



HIV NURSING **2022**



HOSTED BY:

IAFAC
INTERNATIONAL ASSOCIATION
OF PROVIDERS OF AIDS CARE

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A nurse-delivered, technology-enabled HIV outpatient pathway

Presented on behalf of the core Klick team:

Sara Day, Rebecca Wilkins, Ana Milinkovic, Yodit Fissahaye-Yimer and [Caroline Rae](#)



2017: Concept of Klick was developed during an innovation sprint between Chelsea and Westminster Hospital NHS Foundation Trust (CWFT) and ViiV Healthcare. The sprint aim was to design a new sustainable model of care for the management of people living with HIV (PLWH)



2018/19: Proof of concept was successfully piloted in Kobler outpatient clinic, CWFT (n=92) as part of a joint working initiative with Viiv Healthcare/CWFT, with technical support from Avegen, a company specialising in digital healthcare.



2020: The model was adapted using the pilot learnings and named Klick, and was launched at Kobler Clinic in August 2020 and then 56 Dean Street in July 2021.



The joint working agreement between Chelsea & Westminster Hospital NHS Foundation Trust and ViiV Healthcare, terminated Apr 2021.

Chelsea and Westminster Hospital 
NHS Foundation Trust



Klick was designed with a focus on:

- **Patient Empowerment**: Involving PLWH in their care
- **Annual Health Review**: In line with current national guidance (as per BHIVA and NHVNA guidance)
- **Nurse-led clinics**: increased work-satisfaction and retention to work model, opportunities for development
- **Digital solutions**: Enhancing the service model, cost-effective, patient-centred care

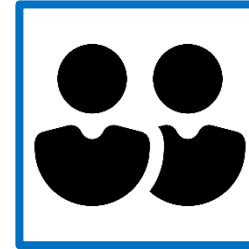




Enabling nurse (Band 6/7) delivered care



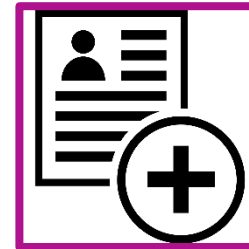
Working as part of a
consultant-led team



Allocated senior medical
supervisor per session
Pre and post-clinic discussion
with supervisor



HealthMachine's medical
proforma guides the
virtual consultation



NHIVNA/STIF
certification /
competencies



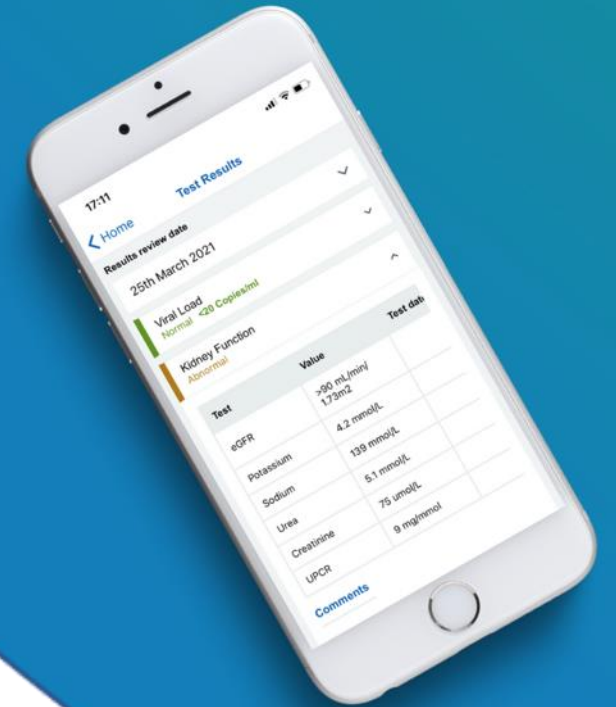
Ongoing programme of
educational training
delivered by MDT





Core features of the Klick service model

PLWH use a **smartphone application** to access HIV care and engage with **nurse-delivered virtual consultations** that are facilitated by a clinic facing web-based platform **HealthMachine™**



Online appointment booking



Holistic comprehensive annual review



Pre-visit questionnaire



Results viewable on app with interpretation



Nurse delivered virtual consultation



Clinician-patient notifications (push notifications)



