

# IMAP Statement on DHI for SRHR

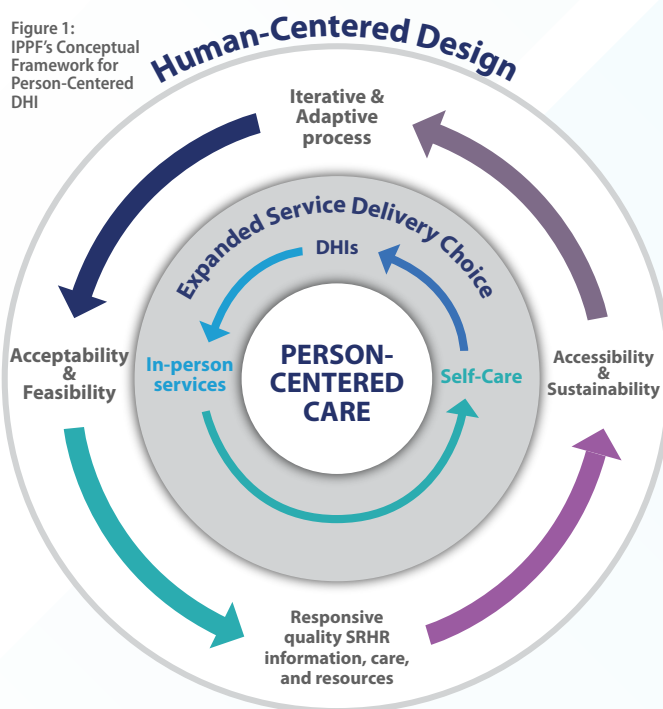
## Introduction

*This statement has been prepared by the International Medical Advisory Panel (IMAP) and was approved in August, 2022.*

According to the World Health Organization, digital health is a broad term for digital technologies<sup>1</sup> that are used to support health and health-related fields. (1) For the purpose of this statement, we will focus on Digital Health Interventions (DHIs) that facilitate provision of/ access to Sexual and Reproductive Health (SRH) services and information.

Evidence shows that DHIs can increase awareness of SRH information and services, facilitate access to in-person and virtual services, and support various self-care practices. While the COVID-19 pandemic accelerated the use of DHIs in SRH care globally, these are becoming part of the spectrum of SRH service delivery options, complementary to in-person and self-care options.

This statement addresses the key attributes for DHIs to provide safe, quality, accessible person-centered care, and to ultimately fulfill clients' including women and girls<sup>2</sup> right to access SRH care when, where, and how they choose to.



<sup>1</sup> It encompasses information and communications technology (eHealth), mobile wireless technologies (mHealth), electronic health records, telemedicine, wearable devices, robotics, and artificial intelligence. (1) The target user can be clients, service providers, health system/resource managers, and/or data services. (2)

<sup>2</sup> This document is inclusive of women and girls and all people who can become pregnant, including intersex, transgender and gender diverse individuals. For the purposes of this document, references to "women and girls" refer to all people who have the capacity to become pregnant.

## Person-centered DHIs

### Human-Centered Design

Human-centered design (HCD) combines innovative solutions with research on the needs of end-users and their context, and creates an implementation strategy that is person-centered, rights-based, contextualized and empathy-focused. HCD considers the lived experiences of clients, the biases of health providers and systemic challenges that may impact client-centered care. (3) This can lead to clients feeling more trust and safety with their DHI journey and the healthcare setting. HCD incorporates the client's perspective throughout design, development, implementation, monitoring and evaluation, and sustainability planning to ensure that interventions are accessible, acceptable, feasible and sustainable. (4) Various free practical resources are available to apply the HCD methodology for DHI design and implementation (Annex 1)

### Expanded Service Delivery Choice

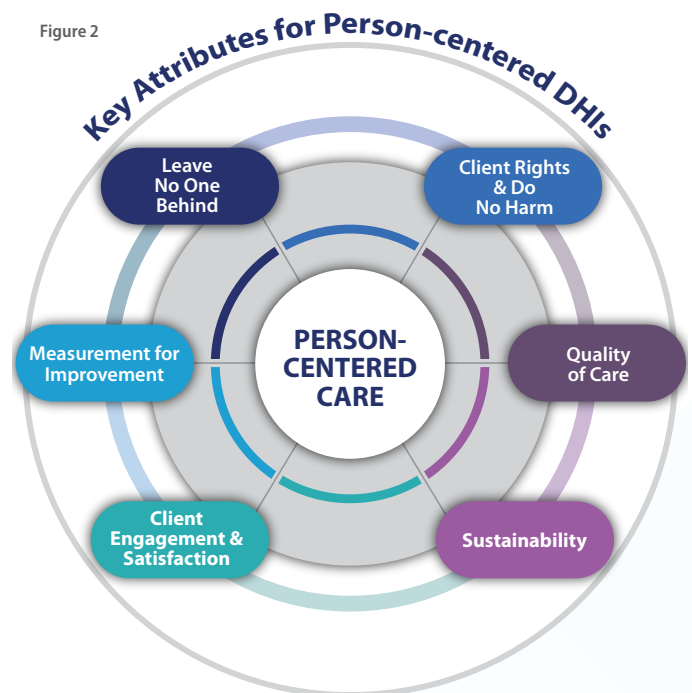
Integrating DHIs across health promotion activities, in-person care, and self-care approaches, as part of a comprehensive hybrid service delivery model increases accessibility to SRH information and services while providing clients with expanded service delivery options to best meet their SRHR needs and goals. With the availability of low cost and effective technologies, more people are managing multiple aspects of their health through digital platforms, including for SRH care such as pregnancy support, menstrual tracking, and choosing methods of contraception and abortion.

