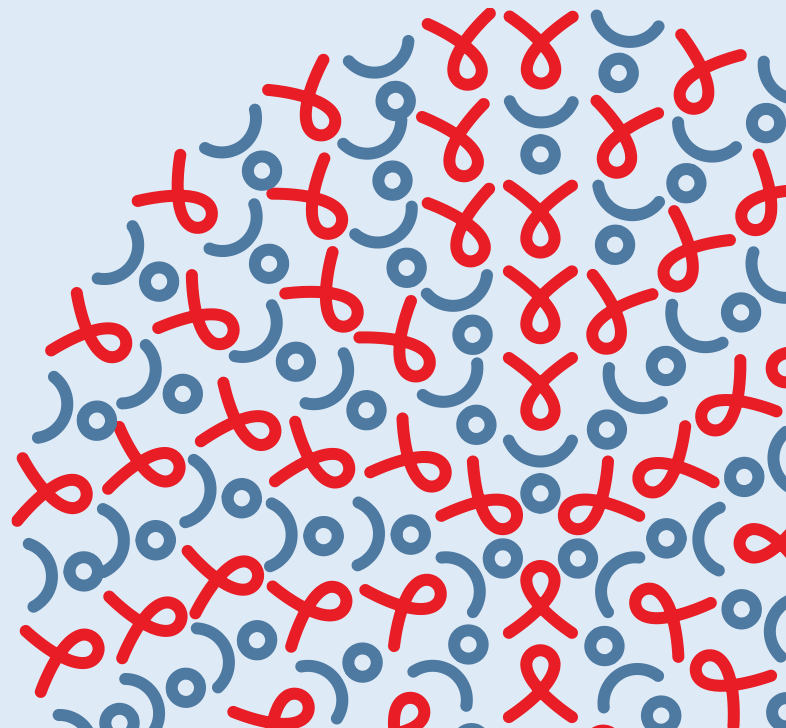


MEETING TARGETS AND MAINTAINING
EPIDEMIC CONTROL (EPIC) PROJECT

COOPERATIVE AGREEMENT NO.
7200AA19CA00002

QuickRes Technical Guide

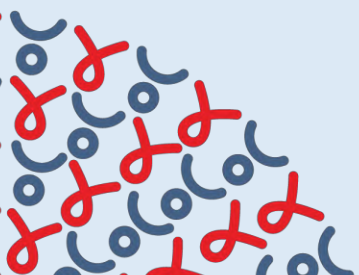
A GLOBAL ONLINE RESERVATION
AND CASE MANAGEMENT TOOL
FOR HIV PROGRAMS
JUNE 2020





EpiC. QuickRes technical guide: a global online reservation and case management tool for HIV programs. Durham (NC): FHI 360; 2020.

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Overview of QuickRes

QuickRes is an online application that allows any member of the public to easily make reservations for health services using a smartphone, tablet, or laptop. It builds on the existing [Online Reservation App \(ORA\)](#) software developed by FHI 360 used by several HIV programs in the Caribbean, Africa, and Asia. QuickRes also provides clinic and program staff with functions for clinic appointment management and reporting, and case management for HIV-related care. The key difference between QuickRes and earlier ORAs is that QuickRes shares functions across multiple countries and programs, and a new country can add their services and case managers to the portal. QuickRes allows programs to rapidly on board outreach, case management, and clinic staff to engage clients virtually. This multi-country platform can be used to mitigate COVID-19-related limitations on standard service delivery models.

Access QuickRes at <https://quickres.org>



Figure 1. Steps for users to (1) select country, (2) review terms and select “start,” and (3) view and select services available in their country