Patient-facing Klick app features



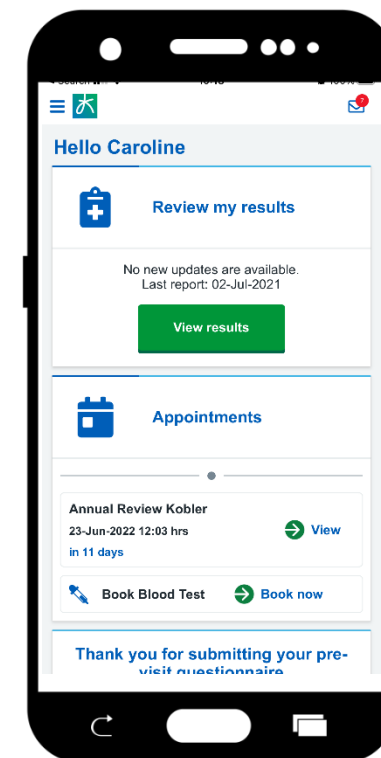
Manage Klick appointments
(book/reschedule/cancel)
Appointment reminders

Submit pre-visit questionnaire
(PVQ) to guide discussion at
consultation

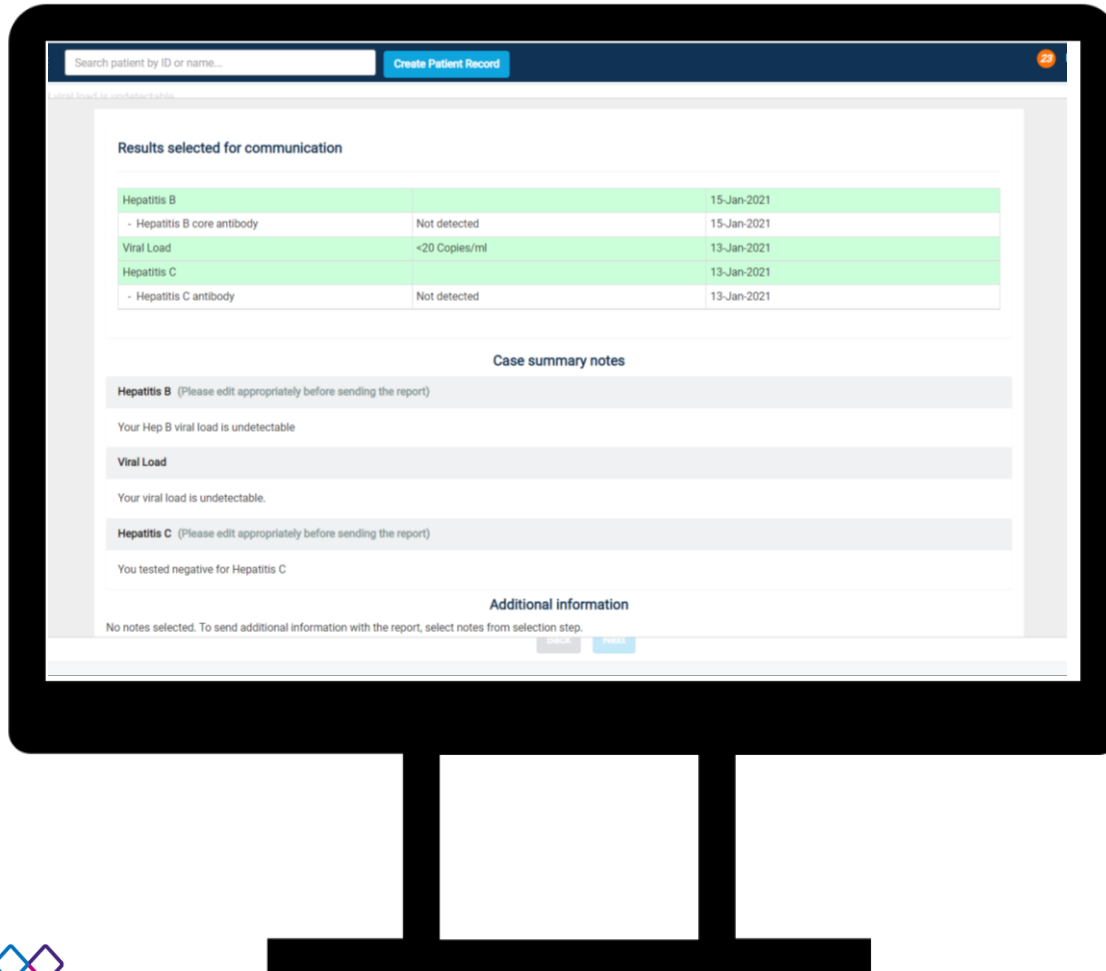


View routine blood results with
interpretation after release by
clinical team

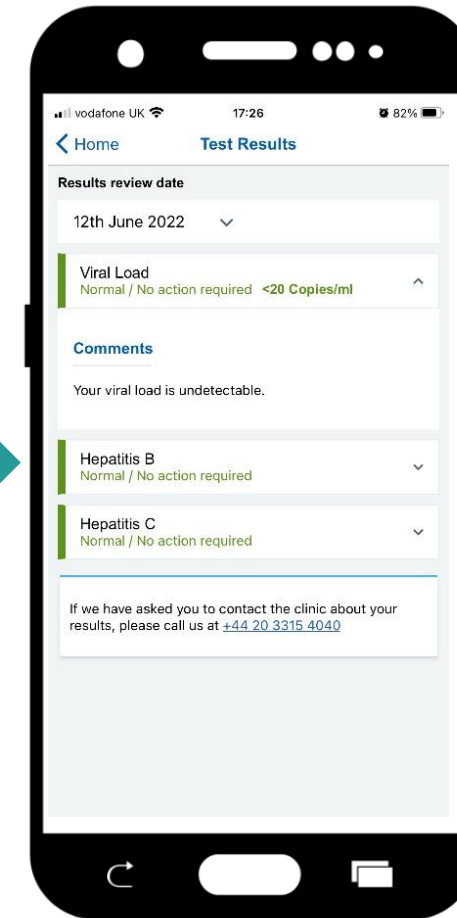
Receive secure care notifications
from the clinical team via push
notifications



Results released/published on app via Health Machine



One week



Clinician can verify patient has viewed notification/results

Worklists & alerts ensure results released on time

Personalised
communication
using results release
or via push
notification

Your Hep B test was negative

Test	Value	Test date
Hepatitis B DNA	<10 copies/mL	30-May-2022

Hepatitis C: Normal / No action required

You tested negative for Hepatitis C .

Test	Value	Test date
Hepatitis C antibody	Not detected	27-May-2022

Additional comments

Dear xxxx It was good to see you in clinic last week. Your liver function has now normalised. You are however, anaemic which may partly explain why you have been feeling a little tired. Ive written to your GP to see if they can help optimise your diabetes and investigate why you are anaemic. Sometimes anaemia can be due to a diet low in iron or vitamins so this too may need reviewing. Unless you have difficulty accessing your GP for these issues I'll see you in six months, Best Sara Day

PVQ

Medical proforma

Doubles
up as GP
letter

Pre
populated

Nurse
prompts

general_wellbeing_group

How have you been since your last visit?

