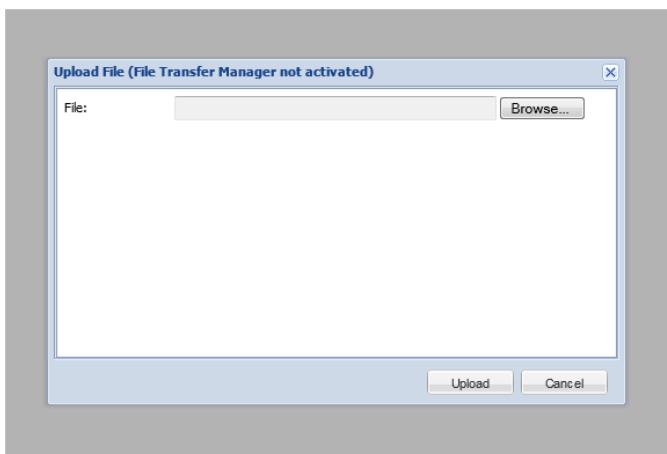
The screenshot shows the 'SECURE FILE EXCHANGE' interface. At the top, there's a menu bar with 'File', 'Edit', 'View', 'Favorites', 'Tools', and 'Help'. Below the menu is a header with the Public Health England logo, the title 'SECURE FILE EXCHANGE', and a login message 'Last login: 11/01/2016 | About | Logout | PHE | Help'. The main area is divided into two sections: 'Workspaces/Safes' on the left and 'Files' on the right. The 'Workspaces/Safes' section contains a tree view with a single entry: 'Martin Sharp (Latent Tuberculosis Infection)' which has 'Inbox' and 'Outbox' as children. The 'Files' section contains a table with columns: 'File name', 'Creation date', 'Created by', 'Last used date', and 'Last used by'. A tooltip 'Used space: 0KB/500MB' is visible above the 'Files' section. A double-headed arrow below the 'Workspaces/Safes' section points to the left, and another double-headed arrow below the 'Files' section points to the right.

To upload a file

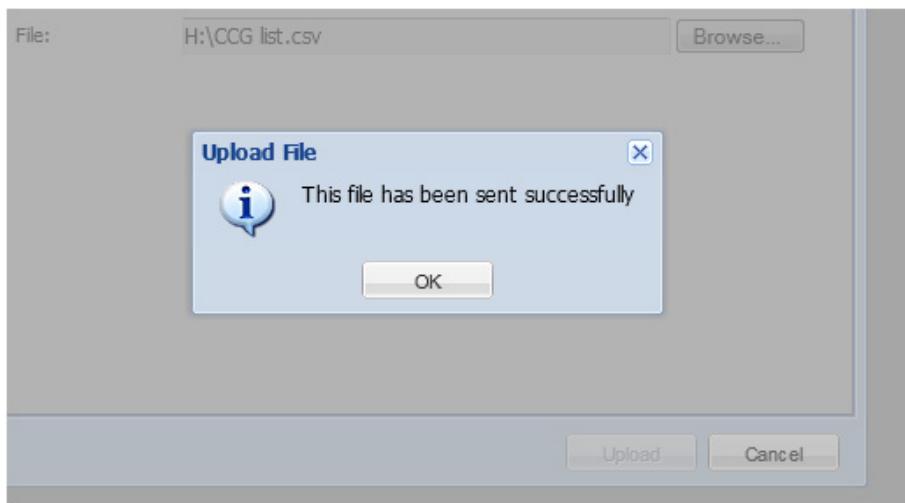
1. Go to your Workspaces panel.
2. Click on 'Outbox'.
3. Click on **Upload**.



4. Browse for your file then click '**Upload**' to complete the process.



5. Please make sure all files are saved in Comma Separated Values (cvs) format.
6. Files should be named according to the following convention:
LTBI_LLLLL_PN_YYYY.csv where:
 - LTBI is fixed
 - LLLLL is a CSU code (to be agreed with LTBI team)
 - PN is the reporting period P1, P2
 - YYYY is the reporting year (eg 2015)
 - The filename is not case sensitive
7. The screen below should appear once your files are sent.



Appendix A: List of eligible countries

Appendix A: Countries of origin eligible for LTBI testing and treatment

(Estimated TB incidence rate ≥150 per 100,000 population in 2013 or Sub-Saharan Africa) (6)