Functions

Outreach and sensitization

- Risk screening: Clients can take their own anonymous 10-question risk assessment online, which captures the required KP_PREV disaggregation. Outreach staff can also complete the assessment on the client's behalf by communicating questions to clients via chat or phone and entering their responses on QuickRes and taking a screenshot of the risk result page and sharing it back with them. The risk assessment alone is anonymous, however it is connected to their appointment booking record where some data is shared with case manager staff members such as a calculated HIV risk level and experience of violence.
- Tailored service recommendations: Clients who complete the risk assessment are shown one of 17 risk result pages with tailored service recommendations, prioritized service booking options, and a list of all other service booking options offered by clinics in the country.
- Violence screening and service linkage: Experience of violence within the last six months is a risk factor noted in the risk assessment. QuickRes flags all appointments if the linked risk assessment reported violence, which helps case managers identify and contact clients in need of post-violence services.
- Outreach microplanning: Client records may be assigned to outreach workers on QuickRes. Outreach staff can use their QuickRes login to view and manage their cohort to check the status of access to services, reschedule appointments, and follow up with clients and clinics to confirm arrival and reporting of services. Outreach staff may also view HIV risk results and violence reports and tailor their follow-up and service referrals with clients accordingly.

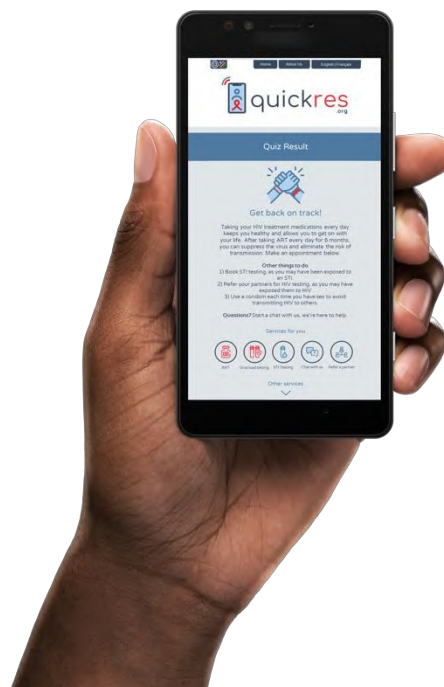


























Figure 2. Risk assessment result with tailored service recommendations

Referral

- **COVID-19 screening:** Standard three-question COVID-19 screening will limit clients with COVID-19 symptoms or possible exposure from booking services at physical clinics on QuickRes but will allow them to chat with program staff or book home-based services. A message for local information and services for COVID-19 is presented. Clients without COVID-19 risk can continue booking.
- **Book appointments for services:** Clients can choose and book from a range of health services (Table 1) at any facility or nonfacility distribution method that is added to QuickRes. Outreach staff or clinic staff may assist clients with booking or complete on the client's behalf. This serves as an e-referral so no paper or other referral method is required; clients receive an SMS with booking details and the clinic receives an email and new appointment record in clinic records when a staff member logs in to QuickRes.

- **Online peer referral:** Special links may be created with a “token” assigned to a certain outreach method (such as an individual outreach worker, online ads, influencer, or peer mobilizer). These links are shared online and, when clicked on, the QuickRes site opens and stores the token in the record so any future action is tagged with it. This feature can be used to implement the [enhanced peer outreach approach \(EPOA\)](#) online to track bookings and resulting HIV tests back to original promoters or mobilizers, and any resulting incentives can be calculated on that basis.
- **Online client-led anonymous partner notification:** Clients who book services can refer their partners for testing services through an anonymous SMS notification function on the QuickRes front-end. This function allows clients to specify if a partner should be notified about potential exposure to one or more various STIs, including HIV. After a client enters a partner’s phone number (up to five phone numbers), they can select the STIs to include in the notification, and then authorize the message to be sent from QuickRes to each of those phone numbers. Partners receive the SMS directly from QuickRes with a link to book for testing services on QuickRes. Embedded within the link is an anonymous code assigned to the referring client that gets stored in the referred clients’ appointment record on QuickRes. It tracks index-to-partner referrals and testing results, while remaining anonymous.

TABLE 1. Service booking options for clients on QuickRes

HIV	 HIV testing	 HIV self-testing	 Pre-exposure prophylaxis (PrEP)	 Post-exposure prophylaxis (PEP)	 HIV treatment (ART)	 Viral load testing
CO-INFECTIONS	 STI testing	 STI treatment	 Hep B	 Hep C	 TB	 Genital wart services
OTHER	 Hormonal therapy	 Post-violence services	 Family planning	 Home-based services	 Virtual consultations	 Opioid substitution therapy (OST)
	 Assess HIV risk	 Book any service	 Call me back	 Chat with us	 Refer a partner	 Return/retry

Pre-appointment support and screening

Outreach and clinic staff log in to QuickRes back-end to view client appointment records.