- ☐ I have been well / no problems
- ☒ I have been unwell and / or have problems

Please list any new medical or mental health conditions since your last visit.

Cluster headaches

State below if you have had any problems with your treatment since your last visit. *

GP started a statin and increased my blood pressure tablets

1.1 Patient Profile

ARV Regimen

Safeguarding alert ⓘ

Last VL result and date show on EPR

Treatment related problems:

Last CD4 Result and Date

Viral load status reported by patient via triage process (suppressed, 9 months)

1.2 Patient History

Co-morbidities / PMH ⓘ

1.3 Co-medications

Co-medications

Allergies ⓘ



Patient Profile:

- Past medical history
- Concurrent medication
- Possible problems/side effects

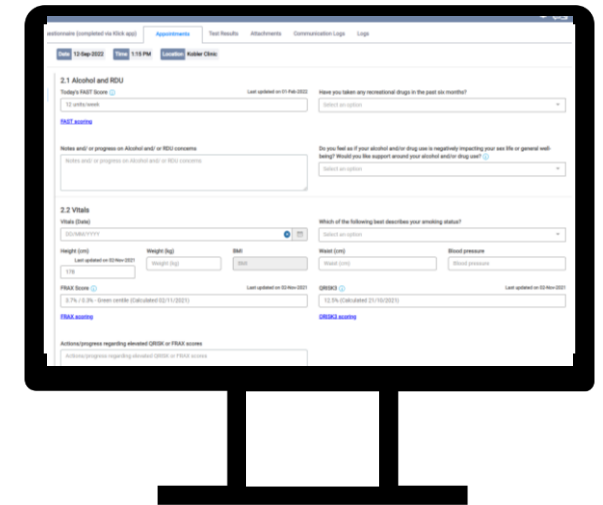
Wellbeing_1:

- Alcohol and RDU
- Biometric data
- Mood and support



Wellbeing_2:

- Sexual Health
- Women's Health
- Vaccinations





Tools we use during consultation

FRAX score

<https://www.sheffield.ac.uk/FRAX/tool.aspx>

Liverpool
University
DDIs

<https://www.hiv-druginteractions.org/checker>

QRisk3

<https://qrisk.org/three/index.php/>

PHQ-9
Depression

<https://patient.info/doctor/patient-health-questionnaire-phq-9>

FAST Scoring

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684828/Fast_alcohol_use_screening_test__FAST__.pdf/](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684828/Fast_alcohol_use_screening_test__FAST__.pdf)

GAD-7
Anxiety

<https://patient.info/doctor/generalised-anxiety-disorder-assessment-gad-7>





Case Study



• JB, 57 y.o. man, well controlled HIV



• **Co-morbidities/PMH:**

SOB

Diarrhoea (chronic?)

