

Homerton NHS - mCB Service definition for online booking and kiosks

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Document history

4/7/2017	1.0	Olli Ruskomaa	Base template
14/12/2017	1.1	Homerton	Version with updates from the contract schedules
20/12/2017	1.2	Olli Ruskomaa	Removed duplicate details, updated structure and name (template to definition)
27/12/2017	1.3	Homerton	Updates and comment responses
9/1/2018	1.4	Olli	Updates for PreView data and flows, some comment changes.
25/1/2018	1.5	Olli	Some cleanup and demographics page reconstruct, removed also some obsolete comments.
31/1/2018	1.6	Olli	Demographics page setup and young people's clinic age
8/2/2018	1.7	Olli	Error handling added, kiosk doc merged, updated 4review data copy fields
1/3/2018	1.8	Olli	Merged kiosk flow version 2018-02-15 document into this one
13/3/2018	1.9	Olli	'Too late' added to the kiosk script
3/4/2018	1.10	Mike U	Minor change to gender classification and action thereon
4/4/2018	1.11	Olli	Kiosk symptoms list, preView data

Related documents

Contract schedules

Document conventions

Words written using *italics* are references to mCB values, items and terms.

Acronyms and abbreviations

app	Service grouping element in the mCB system. A unit can have several apps. For instance, if unit is sexual health apps could be contraception and GUM.
mCB	Mikkom Choose and Book
location	Service location inside mCB system, typically a hospital or hospital unit, clinic site etc.
service	Main service element in mCB, the item defining a service used for appointment slots, using the <i>unit/app</i> example, contraception service could be IUD insert/removal and GUM service symptomatic appointments.
slot	Appointment time having a date and time, <i>location</i> , duration, count (a single slot can have multiple bookings, either for simultaneous or group sessions) and assigned <i>services</i> .
unit	Base service setup entity in mCB system, like sexual health

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Functional specification

Introduction

This is a revised specification of the functionality that will be deployed at Homerton (and its associated clinics) in conjunction with the upgraded IMS preView PAS product.

It should be noted that the diagrams and screen layouts presented in the document are for representation purposes only and may appear differently when deployed on the website.

The purpose of this document is to define the online booking and kiosk self-registration processes for the phase 1 mCB customisation development. The chapter *Future development* defines items and processes for the later phases. Current goal of a “soft” live date of the defined system is by 3rd May 2018.

System overview

The functional purpose of the system is to provide patients of the Homerton Hospital, and its associated clinics, with the capability to undergo a remote triage, in order to book the most appropriate appointment online or, in the case of those needing “non-interventional” help, to be passed on to a third-party service that can provide suitable assistance (in accordance with the pan-London tender criteria). An equally important part of the system is to promote the move towards an “e-record” environment, by allowing registration details to be provided and processed electronically.

The system as a whole consists of several interfacing, but somewhat separate data systems; Homerton sexual health base website, mCB online booking site, mCB kiosk/wifi registration site and IMS preView PAS. The main functionality (regarding this specification) of these systems are:

Base website	Signpost to the online booking, provide sexual health information, handle e-portal services
Online booking	Patient online booking – slot and service selection based on simple triage and the patient data collection
Kiosk site	Patient arrival indication, walk-in patient data collection and registration
IMS preView PAS	Patient data storage, slot and service master system

Following chapters specify the systems functionality in detail in the phase 1.

Sexual Health Services – base website

The initial website is expected to be driven from the main Homerton Hospital site, with the link possibly placed on the current Sexual Health Services webpage, as shown in the following webpage mock-up:

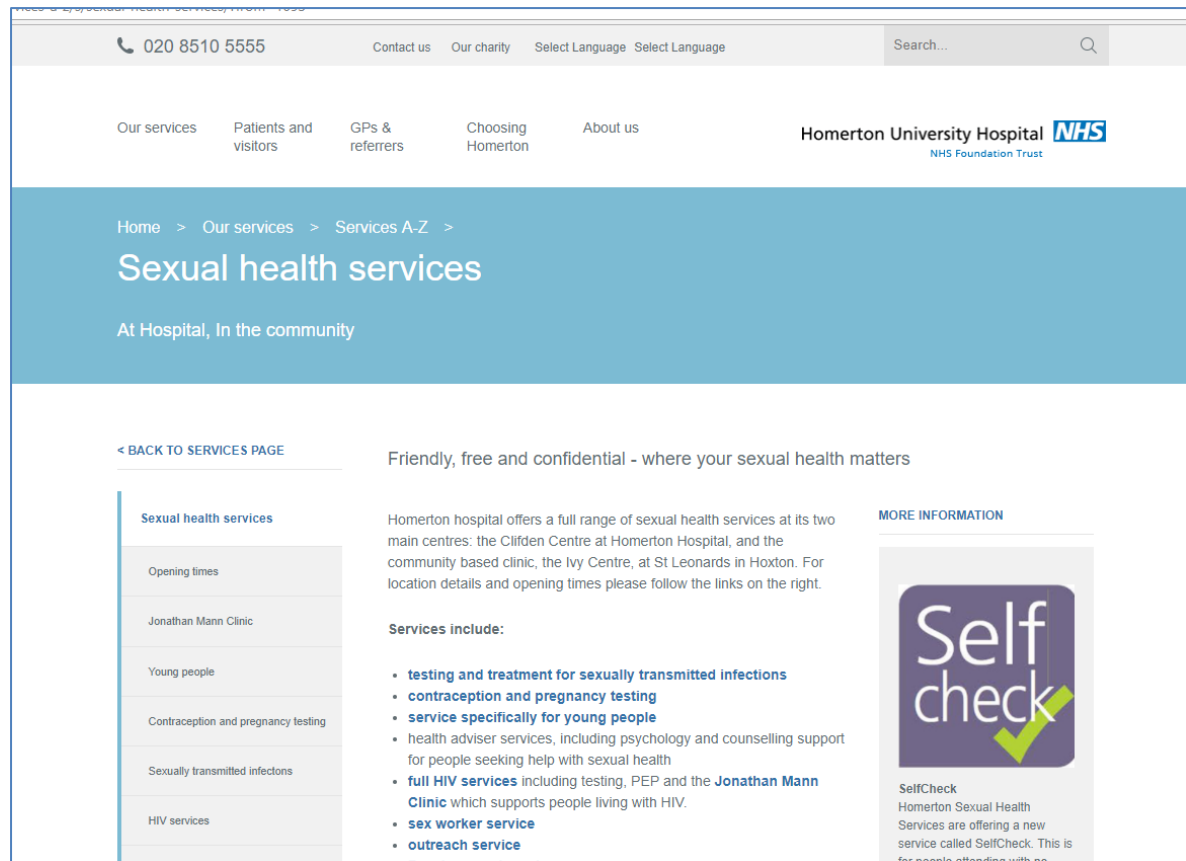


Figure 1 Sample for main website link

Once control has passed to the HTTPS protected booking site, the patient will be triaged according to criteria already in use by Homerton.

PreView data copy

Part of the patient data from the existing patients is copied to mCB database every night to check the patient existence and a possible booking.

The data consists of the following fields and is inserted into a new database tables called previewPatient, preViewPatietIds and previewPatientAppointments. Data will be delivered in a CSV file.

PreView field	Type	mCB field	Details
Forename	Char ??	userFirstName	
Surname	Char ??	userLastName	
date of birth	Date	dateOfBirth	
preView number	Char ??	clientId	
gender			
<i>mobile number</i>	<i>Char 11</i>	<i>mobileNumber</i>	<i>Mobile number</i>
<i>email address</i>	<i>Char 50</i>	<i>emailAddress</i>	<i>Email address</i>
<i>next appointment time</i>	<i>datetime</i>	<i>nextAppointmentOn</i>	<i>Timestamp for the next appointment if any</i>
<i>next appointment clinic</i>	<i>Char 50</i>	<i>nextAppointmentLocation</i>	<i>Location name for the next appointment if any</i>

Error handling

In case of technical errors, raised by system modules, the following procedure is followed:

- If this is an error with a user action, typically a patient at the online site or at the kiosk, an error message is displayed, at the kiosk directing patient also to the reception
- If this a database error, the DB module emails automatically to Mikkom support at support@mikkom.com, a copy can be send to a Homerton mail address as well (Helpdesk ?)
- Errors with preView connection are handled so that an error response is given to the calling party and also reported via email like with DB errors
- Additional error information can be written to log files/DB to help the problem investigation.

Online booking process

Overview

Trust website

For online booking, the process starts by the patient accessing the Homerton Sexual health website, from which there will be a link to a separate mCB booking site. This site will be HTTPS protected and housed within the DMZ area of the Homerton Trust IT department, having the patient database housed inside the Trust network (DB connection through firewall). This should provide suitable protection for the data collected from patients, conforming to Information Governance (IG) requirements, while maintaining the overall security of the Homerton IT environment. Even though the sign-posting exists, patients knowing the booking URL, can access the site also directly.