- **Pre-appointment support:** Outreach staff view only the clients assigned to them (e.g., if a client booked using a token assigned to the outreach staff member or the client was reassigned to them by an administrator). Outreach staff see when their clients' have upcoming appointments and contact them to provide reminders, help reschedule appointments, or even coordinate with the clinic to hand deliver services or commodities so clients need not physically go to the clinic.
- **Manage client flow:** Clinics set their individual hours and days available for online booking and set the duration of each appointment to manage client volume and flow.
- **Telemedicine:** Clinic staff view upcoming appointments booked at their clinic and can use QuickRes to contact clients before their appointments to pre-screen them for COVID-19 symptoms, provide telemedicine consultation where necessary, refer those who are sick to services, and confirm others who require facility-based care.
- **Client appointment management:** Clinics use QuickRes to manage all or part of the client load. If used for all clients, reception staff identify the client's appointment record on QuickRes and mark them as "arrived." For walk-ins or clients without an appointment record, clients are instructed to use their phone to book while waiting or reception staff add the booking on behalf of the client. If a program uses QuickRes to report clinical results, then it is recommended for all clients arriving at the clinic to be booked through QuickRes to ensure completeness of data. If QuickRes is used for some but not all clients, a protocol should be developed for those who book on QuickRes to notify or be asked by staff if they have an existing appointment so "arrived" can be indicated in their record.
- **Reassign appointments:** Clinic staff see upcoming appointments and edit the appointment card to select another clinic from the list available on QuickRes for that country. This allows clinics to shed an overload of appointments to other locations, such as a community pharmacy or distribution points. Staff at the reassigned clinic report services provided to the client during their appointment and then reassign the appointment back to the originating clinic primarily responsible for the client's care.

Clinic reporting

Through QuickRes, clinicians view clients who booked and arrived at their clinic and mark the specific services provided during their appointment, including:

- **HIV self-testing:** Enter the kit distribution method and screening result (one test per person and only for person who books appointment)
- **HIV testing:** Enter confirmed HIV test result
- **Co-infection screening and treatment:** Enter screening/test result for STI, hepatitis B, hepatitis C, tuberculosis (TB), and whether treatment was provided
- **PrEP:** Report the offer, initiation, restart, and refill of pre-exposure prophylaxis (PrEP)
- **ART:** Report the offer, initiation, restart, and refill of antiretroviral therapy (ART)
- **Index:** Offer three methods to the client for partner referral (provider-led, client-led anonymous, client-led not anonymous)

- **Viral load testing:** Report a blood draw for viral load testing and update with results as suppressed or unsuppressed
- **Family planning:** Report the provision of family planning counseling and uptake, change, or discontinuation of a range of family planning methods.
- **Other services:** Indicate referral or provision of other services such as post-exposure prophylaxis (PEP), gender-based violence (GBV), voluntary medical male circumcision (VMMC), opioid substitution therapy (OST), needle exchange, etc.
- **Your code:** Enter another unique ID for the client against their appointment, such as a national ID or unique identification code (UIC) that would allow QuickRes to be synced with another database for deduplication or data sharing (manually)