Country	Incidence	Country	Incidence
Afghanistan	189	Liberia	308
Angola	320	Madagascar	233
Bangladesh	224	Malawi	156
Benin	70	Mali	60
Bhutan	169	Marshall Islands	354
Botswana	414	Mauritania	115
Burkina Faso	54	Mauritius	21
Burundi	128	Micronesia	188
Cote d'Ivoire	170	Mongolia	181
Cabo Verde	143	Mozambique	552
Cambodia	400	Myanmar	373
Cameroon	235	Namibia	651
Central African Republic	359	Nepal	156
Chad	151	Niger	102
Comoros	34	Nigeria	338
Congo	382	Pakistan	275
DRP Korea	429	Papua New Guinea	347
DR Congo	326	Philippines	292
Djibouti	619	Republic of Moldova	159
Equatorial Guinea	144	Rwanda	69
Eritrea	92	Sao Tome and Principe	91
Ethiopia	224	Senegal	136
Gabon	423	Seychelles	30
Gambia	173	Sierra Leone	313
Ghana	66	Somalia	285
Greenland	194	South Africa	860
Guinea	177	South Sudan	146
Guinea-Bissau	387	Swaziland	1382
Haiti	206	Timor-Leste	498
India	171	Togo	73
Indonesia	183	Tuvalu	228
Kenya	268	Uganda	166
Kiribati	497	Tanzania	164
Laos PDR	197	Zambia	410
Lesotho	916	Zimbabwe	552

Appendix B: LTBI variable list

ID	variable name	Format or output
1	GP practice national code	Alpha-numeric
2	Patient's NHS number	Alpha numeric
3	Patient's surname	Text
4	Patient's forename	Text
5	Gender	Male/ Female
6	Full Postcode	Alpha-numeric
7	Date of Birth	mm/yyyy
8	Country of birth	Code description and Read code term
9	Ethnicity	Code description and Read code term
10	Date of entry to UK	dd/mm/yyyy
11	IGRA test- 1st invitation	Code description, Read code term and date
12	IGRA test- 2nd invitation	Code description, Read code term and date
13	IGRA test- 3rd invitation	Code description, Read code term and date
14	IGRA test declined	Code description, Read code term and date
15	IGRA test result +ve	Code description, Read code term and date
16	IGRA test result -ve	Code description, Read code term and date
17	Positive IGRA counselling consultation	Code description, Read code term and date
18	Positive IGRA referral to respiratory specialist nurse	Code description and Read code term
19	TB chemotherapy regimen prescribed	
20		3 months of Isoniazid and Rifinah
21		6 months Isoniazid
22	TB chemotherapy started	Code description, Read code term and date
23	TB chemotherapy refused by patient	Code description , Read code term & date
24	TB chemotherapy completed	Code description , Read code term & date
25	Adverse reaction to LTBI treatment	Code description , Read code term , date & associated freetext describing reaction
26	Date chemotherapy completed	Code description , Read code term & date
27	Adverse reaction to rifnah	Code description , Read code term , date & associated freetext describing reaction
28	Adverse reaction to isoniazid	Code description , Read code term , date & associated freetext describing reaction

29	Side effects specifics	Prescribing module and associated text as above
30	BCG Vaccination	Code description and Read code term
31	cough present	Latest Code description and Read code terms
32	fever present	Latest Code description and Read code terms
33	drenching night sweats	Code description and Read code terms
34	abnormal weight loss	Code description and Read code terms
35	positive examination of lymphadenopathy	Latest code description and Read code terms
36	Plasma C reactive protein	Code description , Read code term , date & value
37	Serum total bilirubin level	Code description , Read code term , date & value
38	ALT/SGPT serum level	Code description , Read code term , date & value
39	HIV status	Latest code description,Read code term & date
40	Hep B status	Latest code description,Read code term & date
41	Hep C status	Latest code description,Read code term & date
42	Erythrocyte sedimentation rate	Code description, Read code term, value & date
43	TB Chest X ray	Latest code description, Read code term, date & associated text
44	immunosuppression (disease or medication)	Latest code description,Read code term & date
45	Diabetes	Latest code description,Read code term & date
46	Any chest damage	Latest code description,Read code term & date
47	Any liver disease	Latest code description,Read code term & date
48	current smoker	Latest code description,Read code term & date

Frequently asked questions about the templates

Do the two GP templates look exactly the same?

No. The two templates were designed by two different clinical systems (EMIS Web and SystmOne). However the templates should look familiar to GP staff which use those systems.

EMIS Web template collects more variables than SystemOne. Why is that?

The EMIS Web template was developed in collaboration with Newham CCG and was a pilot for the national programme. The pilot used a primary care model where LTBI treatment is initiated and monitored.

Are GPs expected to collect on all the variables in the templates?

We expect GPs to complete all relevant information collected on eligible patients who are being tested for LTBI.

Can the templates be customised or tweaked by the CCGs?

Changes to templates should be limited to names and logos. Changes should not be made to the data variables being collected. GPs should contact their local CCG system support team to discuss how to customise their templates.

Do the templates collect all the data needed for national reporting?

You do not need to enter all of the variables in the LTBI data set via the LTBI templates. Some of the information required for national reporting, ie name and date of birth, is already available in the patient medical and will be extracted from the back end. For instance, demographic information such as name and date of birth is recorded in the patient record but is not on the LTBI templates.

Are the data extraction queries for EMIS Web and SystmOne the same?

Yes. The data extraction query reports for both systems and collects the same variables. This means that all the data extracted from the back-end of both systems is the same. As such national reporting will be uniform across the country.