High level service flow

The service welcome page displays information about the service and to whom it is meant. Patients deciding to continue with the service are then asked information about their age, gender – including trans-gender information – and their sexual behavior. Patients younger than 16, cannot use the service and guided to walk-in, for others the main service selection is presented with the following options:

- Home-testing
- Self-check at the clinic
- Contraception (option only for females and trans-gender females)
- Symptoms

Patients selecting home-testing are guided to E-portal. Selection of self-check is confirmed with additional questions to make sure patients are without symptoms. Contraception selection leads to a question about the contraception type, selection of symptoms is followed by a questionnaire about the symptoms.

Using the selected service, the system looks for available times in the booking period and if found, additional personal details are collected. With patient demographics information, a check is made to see if the patient has visited Homerton before, if not, additional registration data is collected. After all the personal details are collected, a booking confirmation page is shown with basic details and some additional, service related information. Confirming the appointment, the booking is added to the database and the details are also send to PreView, a confirmation message is also send to the patient. The booking process then ends at the end page.

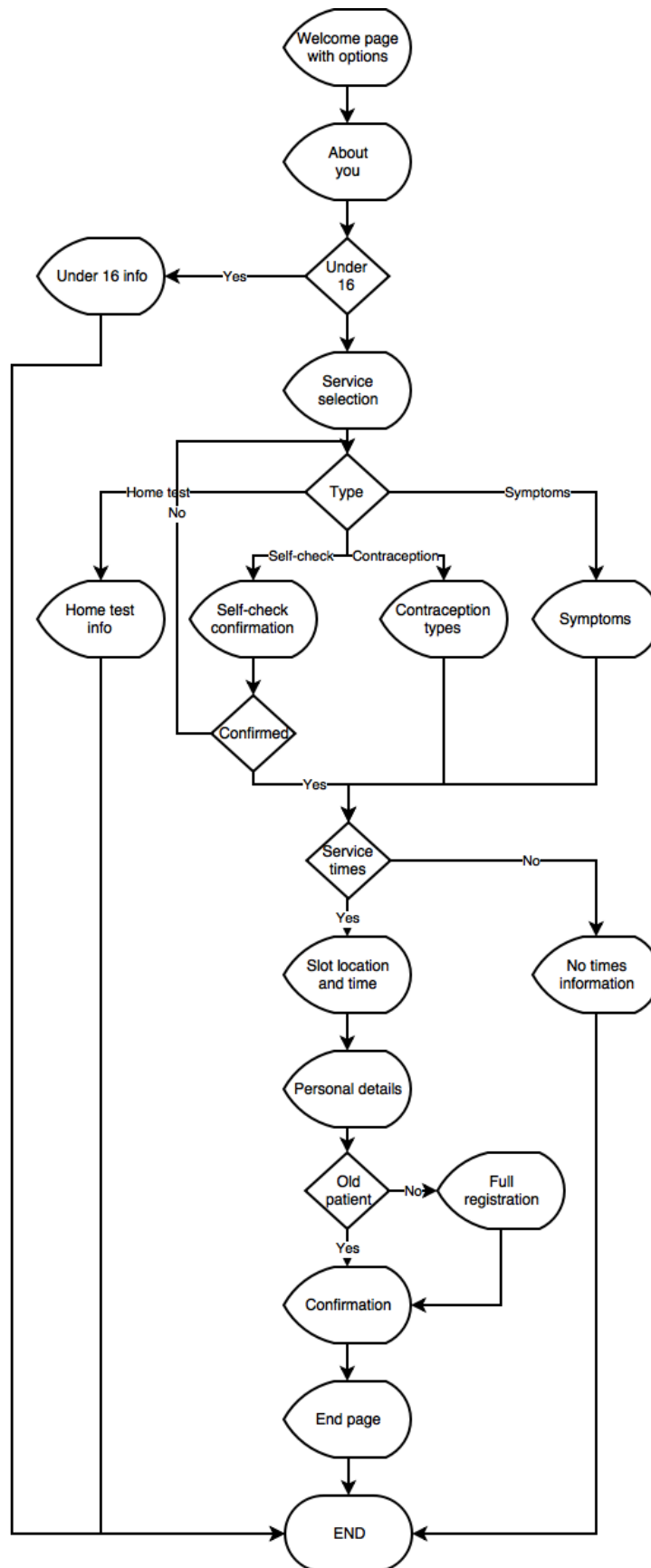


Figure 2 Main service flow

Welcome page Initial triage and appropriate “direction” of patients

The initial triage part of the process for the **online site** has the **logical** steps as in the flowchart below, transfer to more suitable services is **text guiding** the patients, this service is not meant for the patients listed under the flowchart.

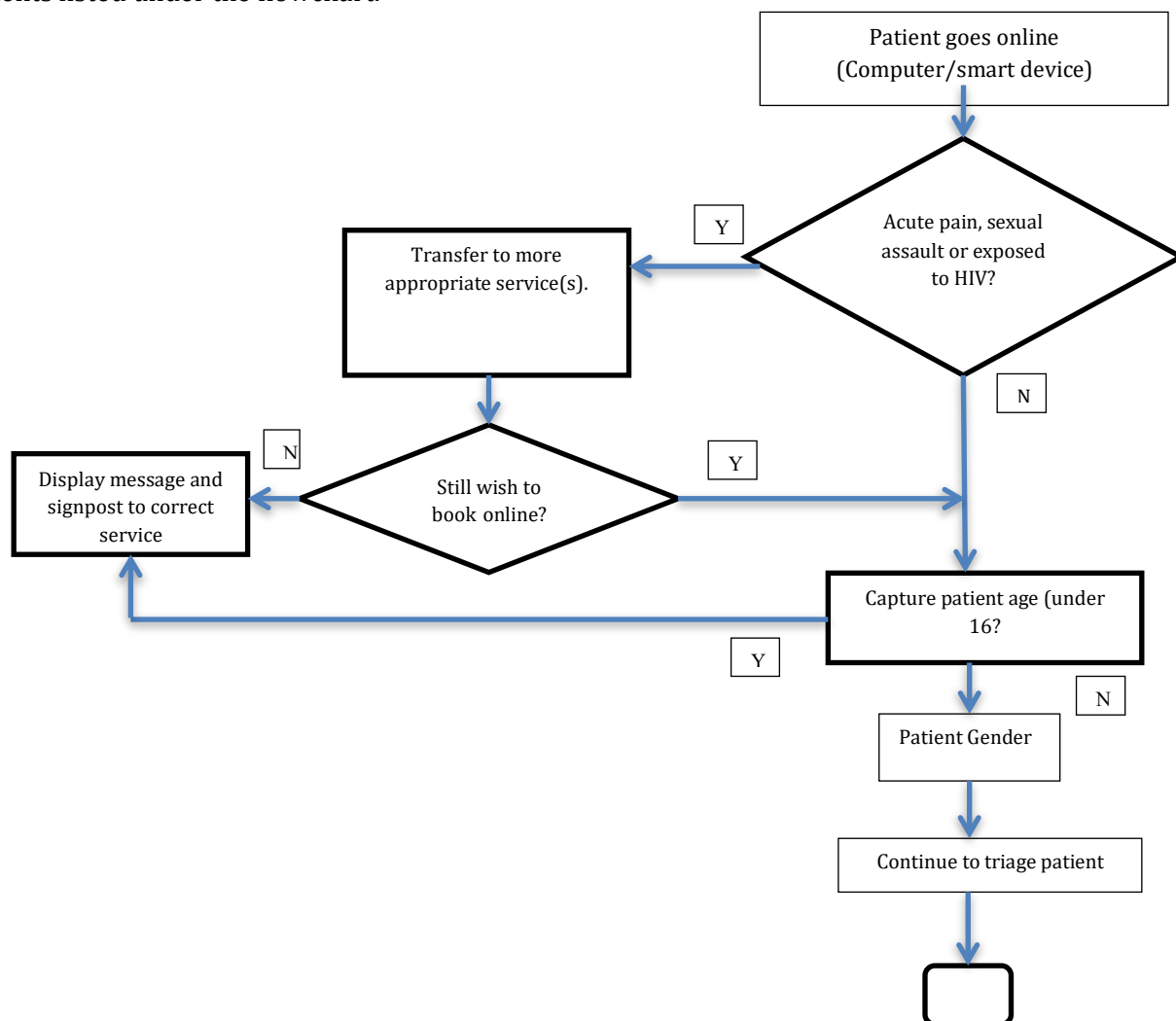


Figure 3 Initial triage flow

The process starts with initial menu to alert patient for whom other services may be more appropriate. These include:

- Victims of sexual assault
- Patients needing PEP
- Those in acute pain
- Those under the age of 16 years

The criteria determining each case will be made visible by means of “pop-up” messages, either when the user hovers over the option or patient can click the link for a separate page that opens for more information. However, although the patient will be advised that more appropriate services exist, they will also be invited to continue booking in the normal manner, except for users who are under the age of 16. If they choose the “other” service pathway, they

will be transferred to that site/webpage, otherwise they will be able to continue on the regular booking path.