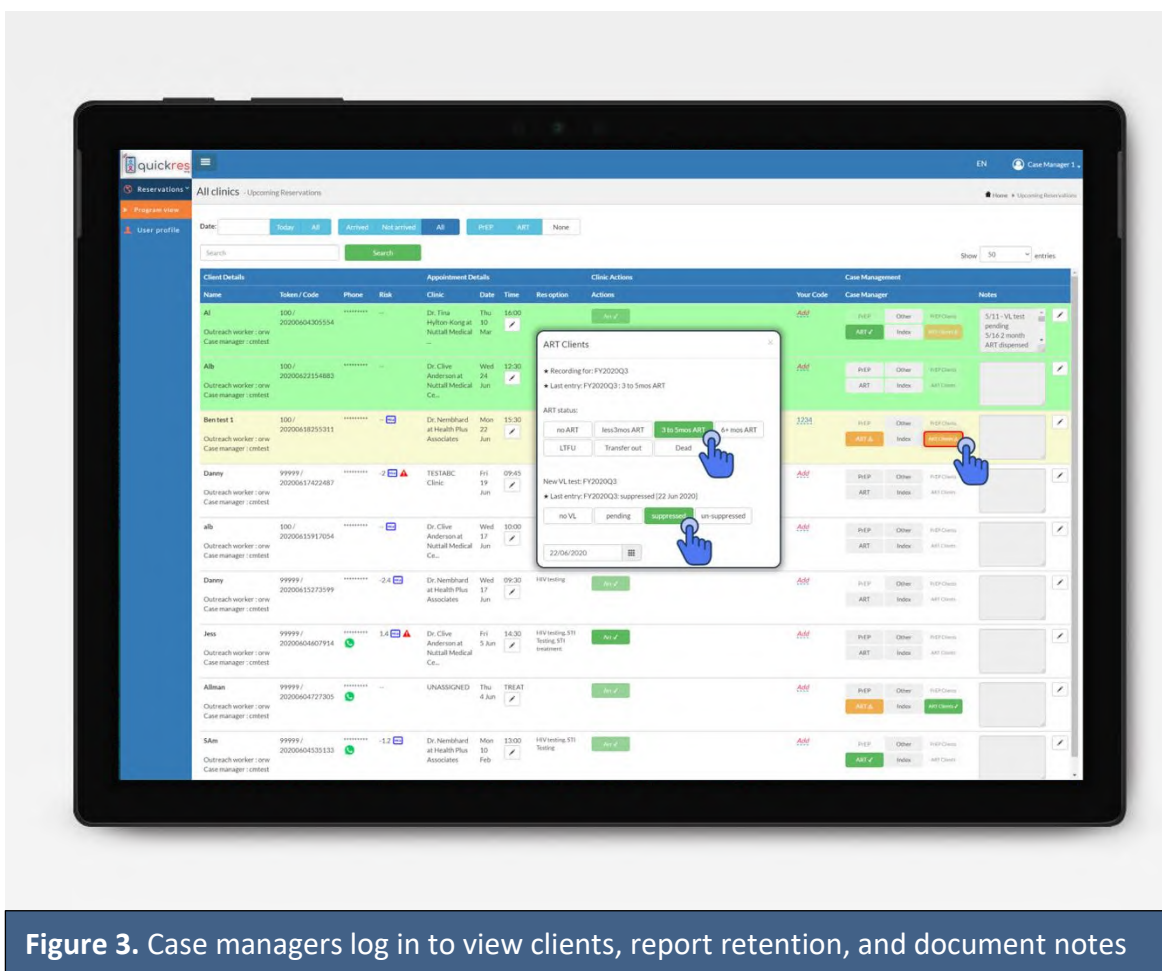


Figure 3. Case managers log in to view clients, report retention, and document notes

Case management

Case managers are assigned appointment records in QuickRes as determined by the token link used to make the original appointment, or cases may be reassigned to case managers by an administrator. Case managers log in to the back-end of QuickRes to view clients assigned to them and their phone numbers, so they may provide follow-up services. By default, managers can see only if their client arrived at the

clinic, not services provided and reported by the clinic. Therefore, managers may follow up with every client after they arrive at a clinic to see what their needs are and support linkage to a range of services. QuickRes has simple filters for case managers to see only their cohort of longitudinal records for clients initiated on PrEP or ART. Alternatively, they can use the search field “find all records” matching the client’s phone number to view recurring appointments for refills and amount of drugs dispensed, which helps determine a schedule for future appointments and provides a way to offer tailored adherence support. Case managers can edit the following set of buttons to suit each client:

- **PrEP:** Report the offer, initiation, restart, and refill of PrEP (this may be done as a follow-up to their original appointment and not marked by clinic staff)
- **ART:** Report the offer, initiation, restart, and refill of ART (this may be done as a follow-up to their original appointment and not marked by clinic staff)
- **Viral load:** Report a blood draw for viral load testing and update with results as suppressed or unsuppressed
- **Index:** Offer three methods to the client for partner referral (provider-led, client-led anonymous, client-led not anonymous)
- **Other services:** Programs can add several additional buttons to report on provision of other services such as PEP, OST, violence response services, etc.
- **Biannual PrEP status update:** Records on all clients initiated or restarted PrEP through the case manager can be updated on current PrEP use every six months.
- **Quarterly ART status update:** Records on all clients initiated or restarted on ART by the case manager can be updated on current ART use every three months, including most recent dispensation amount (MMD) and viral load test result.
- **Case notes:** Input complex case notes on longitudinal records to reference all support provided to clients, current status, and next steps (up to 1,500 characters).