Abdominal bloating,

Splenic vein thrombosis ranging from
SMV to IMV

Basal Cell carcinoma - 4 removals

Shingles

CT CACS (2021): 54 AU

BMD: Osteopenia (2017)



• **Co-mediations:** Atorvastatin 10mg,
acyclovir



• **Consultation:**

F: New 6 month prescription

F: F2F appointment with Prof Nelson

F: Mental Health/HIV CNS and Peer
Support referral

F: Urgent referral to Haematology (splenic
vein thrombosis)

F: Urgent referral to Dermatology (4 basal
cell carcinomas - LFU)



Patient Survey 2021 - service descriptors

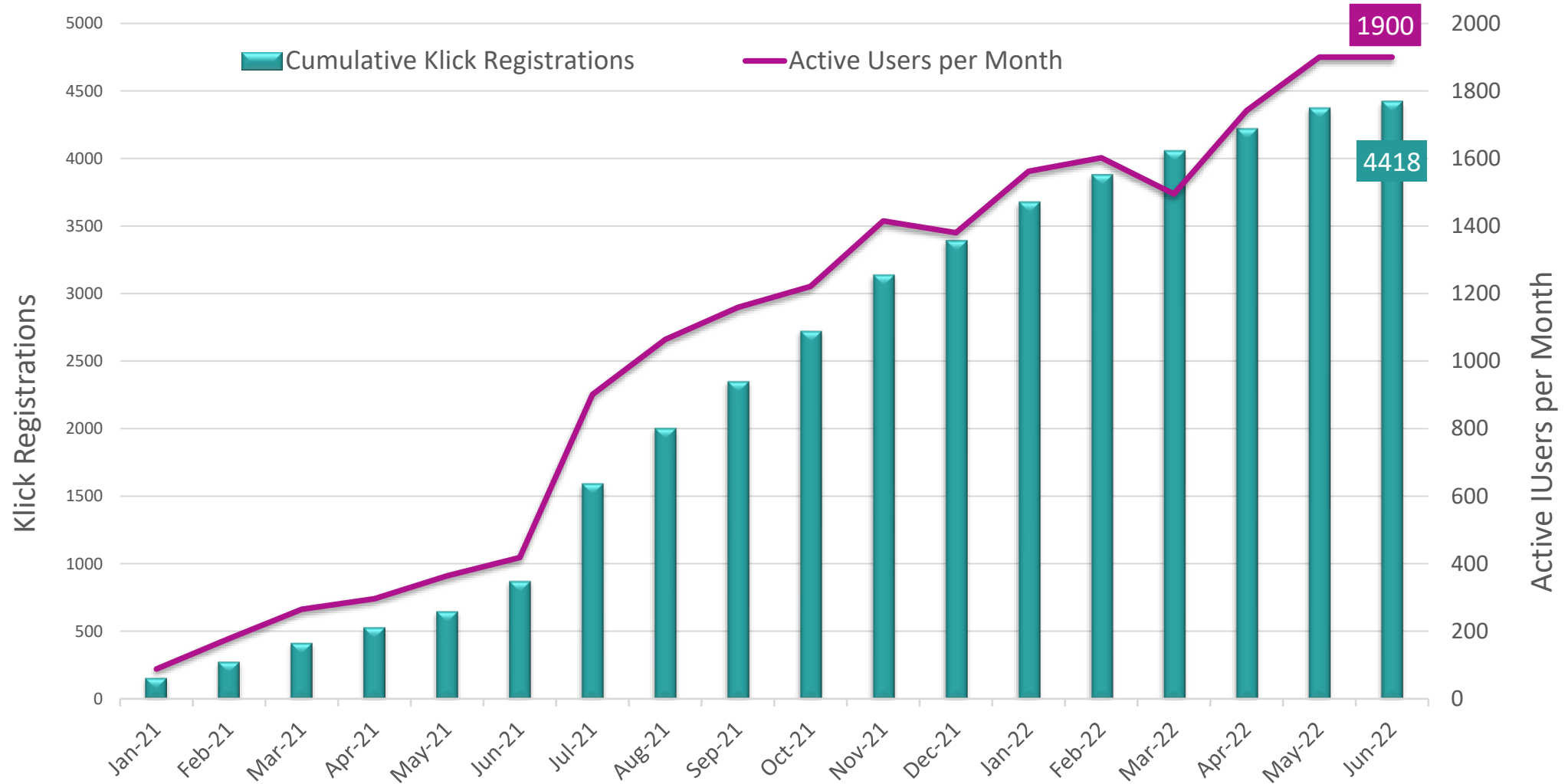
Professional Excellent Efficient convenient **Good** Happy
Easy