Landing page

Footnotes below present the text displayed after pressing the button.

Welcome to Homerton Sexual Health Services - Online booking portal

Use this page to book a sexual health or contraception appointment at one of our clinics. Please note that this service is for people aged 16 or over.

If you are under 16, you are very welcome to use our walk-in service or ring to make an appointment with us on 020 7683 4103 or visit <http://www.homerton.nhs.uk/our-services/services-a-z/s/sexual-health-services/> for more information.

To order a postal kit to test for sexually transmitted infections (STIs) at home [[Click here](#)] ¹⁾

If your problem is urgent, please attend a clinic or A&E rather than book an appointment.

Are you in acute pain? ²⁾

Clinic locations and opening times ³⁾

Is your booking about a sexual assault? ⁴⁾

Have you been exposed to HIV in the last 72 hours? ⁵⁾

Do you have communication support needs? ⁶⁾

CONTINUE

1. Eportal link to PreventX once live
2. If you have severe pain (for e.g. testicular pain, abdominal pain) you can get urgent medical advice by attending A&E, or during our working hours you can come to one of our walk-in services without an appointment. HSHS Clinic locations and opening times (?button to expand or link to our website in new tab <http://www.homerton.nhs.uk/our-services/services-a-z/s/sexual-health-services/opening-times/>)- phone- 020 7683 4103
3. Clinic locations and opening times (?button to expand or link to our website in new tab <http://www.homerton.nhs.uk/our-services/services-a-z/s/sexual-health-services/opening-times/>)- phone- 020 7683 4103
4. If you have been sexually assaulted, you can get 24 hour help and book an assessment through contacting the Havens service on 020 *****. If you have been assaulted recently, you may need samples taken for forensic evidence (for proof in court). The Havens can also help you to report the assault to the police.

You can also report sexual assault directly to the police by calling

5. Post exposure prophylaxis (PEP) is sometimes needed to reduce the risk of getting HIV infection after having sex with someone who might have HIV. PEP needs to be started as soon as possible, and always within 72 hours of the sex. You can get PEP urgently by attending A&E, or during our working hours, through attending our walk-in service.
6. If you have any difficulties booking using this system, you can book appointment by phoning us during opening times on 020 7683 4103, or by attending our clinics in person where our reception staff will help you find the right service for you. For opening times- HSHS Clinic locations and opening times (?button to expand or link to our website in new tab <http://www.homerton.nhs.uk/our-services/services-a-z/s/sexual-health-services/opening-times/>)

Buttons

Text	Functionality
Continue	Submits the form

Personal details – About you

About you...

Help us to know which appointments might be right for you by answering the following:

DOB [Day] [Month] [Year]

Gender
☐ Male ☐ Female ☐ Other (please state)

Is your gender identity different to the sex you were assumed to be at birth?

☐ No ☐ Yes

I have sex with
☐ Men ☐ Women ☐ Both men & women

CONTINUE

Functionality

Check for patient age and gender

- The first step in the triage process will be to determine that the patient fulfils the age category – i.e. is NOT under 16 years of age, by asking for the DoB and checking that the DoB passes the validity test. For the patients under 16 years, a specific web page is displayed and the booking process stops. For the patients 16 years or more, the triage continues (flowchart point 2). Also, to limit the service type options in the next step, the patient gender is asked.

If the gender is stated as “Other” or if the gender identity differs from that assumed at birth, the patient is assigned a “5” prefix number.

This initial demographics page collects information essential in offering MSM appointments (Out there Clinic) to men who have sex with men (or both men and women), and offering the Young Person's Clinic slots to those who are 25 or under. Contraception slots will only show for those of female or other gender, or those males assigned female at birth (i.e. hidden from cisgender males).

Patients under 16

Displays information for young people

Patients under 16

We provide full sexual health and contraception services for people under the age of 16. However, this online booking service is only suitable for people aged 16 and over. If you are under 16, you are very welcome to use our walk-in service. We have a dedicated clinic for patients 25 and under each Tuesday evening at the Clifden Centre, Homerton hospital.

For clinic options and opening times, see our webpage;
<http://www.homerton.nhs.uk/our-services/services-a-z/s/sexual-health-services/>. Alternatively, you can ring to make an appointment with us on; 020 7683 4103.

Text	Functionality
End	Submits the form and moves patient to Homerton SH website

Appointment type selection for normal patients

Patients 16 and over will be triaged according to pre-determined criteria and, if requiring a viable type of appointment, the patient will be able to see all available appointments matching their need. The location and availability of such appointments will be determined as part of the project.

Your appointment type

Please select from the following sexual health services. If the service you require does not appear below, please call your local clinic or phone 01234 987654.

Contraception	Express check Express service for non-symptomatic persons
Family planning Family planning advice	Health Screen (with symptoms) I have symptoms and would like a health screen
Quick check (no symptoms) A check by a nurse for sexual health when you do NOT have symptoms	

Figure 4 Service selection sample

Patients will, at this stage, be able to choose between options for the broad categories of:

- Home-test – to be sent a test kit to their home address. This will result in being referred / redirected to the new E-Portal service
- Self-check – to come to clinic and test themselves
- Contraception services – including IUDs
- Symptomatic service – to check against specific symptoms

The patient, if opting for any of the latter three options, will continue through the booking process.

Your appointment type

Please select from the following sexual health services. If the service you want does not appear, please call Homerton Sexual Health Services on 020 7683 4103.

Self-Check

Tests for sexually transmitted infections (STIs), done at the clinic. [I] (information box expands below)

= [I] I have nothing wrong with me- I just want to have an STI screen

Figure 5 Service selection sample

Home

testing for STIs (Link here to ePortal- could also put this link on the top of every subsequent page?)

Contraception (this option only appears for women, other, and transgender males) [I] (button to expand to below)

= [I] We can provide all methods of contraception. We offer STI testing at the same time.

I have something wrong (or, Health screen with symptoms) [I] (expands explanation as below)

= [I] Choose this option if you would like to see a doctor or nurse to assess symptoms that might suggest a sexually transmitted infection. You can test for STIs at the same time.

Functionality- Each appointment screen will appear depending on the above option selected

If quick-test selected:

Book a self-check [I]

= [I] You would like to have tests for sexually transmitted infections (STIs) but don't have any symptoms that you are concerned about, and don't need contraception. You can also do test by ordering a home testing kit by post- click [here]

Contraception: (Need flag for emergency contraception)

Please note – If you are at risk of getting pregnant because you have had sex in the last 5 days without using contraception, it is important to get help with emergency contraception as soon as possible rather than waiting for an appointment.

CLICK HERE (link to: <https://www.fpa.org.uk/contraception-help/emergency-contraception>) for further information about your options.

IUD/IUS (coil) insertion [I]

=I Our IUD/IUS clinics can fit and replace copper coils and the Mirena hormonal coil. Please read our advice about the right time to have a coil inserted – **LINK HERE** – as we may not be able to fit a coil if there has been a risk of pregnancy in the past 3 weeks. If you need a copper IUD for emergency contraception, you do not need an appointment – please attend our walk-in service.

Contraception- implants, pills, injections, advice [I]

=I Our general contraception clinics provide advice about all methods of contraception, including injections, pills, patches and barrier methods. We can also fit and remove implants (Nexplanon) as well as remove coils (intrauterine methods) in this general clinic.

Something wrong [I]

=[I] Choose this option if you have symptoms and would like an assessment by a doctor or nurse. This will include an offer of testing for sexually transmitted infections. If you have severe symptoms such as severe testicular pain or abdominal pain, please attend our walk-in service or go to A&E. If you have already been diagnosed with a sexually transmitted infection please ring: 020 7683 4103 to book into one of our dedicated treatment slots.

Symptoms Page:

If something wrong was selected on the appointment type page, the following additional questions are presented:

Please indicate what you want help with:

For Women

- Vaginal discharge
- Bleeding between periods or after sex
- Pain with sex
- Stomach pain
- Pain when peeing
- Genital rash, lumps, bumps or itching
- Genital ulcers (sores)
- Something wrong with my bottom
- I have had sex with someone who has had an infection
- Other:
- Indicate here if you prefer not to say

If you have severe symptoms such as severe testicular pain or abdominal pain, please attend our walk-in service or go to A&E.

For Men

- Pain when peeing
- Genital rash, lumps, bumps or itching
- Genital ulcers (sores)
- Something wrong with my bottom
- I have had sex with someone who has had an infection
- Other:
- Indicate here if you prefer not to say

For other genders

- Vaginal discharge
- Penile discharge
- Bleeding between periods or after sex
- Pain in the testicles (balls)
- Pain with sex
- Stomach pain
- Pain when peeing
- Genital rash, lumps, bumps or itching
- Genital ulcers (sores)
- Something wrong with my bottom
- I have had sex with someone who has had an infection
- Other:
- Indicate here if you prefer not to say

Buttons

Text	Functionality
Continue	Submits the form and moves control to appointment time selection

Appointment time selection

After selecting the service type, system displays the available locations and times for that service, user selects the time and presses confirm to move forward. When the confirm button is pressed, system checks that the displayed time is still available inside the booking system. Displayed times have been received from preView via API call.