Send SMS blasts to clients

QuickRes includes a feature for field staff to send SMS messages to particular groups of clients. They may share program updates such as new service options, changes to clinic hours, or new ART dispensing methods for PLHIV. Messages should be reviewed by social and behavior communication (SBC) experts to ensure information does not put recipients at risk and content is communicated clearly. The SMS function will automatically estimate the cost to send messages based on message length and number of recipients.

Program management and data analysis

- **Country-specific access:** QuickRes program managers and administrators have access only to their country’s data, not data from projects in other countries. An administrator login ID, appointment records, clinics, and outreach tokens are assigned to a specific country with separate data access.
- **Data visualization:** Field staff and backstops can view live dashboards in QuickRes including the HIV services cascade in various formats that can be segmented by partner, outreach approach, and

even individual outreach worker (based on a token). The entire database may be exported to Excel for further data analysis and reporting.

- **Data capture:** The following information may be stored in the QuickRes database: completed risk assessments including the calculated HIV/STI risk value, appointments booked, HIV tests conducted and results, HIV self-test kit distribution and results (limited to self-distribution only and one kit per appointment); client-to-peer or -partner referrals (with tracking from HIV-positive seed to referred clients' test results); offer, link, and initiation on ART and PrEP; biannual reporting of clients on PrEP, quarterly update of clients on ART, dispensing amount and viral load test results. These data captured on QuickRes can be cleaned, deduplicated, and disaggregated to report on several PEPFAR indicators mentioned in the [Monitoring, Evaluation, and Reporting \(MER\) indicator reference guide](#), particularly for outreach, testing, ART/PrEP initiation and retention, and viral load suppression. Using QuickRes as the basis for reporting PEPFAR or other custom indicators should be discussed with the HIV program's technical and strategic information/monitoring and evaluation teams. Programs should have a clear plan for when data from QuickRes is used (in combination with other data collection systems) to report service delivery results.

Data and Security

The features below help to ensure data security and client confidentiality, which are also reinforced by the privacy procedures followed by staff in QuickRes' ongoing management and administration.

- Secure web hosting by recognized, high-capacity cloud-host vendors who maintain infrastructure with the newest versions and security patches.
- Secure sockets layer (SSL) encryption on communication between the ORA server and clients to ensure data in transmission cannot be intercepted by bots, hackers, or malware.
- ORA application maintenance, such as using well-regarded open-source components, libraries, and software elements updated to newest versions and patches, helps avoid emerging vulnerabilities.
- Limited identifying information: clients are not asked to provide real names, addresses, or government IDs; however, clients' mobile numbers are required to provide follow-up services.
- Client data is secured through a staff interface that limits risks for exposure: hidden phone



numbers are accessed only temporarily by case managers, and the data export sheet replaces phone numbers with UICs (thereby removing all personally identifying information).

- Informed consent is obtained from clients before they use ORA; consent language explains in clear terms what data are collected, why they are collected, and how limited data may be shared securely with clinic staff and HIV program staff.
- Staff user guides are developed to outline user roles, and staff are trained in the crucial elements of protecting privacy and handling exported data responsibly.

Joining QuickRes

HIV programs and organizations can join QuickRes by receiving technical support from FHI 360. FHI 360 can help programs develop a rollout plan for joining QuickRes; support partners to add their clinics, service options, and users to QuickRes; provide training to end users; adapt standard operating procedures; and provide ongoing supportive supervision. Interested programs should consider the ideal cases, limitations, and necessary program and budget inputs related to joining QuickRes (see below). Contact us to explore QuickRes and see if it can work for your HIV program: GoingOnline@fhi360.org.