Quick Easy **Efficient** Better

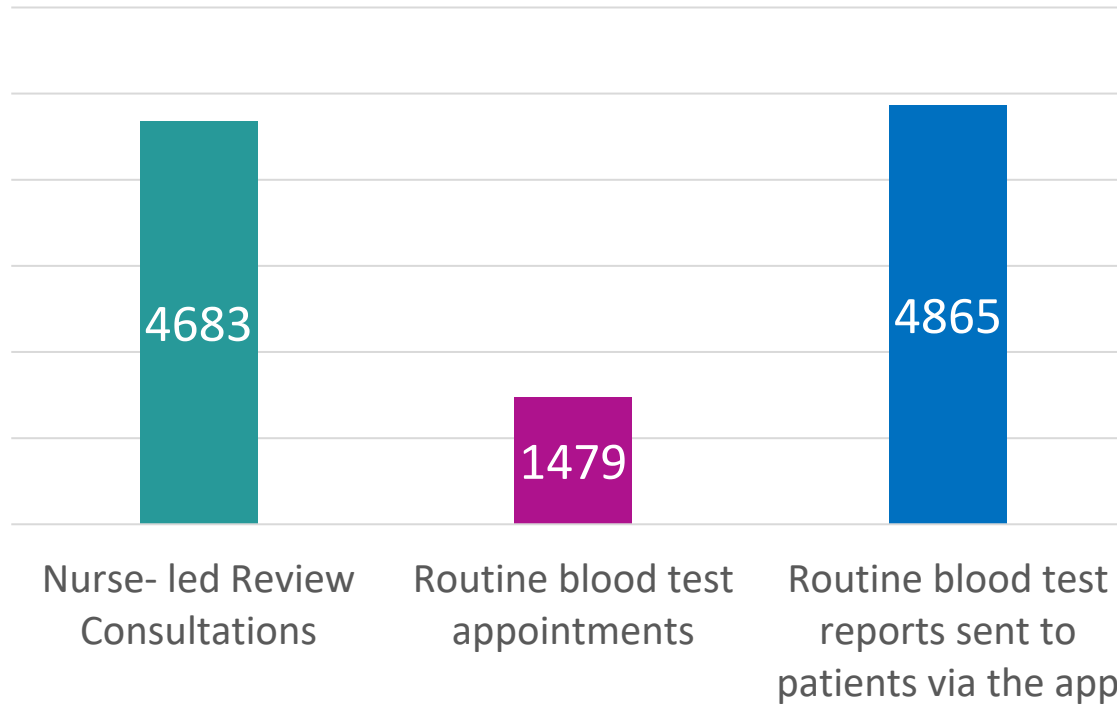
Convenient impersonal **Easy** results
Reassuring



Klick Registrations and Active Users per Month

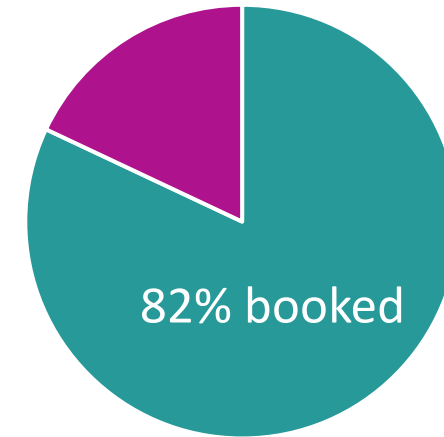


Appointments booked via Klick (from Aug 2020)

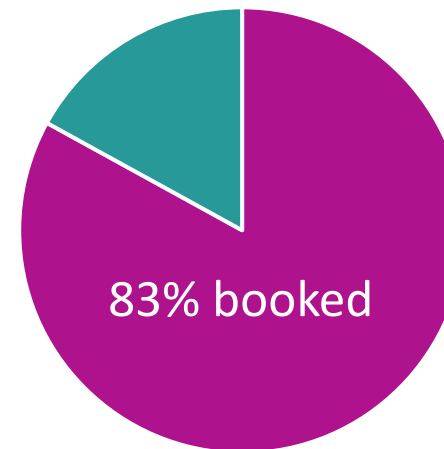


Klick demonstrated **84% reduction in DNA** rates compared to the mainstream Kobler clinic during the same period.