This will also include the following message:

'Please choose an appointment time'

'Can't see an appointment that suits you? Ring 020 7683 4103 during opening hours and a member of staff will advise' to allow for non-Mikkom bookable appointments.

'We also run a walk in service. You can attend without an appointment during opening hours. People are seen in the walk in on a first come first served basis and you may experience long waits if you attend without an appointment.'

MiKOM

Express check Terms of use Personal info **Appointment time** Confirm Finish

Appointment time selection

Clarence Road Wellness Centre
Clarence Road, Windsor., SL4 5AF.

Wednesday 21 June 2017

13:00 13:20 13:40

Thursday 22 June 2017

13:00 13:20 13:40

Friday 23 June 2017

13:00 13:20 13:40

Saturday 24 June 2017

Key: 31 = appointments available 31 = no appointments available

Show more days **Back** **Continue**

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Figure 6 Appointment location and time selection sample

Available clinics

- Clifden Centre, Homerton Hospital, Homerton Row, London E9 6SR
- The Ivy, St Leonard's Hospital, Nuttall Street, London N1 5LZ
- 80 Leadenhall, 80 Leadenhall, London, EC3A 3DH

Fields

The main page collects the following data:

Field	Size/type	I/O	Required	Description
Map icon	Selection	I		Map icons can be used to select the location, default can be used
Location selection	Selection	I	X	List of locations to select instead of map
Time selection	Selection	I	X	Available times to select

Map icon to only display location of clinic. Patient will select location from drop down location selection list.

Buttons

Text	Functionality
Show more days	Retrieves more days with available times
Back	Back to appointment type selection page
Continue	Submits the form, checking that the time is selected. Stays inactive as long as no selection.

Use the following rules to decide service times displayed:

- MSM clinic for men who have sex with men
- Young person's clinic for appropriate people – and flags that these clinics are specifically for 'people under 25'
- Contraception slots will only show for those of female or other gender, or those males assigned female at birth (i.e. hidden from cisgender males).

Booking periods

Following table displays the services and the booking periods for them.

Service name	Booking period	Same day gap- N/A as lock all from the midnight prior	Gender	Age range
Young person's clinic	7 days prior	N/A	Any	16-25 (under 26)
Contraception- general + implants + symptomatic (these are all one clinic type)	3 days prior	N/A	F or other or trans	16-99
Contraception- IUD/IUS	28 days prior	N/A	F or other or trans	16-99
MSM clinic	7 days prior	N/A	M or other or trans	16-99
Asymptomatic	3 days prior	N/A	Any	16-99

Demographics (Further details)

It is imperative that for both the online (and walk-in) electronic questionnaires, the questions should be tailored to ensure patients spend the minimum time on the (online or kiosk) device, before they have been adequately “served”. The initial requirement is for personal details related to the patient.

The demographics data flow is the following:

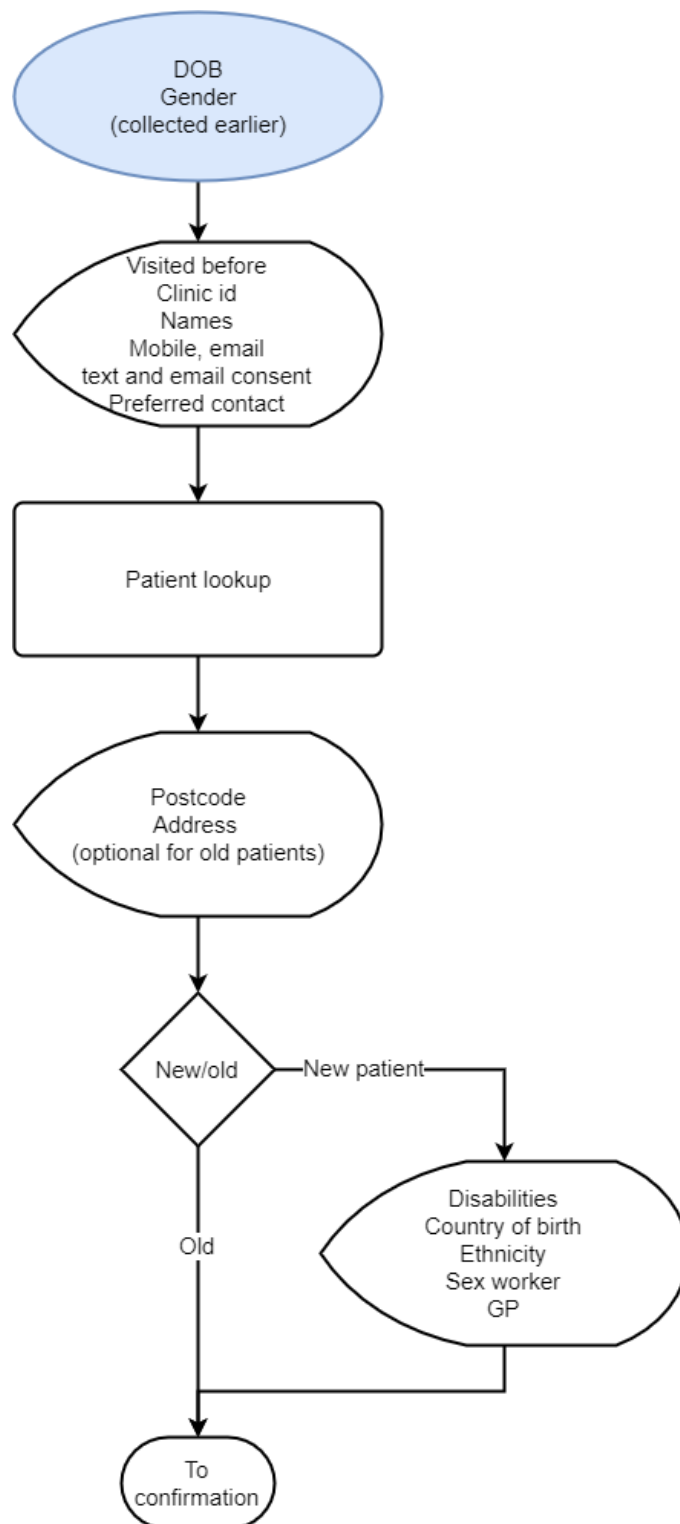


Figure 7 Flow for demographics pages

Personal details

Patient is first asked for enough details to see if they already exist in the database.

About you

Please fill in your registration details. Your appointment time will be held while you complete this stage. The fields marked with * are compulsory.

Have you been to our clinics before? (Homerton Sexual Health Services including the Clifden Centre, The Ivy, John Scott, City Site) Y/N

If yes, do you know your clinic number?

First name*:

Surname*:

You must enter either mobile number or an email address. It's very helpful for us to have alternative ways of contacting you. Please consider if you are happy for us to contact you via email. This would be via non-secure link.

Mobile phone*:

Confirm mobile*:

Can we contact you by text? Y/N

Email address*:

Confirm email:

Preferred contact*: ☐ Mobile ☐ Email

Do you want to allow us to use this email address to contact you about results and other clinical information if necessary? Y/N

Field	Size/type	I/O	Required	Description
Clinic id	Numeric string 10	I		Homerton clinic id in format nnnnnnn, has to start with 1 or 3
First name	String 50	I	X	Valid name
Surname	String 50	I	X	Valid name

Mobile phone	String 11	I	X	Valid UK mobile number
Confirm mobile	String 11	I	X	Has to match mobile (no copy-paste)
Email address	String 50	I		Has to have follow format xxx@xxx , max length 50
Confirm email	String 50	I		Has to match email if given
Preferred contact	Radio	I	X	If email is selected, email address has to be filled. Stored values M (mobile) E (email)
Consent text	Radio	I	X	Y/N
Consent email	Radio	I	X	Y/N

Check for existing patients

After the base demographics have been entered, patient details are searched first from the mCB database and then from the preView data copy to see if patient is existing or a new one. Criteria varies if patients know the patient id.

If patients have entered the clinic id, the id has to match with date of birth and gender to consider patient existing. If they have not entered the id, DOB and gender has to match and at least two from the following list; first name, surname, postcode, mobile, email.

Address details

Address info for new patients (who answered not visited before) or if the address has changed. The address must be given if the patient was not found in the search.

Your address

If you have not visited our clinics before or your address has changed after your last visit, please fill the following information.