When to use QuickRes

Useful in these cases:	Less ideal in these cases:	Avoid in these cases:
<ul style="list-style-type: none"> ■ Private sector service delivery partnerships ■ New programs or civil society organization (CSO) partners without existing client tracking and reporting tools ■ Existing programs or CSOs wanting to shift from paper-based systems ■ A specific subsegment of beneficiaries or target audience (distinct or new reached online) 	<ul style="list-style-type: none"> ■ Use QuickRes for client tracking and management functions, but another system for official reporting (double entry) ■ Data collection on QuickRes needs to be integrated with government EMR or other systems ■ QuickRes data storage and ownership needs to be local ■ Partners want high customization of features and functions (should use their own ORA) 	<ul style="list-style-type: none"> ■ Electronic client management systems exist and do not limit program performance ■ Programs do not meet the standard requirements ■ Data sharing with government is mandatory or local ownership is required (should use its own ORA) ■ QuickRes data collection and use may put beneficiaries at risk

Limitations

QuickRes is a global platform shared by many countries and therefore several features and design aspects must be standardized. These limitations do not apply if a HIV project or organization would like to use their own Online Reservation App (ORA) platform hosted on their own server, which allows for custom functions and unique branding and website domain.

Some limitations for programs or organizations joining QuickRes include:

- Standardized risk assessment structure, risk calculation, and result page logic
- Standard set of available service and reporting options for clinics (clinics can edit which services they offer from the available list)
- Standard set of available case manager functions and reporting options
- Data hosted in a cloud server (not in-country)
- Limited to three back-end languages (e.g., English, French, Spanish), and two front-end languages (client-facing) per country
- Back-end users are assigned to a specific country, not a specific project. Therefore, multiple projects within a country will need to collaborate on data use and sharing (administrators see data across projects within a country)
- The website domain (<https://quickres.org>) and website design including logo and colors are standardized and cannot be changed. Only the home page welcome text can be modified per country.

Minimum requirements

- Clients have at least a basic phone (with number for SMS and voice calling). If clients have a smartphone and mobile data (or other device for accessing the web), they can assess their risk and book services themselves without assistance from outreach staff.
- Outreach workers and case managers have a simple phone to reach out to clients to coordinate bookings and follow up, which can be communicated to a central staff member to update on ORA. Ideally, outreach and case manager staff have their own smartphone or tablet with mobile data so they can log in to QuickRes and report results.
- Clinic staff are equipped with tablet or laptop with mobile data to report client arrivals and services provided (or case managers can be empowered to report on clinic's behalf).
- Budget for FHI 360 headquarters technical assistance for rollout and help with ongoing technology and developer fees (see details below).
- Data sharing and confidentiality agreement with FHI 360, the owner of the global QuickRes platform.

Budgeting

QuickRes is a custom built website based on the Online Reservation App (ORA) software developed by FHI 360. QuickRes does not have license fees, however HIV programs interested in joining QuickRes should consider the following estimated budget requirements:

- **Technical assistance:** Approximately 12 days of work (level of effort—LOE) for remote rollout support and drafting of standard operating procedures (SOPs) for using QuickRes, and approximately 15 days LOE for routine ORA implementation support for one year after rollout (approximately \$20,000 per country or program)
- **Technology costs:** Annual service contract with AD Systems Asia for routine service support and SMS bundle to send clients reminders via SMS (approximately \$1,400 per country or program)
- **Demand generation** (may be required if trying to reach new online audiences): Online marketing budget (ads/influencer promotions); contract with creative agency to develop marketing plan and creative assets (i.e., social media campaign)
- **Staff training and devices:** Additional training, supportive supervision, and tool development on use of ORA and conducting appropriate online HIV outreach and case management; purchase new devices (e.g., smartphones, tablets) and airtime/mobile data for staff to connect with clients
- **Local support:** Consultant(s) or staff time to coordinate field program input and review/translate QuickRes website text and SOPs

Contracting FHI 360 to use QuickRes

HIV programs may engage FHI 360 for technical assistance to join and use QuickRes through any of the methods below:

- A USAID mission can buy in to the EpiC project or request FHI 360 to provide technical assistance through an existing global or bilateral project implemented by FHI 360.
- Other organizations interested in technical assistance from FHI 360 should contact: GoingOnline@fhi360.org.