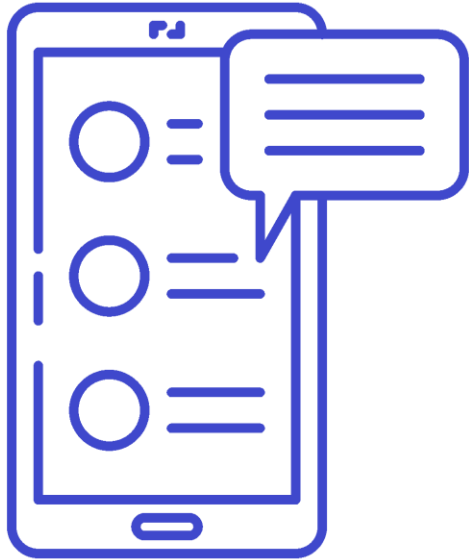
Slot Utilisation for Nurse Consultations (Apr-Jun 2022)



Slot Utilisation for Blood Test bookings (Apr-June 2022)



Evaluation



Online surveys x 2
via Survey Monkey



One-to-one
qualitative patient
interviews



Clinical audit using BHIVA
monitoring guideline

Patient Survey 2019

91%

Overall patient satisfaction

84%

Wanted to continue the same care pathway

93%
Technology

Were positive about technology playing a role in their care

Patients happy to have a routine consultation with a nurse instead of regular Dr/ANP

77%

96%

Felt their needs were fully/mostly met:

- Addressed medical needs
- Felt listened to
- Sufficient time to ask questions
- Info provided in an understandable format
- Felt fully involved in decisions about their care.

Patient Survey 2021

90%

Positive
experience
booking
appointments

70%

Patients use
multiple features
of app

77%

Klick superior or
more preferable
than previous
booking system

>80%

Rate all core
features as
extremely important
or important

Patients reported high satisfaction with the service overall

"Fast, efficient, convenient. Much better than being on telephone hold for 30-minutes. Frees up staff to do other things"

"Was a pretty seamless experience"

"Smart and confidential"

Patients felt in control

"I feel in control and empowered to take part in my care"

Patients appreciated user-focused technology

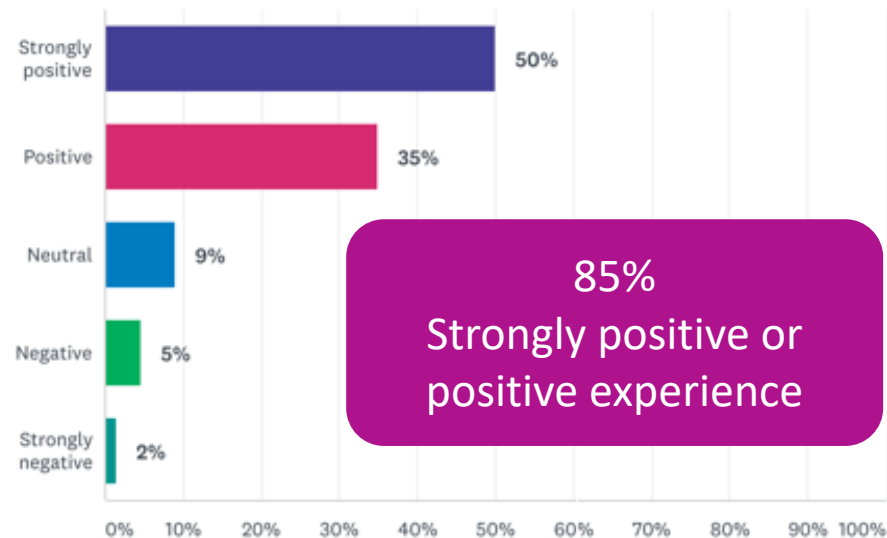
"Very user friendly application, focussing not only around healthcare professionals safety but most importantly focusing on patient quality of care"

Most patients wanted the option of virtual consultations

Patient Survey 2021 – Nurse-led Consultations

How would you rate your experience of the Annual Review consultation with an experienced nurse?