Postcode*: _____ **ADDRESS LOOKUP**

House nbr: _____

Address*: _____

City*: _____

Can we contact you by post at the address given? Y/N

The patient will only be required to enter their postcode, which would then be searched using the Post Office Address File (PAF). The address would be displayed in the address line fields. However, once the address has been retrieved, it will still be possible for the patient to update the house number field by hand, in case the incorrect house / flat / building details has been retrieved or displayed incorrectly. This is a known fault with the PAF file retrieval.

Field	Size/type	I/O	Required	Description
Postcode	Numeric string 10	I	X	Valid UK postcode
House nbr	String 50	I		Alphanumeric string plus - /
Address line 1	String 50	I	X	
Address line 2	String 50	I		
City	String 50	I	X	
Consent post	Radio	I	X	Y/N

Full registration for new patients

For patients who did not match in existing patients check.

Demographics (New patients)

Fields marked with * are mandatory fields

- Do you have a:**

Hearing impairment (yes/no)

Vision impairment (yes/no)

Learning disability (yes/no)

Tell us more? _____

- Country of birth:** ☐

- Your ethnicity?** ☐

- Tick this box if you are paid for sex:** ☐ ☐

Your GP

We occasionally write to your GP—may we do this? Y/N

GP name : _____

Surgery: _____

If we write to your GP, do you want a copy of the letter sent to your home address? Y/N

Field	Size/type	I/O	Required	Description
Hearing impairment	Radio	I	X	Y/N
Vision impairment	Radio	I	X	Y/N
Learning disability	Radio	I	X	Y/N
Disability info	String 50	I		
Country of birth	Dropdown	I		NHS standard values
Ethnicity	Dropdown	I		White British Black or Black British (Caribbean) White Irish Black or Black British (African) Any Other White background Any other Black background

				Indian Mixed White and Black (Caribbean) Pakistani Mixed White and Black (African) Bangladeshi Mixed White and Asian Any other Asian background Any other mixed background Chinese Any other ethnic group Prefer not to say
Sex worker	Checkbox	I		Y if checked
GP name	String 50	I		Valid name, no other verification
GP surgery	String 100	I		Valid name, no other verification
Consent GP	Radio	I	X	Y/N

Both the country of birth and ethnicity would be selected from drop-down menus, standard NHS / DoH requirements.

Sex workers

In the demographics, a tick box for the question – ‘Are you paid for sex?’ will help identify whether the patient is a sex worker. This information will need to translate into a flag or displayed as a flag on preView. This field will be an optional field and not pre-filled. This information will be requested both on the online booking and at the kiosks each time demographics are collected.

Booking confirmation and the notification of an online booking

The booking process ends on a confirmation page, which displays main information about the booking.

MiKOM

Home Express check Terms of use Personal info Appointment time **Confirm** Finish

Your appointment details

Unit	Sexual Health
Service	Express check
Location	Clarence Road Wellness Centre Clarence Road, Windsor, SL4 5AF.
Appointment date/time	Thursday 22nd June 2017 at 13:40

Upon pressing **Confirm appointment**, you will be sent a message with details of how to log into our secure messaging portal, in which you can track your appointment schedule and send and receive communication with our clinics and specialists.

To access the secure portal, click the **Patient login** button when you return to the home page after completing booking.

Please ensure that the address shown below is correct for your message before pressing **Confirm**:

olli@mikkom.com

Cancel **Confirm appointment**

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Figure 8 Sample confirmation page

Confirmation

Your appointment details with Homerton Sexual Health Services

Type of service - Self-check, Contraception (general), Implant training clinic, IUD/IUS/coil fitting, Out There Clinic for men who have sex with men, Young persons' clinic

Clinic - (includes address and contact number)

Date + Day + Time

Confirm appointment + Conditions of appointment box

- We will need to attach or include advice for implant/IUT clinics- regarding the need to avoid unprotected sex prior to the appointment.

We have a word document for the coil clinic which would be good to include information with the appointment confirmation. For all contraception appointments it would be good to include FPA.ORG.UK website for further information).

- Contact address to send the confirmation message

- (Do we need information here?- if your appointment is not confirmed, any information you have entered will not be saved on our servers)

If patient needs to change any of the information, they can still go back to the page needing amendment and then come back here. After patient clicks on the confirmation button, the appointment will automatically be confirmed to the patient via their preferred method of communication – i.e. email or SMS. The confirmation will also contain a cancellation option.

The booked appointment details are after this, sent to PreView system.

Field header	Formatting	Description
Service name		Selected service
Appointment location		Slot location with detailed access information
Appointment date	day name dd/mm/yyyy	Selected appointment date
Time	hh:mm	Selected appointment time
Further information		For instance how to prepare for the appointment

Buttons

Text	Functionality
Back	Back to personal details page
Confirm	Submits the form, creates the appointment and send the confirmation message.

End page

Thank you!

Thank you for booking an appointment online.

To amend or cancel your appointment, please follow the link in your text/email confirmation, or phone 020 7683 4103.

What did you think of our online booking service? Please fill in our short survey [click here]

- *If booked for 'Something wrong' on booking confirmation screen we can display:*
- For information about common conditions, including herpes, erectile dysfunction and premature ejaculation, thrush, bacterial vaginosis and HIV [click here]. This link also has information about how to manage your sexual and general health, including topics such as anal sex, obesity and smoking.

Takes to a new (_blank) page with downloadable leaflets or links to websites, covering:

- Bacterial vaginosis
- Premature ejaculation
- Herpes
- HIV
- Thrush (candidiasis)
- Erectile dysfunction
- Chlamydia
- Gonorrhoea
- Trichomonas
- Painful sex

Functionality

Confirms that the booking succeeded. In case of errors with confirmation messaging, the page could show the appointment details once more. Optionally it is possible to offer downloadable calendar link to add the appointment details to the user's calendar.

Buttons

Text	Functionality
Go to home page	Moves user to the main website

Kiosk process

Overview

Kiosk application will be used for the physical kiosk devices at the clinic reception area and the smart devices owned by the patients. Patients can use the kiosk application inside the clinic WIFI network specifically reserved for this purpose (separate from the normal trust guest network).

Kiosk flow has two “legs”, one for patients who have booked an appointment – either via online or by calling the clinic - and for those who are pure walk-in. Based on the answers patients give, they will be “flagged” for the preView to determine whether they should be seen by a Health Advisor (HA) or a nurse or doctor.

Process start

At the beginning of the kiosk process, the application tries to detect the device, it's been used (kiosk or smart device) and the location. The device is identified by the remote IP address, which will be different for the kiosks running in the fixed network and the smart devices using the clinic specific WIFI network. In addition to IP address, the browser details can be used. If the IP address lookup for the location detection fails, as a backup, patients are asked the site location they are in. The location info is needed to send the correct arrival location. For the patients using the smart devices, the WIFI splash screen is displayed to explain the T&C's of the system.

Kiosk arrival

Patients are asked whether they have a booked appointment. If so, the patient *should* be found in the system, either from the mCB database (online bookings) or preView data copy. If they are NOT found as part of this search they will be asked to report to reception, as something may have gone wrong during the booking or information transfer process. Patients booking online may or may not be found within the existing PreView system, depending on whether they have attended clinic before and given the same relevant pieces of information. If there is any discrepancy or doubt, the patient will be asked to report to Reception.

If a patient says they have NOT booked an appointment (i.e. they are a walk-in) but are an existing patient they will be asked to provide some details and the attempt to match against PreView data made. Once again, if the search is UNSUCCESSFUL but the patient has a booked appointment they will be asked to go to reception for verification. In case of walk-in patients for whom this is a first-time visit a request to see reception/paper registration/ to continue with registration on a smart device will appear. This is to prevent delays at the kiosk.

Check-up (asympto) patients

Asymptomatic patients over 18 will be offered to use the E-Portal, if they wish to do so. If they proceed with the booking they will be placed onto the upfront wait stack.

Those under 18 for whom this will be their first visit will be directed towards the HAs. If this is not their first visit/subsequent visit they will also be placed onto the upfront wait stack.

Contraception and symptomatic attendees will be triaged according to additional factors, such as age or whether they have a learning disability. Patients seeking IUDs or implants will be directed to reception, where a scheduled appointment will be made.

As can be seen from the previous diagram, the various pathways for patients with symptoms are as follows:

- LD and under 18 first visits are immediately directed towards an HA. NB some or all of these may then be “fast-tracked” to see a doctor or nurse
- Under 16 repeat visits are “fast-tracked” to see a doctor or nurse
- Sex workers are “fast-tracked” to see a doctor or nurse
- All other patients are queued with normal priority to see a doctor or a nurse.

apply (under 18 first visit – flagged for HA/subsequent visit under 16 – to be fast tracked, – place onto asymptomatic waitstack).

Process flow

Following pages define the application flow in the kiosk application.