Answered: 85 Skipped: 23

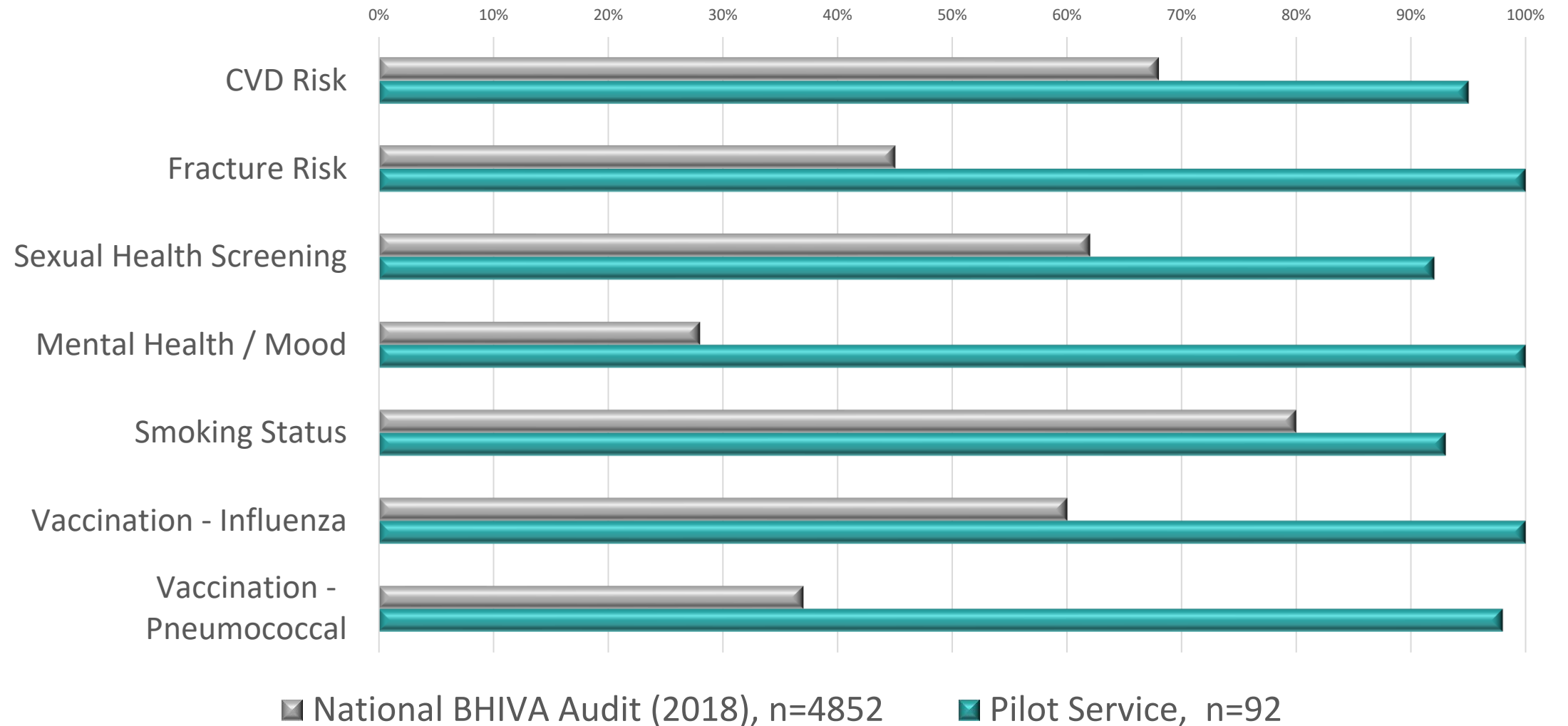


"There was plenty of time to go through each item and there was not the feeling of holding up a doctor from seeing another patient."

>50% felt the level of care provided by the nurse consultation was superior or preferable to the mainstream/historic service