Shapes legend:

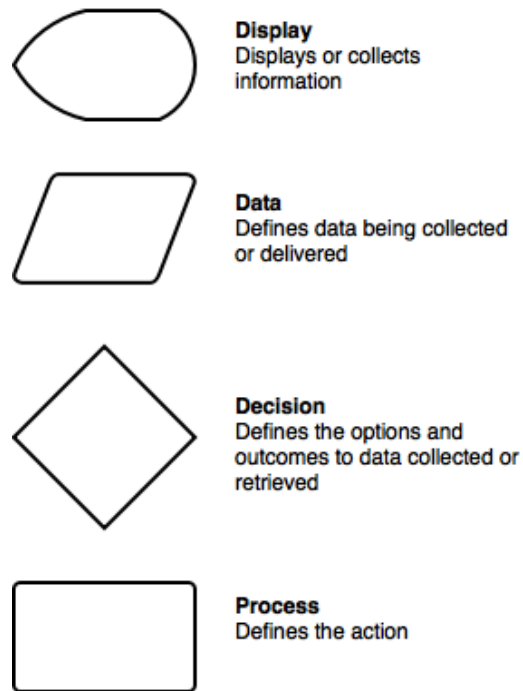


Figure 9 Flowchart symbols

The flow is not a detailed technical description.

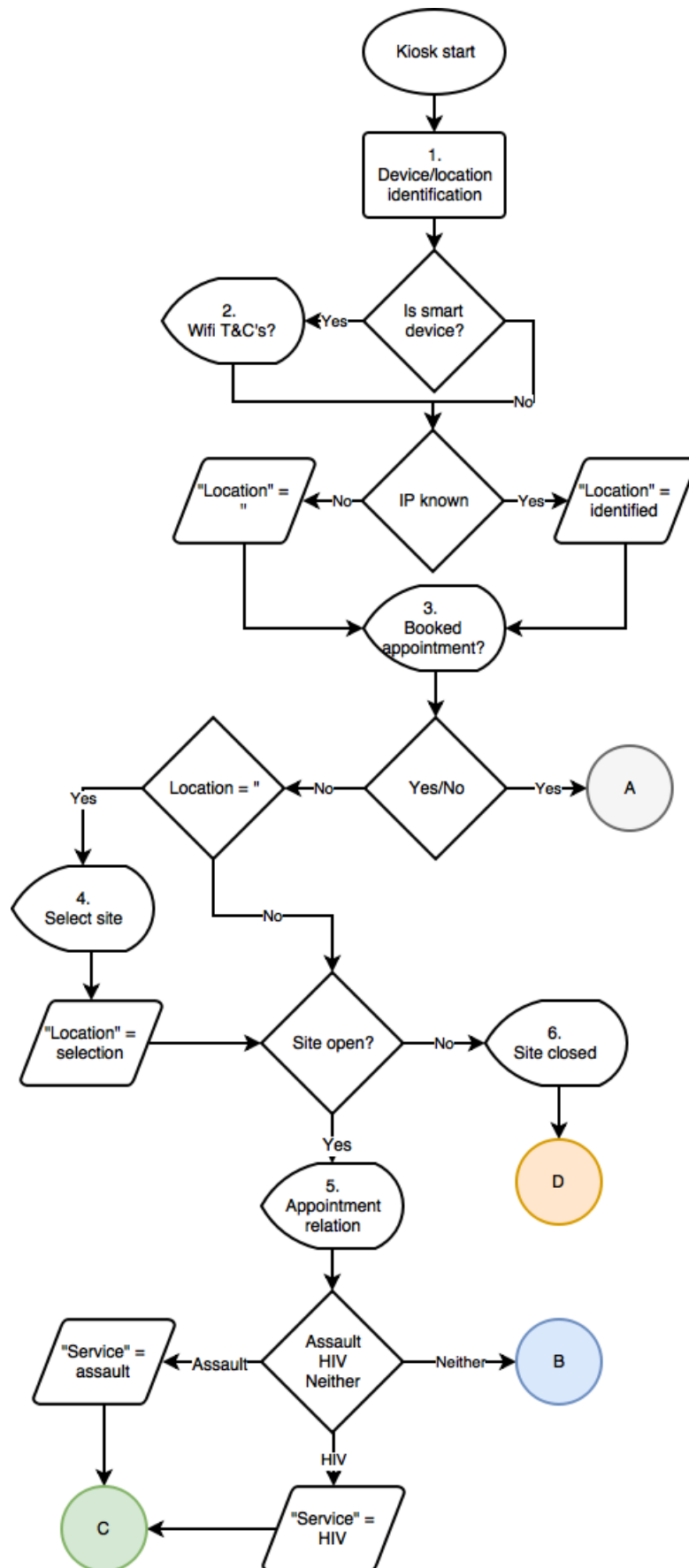


Figure 10 Kiosk flow from start

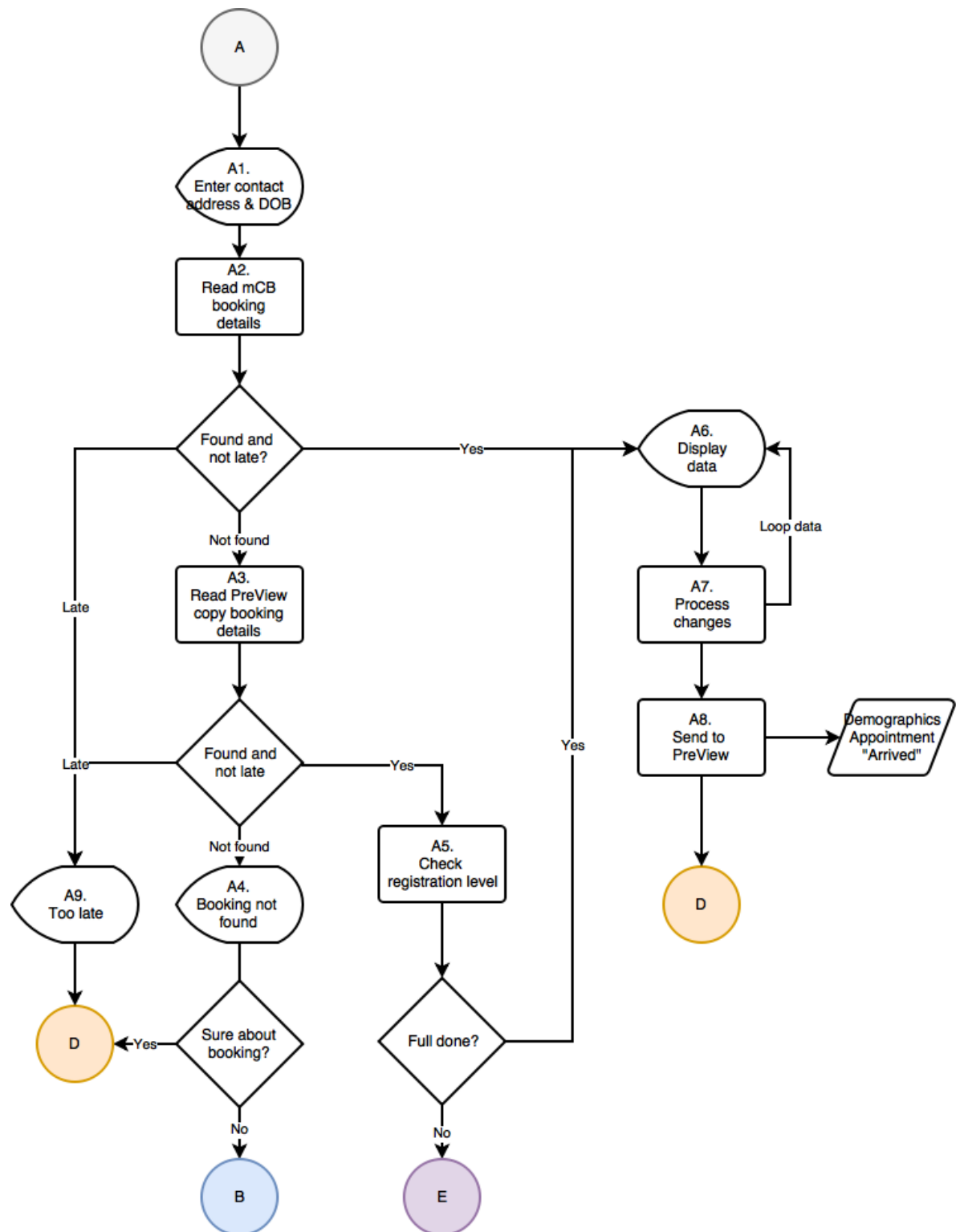


Figure 11 Kiosk flow for check of online booking

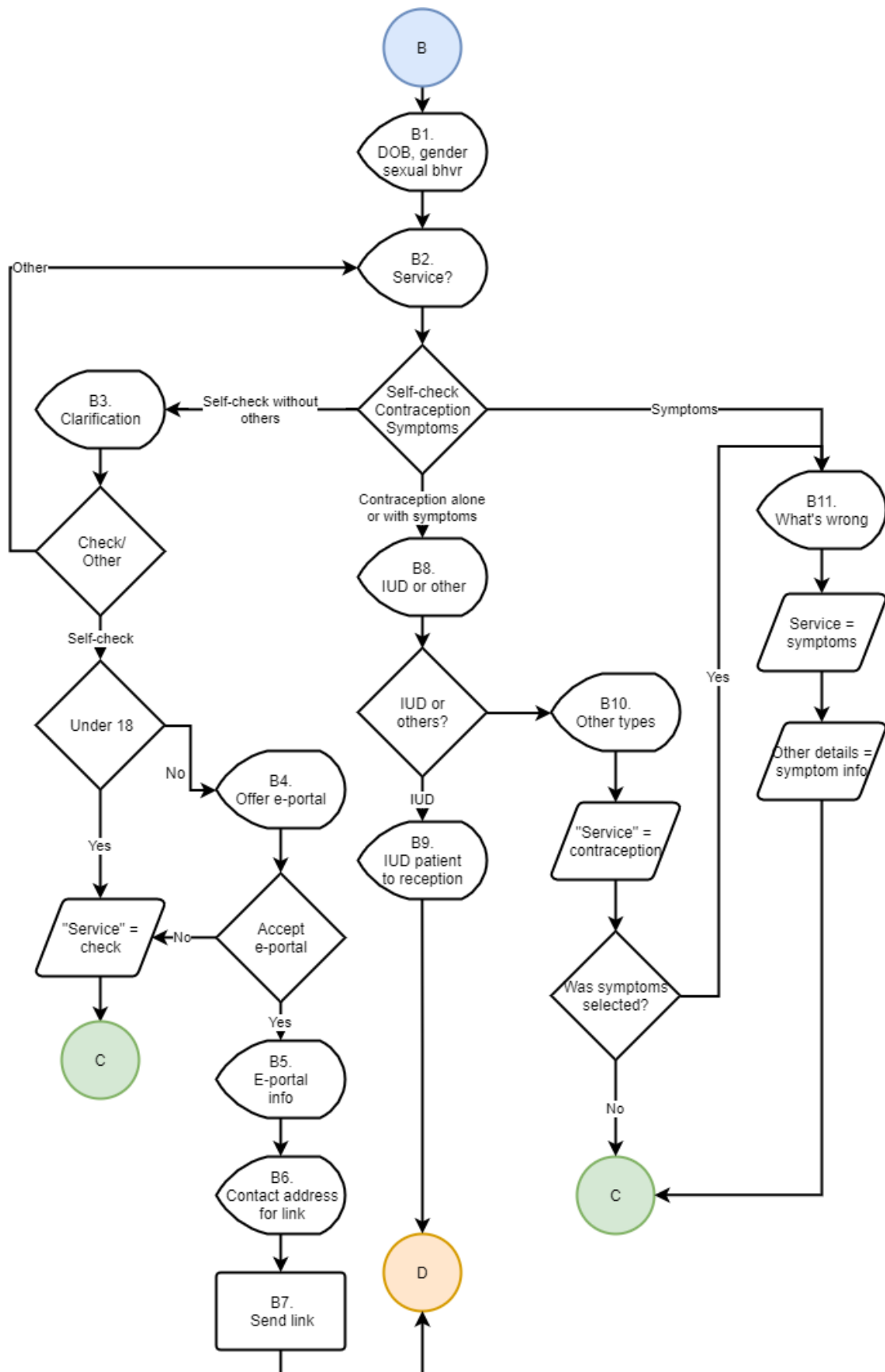


Figure 12 Kiosk flow for appointment type



Kiosk pages and actions

Start

1.	Device & location identification Try to determine the location application is started based on remote IP address. Site address ranges are defined in the parameters table. Is the location is identified check also if closure data is set for any location. This will be used for walk-in patients. Also determine if the patient is using kiosk or smart device, IP address and browser information is used for this. If user is using smart device, continue 2. It should be noted, that in case of configuration error, even kiosk location can be undefined. - Location = ""/identified - Device = "kiosk" or "smartdevice" <i>Location check method is open but the options are to use</i> - For fixed kiosks IP address/browser info - For other devices IP address range
2.	Wifi T&C's If device = "smartdevice", display Wifi T&C's
	Welcome to Homerton This is the kiosk application for ...
3.	Booked appointment Kiosk start page. For kiosk users (device = kiosk), system displays the additional information for new patients. If patients select that they have an appointment, continue in A1. If patients do not have an appointment (walk-in), if location was not identified (Location = ""), continue from 3. site selection, if location is know, check if site is open. If site is closed, continue 5., if site is open continue 4
	Welcome to Homerton Do you have a pre-booked appointment? [optional for kiosk users]If this is your first visit to Homerton sexual health clinics and you have a mobile phone, please stop here and login to our WIFI network (XXXX) and do a full registration there. If you do not have a smart device, please fill the paper form and go to reception. I HAVE APPOINTMENT NO APPOINTMENT
4.	Select site

	Menu to select clinic and store the location. If patient select the site that is marked closed today, continue to 6, otherwise store the selection for later usage.
	Please select the clinic Are you in Clifton Ivy ...
5.	Appointment related to sexual assault, exposure to HIV or other Check if patient visit is related to sexual assault, recent exposure to HIV or something else.
6.	Site closed Display information about the closure Sorry we are closed today Unfortunately we cannot see any walk-in patients today...

Leg A – A booked appointment

1.	Enter contact address and DOB Details to find the booked appointment Please enter data for us to find your appointment Enter your preferred contact address Email Mobile Date of birth [DAY] {Month} {Year}
2.	Read mCB booking details Find online booking details based on the given information. If found and patient is not late more than X minutes (slot time < now + 15min, default value), go to A6. If not found, go to A3, if too late, go to A9.
3.	Read preView copy booking details Find booking details from preView data based on the given information. If not found go to A4. If found and patient is not late for the appointment more than 15 minutes, go to A5, if too late, go to A9.

4.	Booking not found Display information when the patient booking is not found from mCB or PreView data. After pressing continue, we continue in B1. In C flow the given contact address, DOB will be used.
	Your booking details were not found If you are sure you have a pre-booked appointment, press END and go to reception, otherwise press CONTINUE and we ask more information
5.	Check registration level Check from found data if sexuality is filled to identify whether full registration is needed. If registration data is missing, continue from E (in C flow), otherwise from A6.
6.	Display data Display patient and booking details and ask patient to verify the following information: • Address • ... Information may split across several screens.
7.	Process changes Check what data has changed and update the details. If patient was found only in the PreView copy, then the details are not stored in mCB.
8.	Send to PreView Send changed data to PreView with status 'Arrived'.
9.	Too late Display a message to the patients to tell that they are too late for their booked appointment and should go to reception.
	Too Late Sorry, you have arrived too late for your booked slot and you need to see the reception.

Leg B – Walk-in patient service selection

1.	DOB, gender & sexual behaviour Collect patients date of birth, gender and sexual behaviour Please answer the following Date of birth [DAY][MONTH][YEAR] Gender
2.	Service? Menu with check boxes to allow multiple services. Contraception is shown only to women, self-check can be selected only alone. If patient selects • self-check, continue B3 • contraception, alone or with symptoms, continue B8 • symptoms, continue B11 Store selected service in the services array. Please select what kind of service you need and press continue Self-check ☐ Contraception ☐ I have symptoms ☐ CONTINUE
3.	Clarification Check if patient really is non-symptomatic and self-check is OK. If patient agrees to continue with self-check, check patient age and if they are over 18, continue to B4, otherwise set service = “check” and continue in C. If you...
4.	Offer E-portal Check if ...

5.	E-portal info Check if ... Different Homerton sites will use different URLs so patient location is check for this.
6.	Contact address for link Ask patient's contact address for the E-portal link
	Please give your contact address You can give your email address or your mobile phone number and we will send you the link to the E-portal. If you do not wish to give your address, just press continue and write down the following address: www.... We will not store your contact information.
7.	Send link Either email and text the E-portal link to the given address
8.	IUD or other Ask if patient wants IUD. If they do, they need to go to reception
9.	IUD patient to reception Tell patient to see the reception staff for the IUD operation
10.	Other types Display the list of other contraception options and make patient to select and store the selected contraception method to - contraception = "selected type"