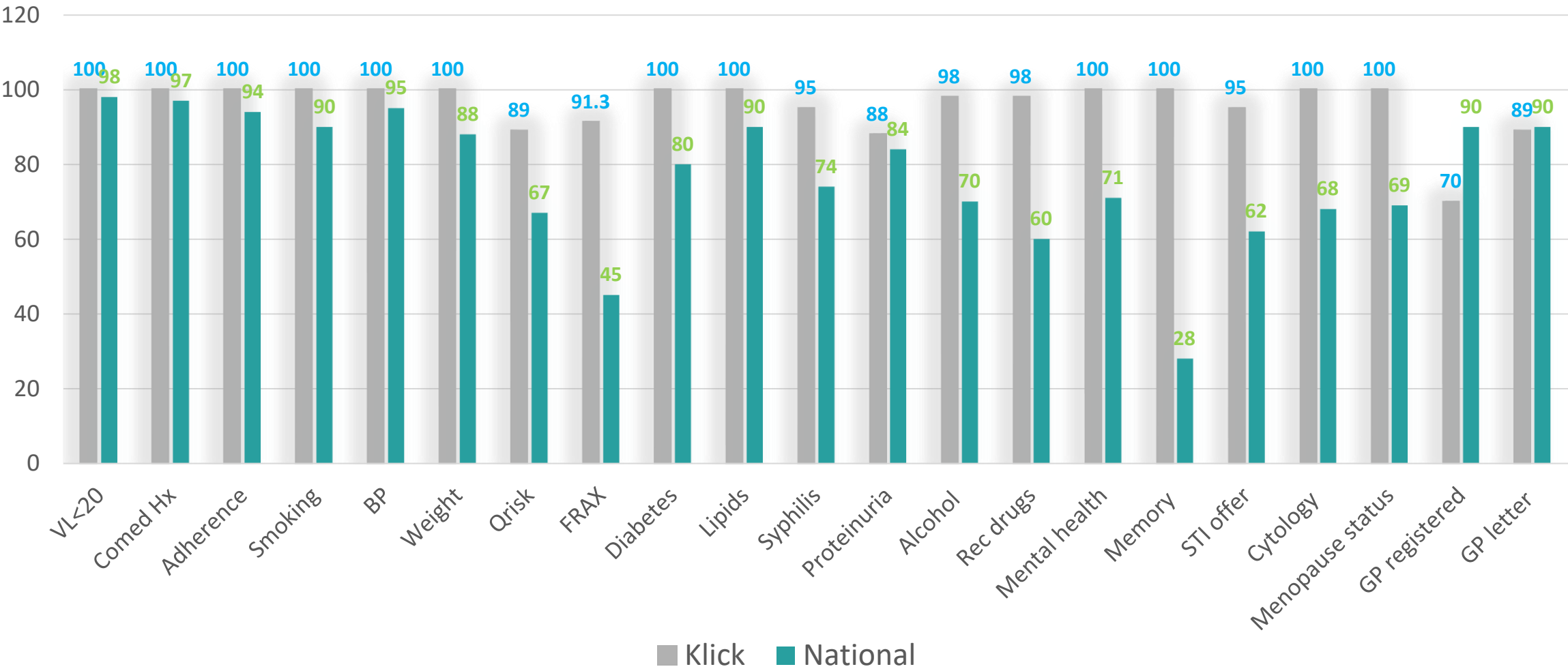
"I would be happy to have Annual Review consultation with Nurse, but wish to have this particular one with Consultant as I want to discuss changing treatment."

Clinical Audit - Comparing Klick Pilot to National BHIVA Audit (2018)





Clinical Audit 07-08/2022 compared to National BHIVA Audit (2018)





Challenges facing our outpatient services - did we address them?

QUALITY

Expanding complex cohort creating resource pressures; poor results governance; suboptimal BHIVA audit findings

Response: Klick releases consultant expertise to manage complexity; BHIVA audit standards met; improved results governance

MODEL OF CARE

Consultant delivered care; multiple IT systems housing requisite data; face to face consultations; limited nurse development opportunities

Response: Nurses manage stable cohort within consultant-led MDT; standardised AR medical proforma houses auditable requisite data; virtual consultations; STIF/NHIVNA certification

SUITABILITY OF SERVICE FOR PATIENTS

PLWH want convenient care that fits with their lifestyles; long waiting times for consultants or call centre; limited ability to inform service development

Response: PLWH have ownership over appointments and influence their consultations via PVQ; secure and verifiable communication portal with clinic; insights have informed future iterations





Developments (live in next three months)

Phased scale up: 10 HB, West Middlesex (Sexual Health Hounslow), Harlow, Watford and Stevenage

Content Library within app: trusted and supportive resources, clinical questionnaires, surveys

Injectable ARV appointments: aid adherence to strict requirements, “Book your appt” prompts, appt reminders

Bulk push notifications e.g. Monkeypox, service iterations

Fuller evaluation – 3rd survey, BHIVA audit, patient interviews

Emergency prescription requests for ARVs

More complex integration to enable offering other appointment types – eg specific clinician





Thanks to everyone who has contributed to Klick...

Kobler Clinic

Dr Sara Day
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Dr Ana Milinkovic
Dr Paul Holmes
Yodit Fissahaye-Yimer
Dr Ruth Byrne
Klick Nursing Team
Admin Support
Jamie Hardie

ViiV Healthcare Team

Thom Van Every and Christina Nesheva
Sangeeta Patil and Aaron Pond

56 Dean Street

Dr Alan McOwan
Joe Phillips
Alex Harvey
Klick Nursing Team
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Jon Clarke

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Special thanks to our patients who have embraced Klick



Special thanks

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