	If patient has also symptoms in the <i>services</i> array, continue in B11, otherwise continue in "leg C".						
11.	What's wrong Show the symptoms and make patient to select what they have. The selected symptom is stored to variable otherDetails <table border="1"> <thead> <tr> <th>Women</th><th>Men</th><th>Other genders</th></tr> </thead> <tbody> <tr> <td> • Vaginal discharge • Bleeding between periods or after sex • Pain with sex • Stomach pain • Pain when peeing • Genital rash, lumps, bumps or itching • Genital ulcers (sores) • Something wrong with my bottom • Referral for abortion • Cervical cytology (SMEAR) • I might be pregnant • I have an infection (chlamydia, gonorrhoea, trichomonas, syphilis) • Other: _____ • Indicate here if you prefer not to say </td><td> • Penile discharge • Pain in the testicles (balls) • Pain when peeing • Genital rash, lumps, bumps or itching • Genital ulcers (sores) • Something wrong with my bottom • I have an infection (chlamydia, gonorrhoea, trichomonas, syphilis) • Other: _____ • Indicate here if you prefer not to say </td><td> • Vaginal discharge • Penile discharge • Bleeding between periods after sex • Pain in the testicles (balls) • Pain with sex • Stomach pain • Pain when peeing • Genital rash, lumps, bumps or itching • Genital ulcers (sores) • Something wrong with my bottom • Referral for abortion • Cervical cytology (SMEAR) • I might be pregnant • I have an infection (chlamydia, gonorrhoea, trichomonas, syphilis) • Other: _____ • Indicate here if you prefer not to say </td></tr> </tbody> </table>	Women	Men	Other genders	• Vaginal discharge • Bleeding between periods or after sex • Pain with sex • Stomach pain • Pain when peeing • Genital rash, lumps, bumps or itching • Genital ulcers (sores) • Something wrong with my bottom • Referral for abortion • Cervical cytology (SMEAR) • I might be pregnant • I have an infection (chlamydia, gonorrhoea, trichomonas, syphilis) • Other: _____ • Indicate here if you prefer not to say	• Penile discharge • Pain in the testicles (balls) • Pain when peeing • Genital rash, lumps, bumps or itching • Genital ulcers (sores) • Something wrong with my bottom • I have an infection (chlamydia, gonorrhoea, trichomonas, syphilis) • Other: _____ • Indicate here if you prefer not to say	• Vaginal discharge • Penile discharge • Bleeding between periods after sex • Pain in the testicles (balls) • Pain with sex • Stomach pain • Pain when peeing • Genital rash, lumps, bumps or itching • Genital ulcers (sores) • Something wrong with my bottom • Referral for abortion • Cervical cytology (SMEAR) • I might be pregnant • I have an infection (chlamydia, gonorrhoea, trichomonas, syphilis) • Other: _____ • Indicate here if you prefer not to say
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Leg C – New or existing patient

1.	Visited before Question whether we should try to find the patient details. If patients asnwrs YES, continue C2. If patient answers NO, the device used is checked. If device is “KIOSK”, continue C8, if device is “SMARTDEVICE”, continue with full registration in C9. Is this your first visit to our sexual health services Have you visited our sexual health clinics before, this includes ... YES NO
2.	Ask key data If patient has answered Yes, ask key data to locate the patient Please enter your First name Surname ..
3.	Read from the mCB database with the given data, if patient is found go to C6, if not, go to C4
4.	Read from PreView copy Try to find the patient from the PreView data. If patient is not found, go to C5, if found fill the verification data and go to C6.
5.	Not found Display info when the patient details are not found Your information was not found Unfortunately your data was not found from the system, please go to reception ...
6.	Verify data Display part of the found information and ask the patient if any of this has changed

7.	Process updates Check what data is changed by the patient and update the changes																																																
8.	Have smart device Ask patient if they have a smart phone or other mobile device to continue the full registration with that, if they say yes, continue C14, if no, continue C9																																																
	Full registration needed We need to ask more information...																																																
9.	Full registration Ask patient to fill the full registration details. The information may split across several screens. Items to collect:																																																
	<table><thead><tr><th>Field</th><th>Type</th><th>Remarks</th></tr></thead><tbody><tr><td>First name</td><td>Char 50</td><td></td></tr><tr><td>Surname</td><td>Char 50</td><td></td></tr><tr><td>Mobile</td><td>Char 14</td><td>UK mobile only?</td></tr><tr><td>Email</td><td></td><td>Has to have @</td></tr><tr><td>Consent text</td><td>Y/N</td><td></td></tr><tr><td>Consent email</td><td>Y/N</td><td></td></tr><tr><td>Consent post</td><td>Y/N</td><td></td></tr><tr><td>Consent GP</td><td>Y/N</td><td></td></tr><tr><td>GP mail copy</td><td>Y/N</td><td></td></tr><tr><td>Postcode</td><td>Char 8</td><td>UK postcode</td></tr><tr><td>House</td><td></td><td>Alphanumeric values allowed with -</td></tr><tr><td>Address 1</td><td></td><td>-“-</td></tr><tr><td>Address 2</td><td></td><td>-“-</td></tr><tr><td>City</td><td></td><td></td></tr><tr><td>Ethnicity</td><td></td><td>Dropdown list NHS standard</td></tr></tbody></table>	Field	Type	Remarks	First name	Char 50		Surname	Char 50		Mobile	Char 14	UK mobile only?	Email		Has to have @	Consent text	Y/N		Consent email	Y/N		Consent post	Y/N		Consent GP	Y/N		GP mail copy	Y/N		Postcode	Char 8	UK postcode	House		Alphanumeric values allowed with -	Address 1		-“-	Address 2		-“-	City			Ethnicity		Dropdown list NHS standard
	Field	Type	Remarks																																														
	First name	Char 50																																															
	Surname	Char 50																																															
	Mobile	Char 14	UK mobile only?																																														
	Email		Has to have @																																														
	Consent text	Y/N																																															
	Consent email	Y/N																																															
	Consent post	Y/N																																															
	Consent GP	Y/N																																															
	GP mail copy	Y/N																																															
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	House		Alphanumeric values allowed with -																																														
	Address 1		-“-																																														
	Address 2		-“-																																														
	City																																																
	Ethnicity		Dropdown list NHS standard																																														

	Currently the link is to main kiosk start page, in the future other options can be looked.
	Use your smart device to do a full registration Please connect your smart device to our Wi-Fi network XXXXX and go through the registration process. At the beginning you will be asked the same questions as now. We apologise for the inconvenience.
15.	Go to reception If patient indicates they do not own smart device, they are guided to reception to fill paper forms.
	Fill the registration form Please fill the paper registration form and give it to the reception.

Connections between mCB and preView

Data (API) Interfaces

These are the interfaces currently being developed as part of this initiative and the information, together with the “direction of flow” that is being collected. The current understanding of the interfaces is the following. (The interfaces are defined in detail in separate specification document.

The full set of interfaces implement the following functions:

- mCB (Mikkom) side
 - mCB receiving:
 - Appointment times, free and booked
 - On the mCB calling side:
 - Patient booking
 - Patient cancellation
 - Patient registration (kiosk/local WIFI)
 - Full registration
 - Arrival confirmation
- PreView (IMS) side
 - preView receiving:
 - Check if patient exists and create new record if needed without patient number
 - Mark the appointment slot as booked with the received patient information
 - Patient arrival confirmation
 - Process cancellation received from online
 - Process GP information supplied by patient will be recorded as free text
 - preView calling:
 - Send free online bookable
 - Send booked slot
 - Patient cancellation from clinic

Booking data process

The process delivers data from new online booked appointments to preView. For the flags see the chapter below. The dataset varies a little if it is an existing patient or a new patient, detailed information in the *preView Mikkom mCB messages* document.

Data	Details
Title	Mr/Mrs/Miss/
Firstname	As collected
Lastname	As collected
Sex	Male/Female/Other

DoB	Date of birth in YYYY-MM-DD format
Gender	Male/Female/Other
Address	As collected from merging line 1, line 2 and city
PostCode	XXXX XXX
Mobile	Without country code
Email	As collected
ConsentToText	Yes/No
ConsentToEmail	Yes/No
GPAAddress	As collected
AptID	Booking slot preView id from extra1 field
ClinicalInformation	Flags and disabilities from below in clear text as in <i>Data field</i>

Patient flags

The following flag fields are set both in the online booking data delivery and kiosk data delivery, to raise a flag in preView. That functionality is described in the preView documentation.

Data field	Details when the data field is set
Sexual worker	Patient has selected 'I get paid for sex'
Under 16	Patient age based on DOB is < 16
Sexual assault	Patient has selected sexual assault in the service selection
Exposure to HIV	Patient has selected 'Exposure to HIV' in the service selection
Under 18 first visit	Patient age based on DOB < 18 and patient has selected 'Not visited before'
Vulnerable adult	Patient has checked 'I have disabilities' and selected 'Not visited before'
Treatment of STI	Patient has selected 'I have symptoms' and under it the checkbox "I have an infection (chlamydia, gonorrhoea, trichomonas, syphilis)".

Patient disabilities in preView

The full list of disabilities supported by preView is below. The mCB system sends the collected values.

- Behaviour and Emotional
- Hearing
- Manual Dexterity
- Memory or ability to concentrate, learn or understand (Learning Disability)
- Mobility and Gross Motor
- Perception of Physical Danger
- Personal, Self Care and Continence
- Progressive Conditions and Physical Health (such as HIV, cancer, multiple sclerosis, fits etc)
- Sight
- Speech
- Other
- Not Stated (Person asked but declined to provide a response)