Digital health for SRH self-care provides an opportunity for quality care that does not require clients to go to a clinic to have in-person care. This is particularly helpful for people who live in remote and hard to reach areas and/or for stigmatized services such as abortion where

clients may want to avoid attending a clinic for services. (17)

Digital interventions can bridge gaps between formal and community-based models of SRH service delivery. (18) They offer unique benefits such as accessibility, privacy, anonymity, linkages to the health system and opportunities for continuous programme monitoring and evaluation. (10)

Figure 2



### Key Attributes for Person-Centered DHIs

There are six key attributes<sup>3</sup> for ensuring accessible, acceptable, feasible and sustainable person-centered DHIs:

#### 1. Leave no one behind

Digital technology can increase accessibility of SRH information and services; however, it can also exacerbate inequities in access for populations with less access to digital devices and the internet including women, people with low literacy, and those living in rural, remote or crises-affected areas. (19) To mitigate the

<sup>3</sup> Refer to Annex 2 for a checklist for each key attribute.

potential for digital exclusion, marginalized and hard-to-reach groups should be included in human-centered design and implementation of DHIs. Integrating DHIs with in-person and community-based approaches will further mitigate the risk of excluding these groups.

In addition, low literacy can affect clients' ability to find relevant information and services through the DHI. Hotlines and voice-based DHIs are formats that are more accessible to low-literacy clients. (19) Including gender-inclusive language and content, being context-specific and adding accessibility features respect the rights of users and improves inclusivity for other marginalized groups such as the LGBTQ+ community, those with disabilities, and indigenous populations.

Digital literacy can be a barrier to DHI access and usage for both the client and the provider. Both need to have the technical skills to operate a digital device and the app/platform. Therefore, both the client and the provider should contribute to the design and user-testing of the DHI, and providers should be trained on how to support users.

## 2. Client Rights and Do No Harm

Greater awareness around data protection and rights is needed to better inform policy makers, practitioners, and clients on ensuring digital privacy. Currently there is no comprehensive global set of principles to guide the governance of health data across health systems and policies. In response, Transform Health launched their [Health Data Governance Principles](#) which are clustered around three key objectives: protect people, promote health value, and prioritize equity. (22) These principles can guide providers' DHI cybersecurity and safeguarding policies and protocols. Important data security considerations include protecting the client's personal data, addressing sensitivities around SRH content, understanding the national laws/regulations on data protection, including a privacy policy and terms and conditions during DHI onboarding,

and implementing security best practices and protocols for virtual providers. (6)

## 3. Quality of Care

Person-centered care is at the core of IPPF's approach to Quality of Care (QoC). Clients have the right to receive quality healthcare and to choose the type of care that meets their needs, preferences, and lived experiences. Established QoC standards for in-person services should be applied to DHIs by adapting them to reflect the realities of various out-of-clinic scenarios.

Adaptation considerations for ensuring QoC in DHIs include privacy and security for the user and provider (discussed below), establishing trust in the remote provider-client relationship, and providing counseling virtually without visual aids. HCD can be used to elicit client preferences for establishing and maintaining trust with providers, and to understand the challenges providers face in meeting similar QoC standards virtually as in-person. QoC standards and protocols need to be adapted to reflect these findings and additional training of providers is required.

The Digital Adaptation Kits (DAK) created by WHO support DHI implementers in systematically applying clinical, public health, and data recommendations and guidelines within digital systems. (21) Applying them to DHI design and implementation can promote content standardization and technical interoperability within a country's digital ecosystem, leading to improved quality of care, and further support DHI sustainability.

## 4. Sustainability

DHIs often fail to reach scale/sustainability due to limited internal capacity for digital development, lack of a viable business model, or reliance on short-term funding. Sustainability needs, therefore, should be considered from the start and throughout the project lifecycle when considering whether a DHI will achieve the project's goals. (6)

Strategic partnerships can be leveraged to sustain and scale the DHIs. (6, 35) For example, partnering with other established digital health organizations and leveraging their referral networks can be cost-effective and amplify impact. Alignment with health systems strengthening efforts promotes integration by national health systems as well as sustainability and population-wide application. Understanding and navigating telemedicine regulations, for example, can be an insurmountable challenge for implementing telehealth DHIs. Partnering with government ministries and the private IT sector can help to overcome regulatory barriers and ensure compliance with local regulations. Partnering with the Ministry of Education to integrate the DHIs into the curriculum is strategic for sustainability and scale-up of Comprehensive Sexuality Education (CSE) DHIs. Partnering with Internet Service Providers (ISP) and Mobile Network Operators (MNO) can provide opportunities to expand access and reduce costs associated with hosting DHIs as well as client access to DHI services. (35)

Many SRH digital tools are already developed and available on the market as digital public goods. (49) Using existing tools can save on design and development costs. It is important, however, to recognize the limitations of these tools as they still need to be adapted to the context for which they are intended. (36) Research 4 Scalable Solutions conducted a content analysis of various family planning digital platforms highlighting key findings related to the content areas and offer a list of tools recommended for adoption or adaptation. (37)

More research and evidence are needed to understand the cost-effectiveness and sustainability of person-centered SRH DHIs. Ideally an impact evaluation should be conducted prior to scaling a DHI. Given financial and resource constraints, however, it is helpful to start by including sustainability indicators within the M&E plan and reviewing them against the DHI's goals and mission over time.

### 5. Client Engagement and Satisfaction

Measuring the direct effect of DHIs on SRH service uptake can be challenging to implement. Very few SRH DHI studies have made the connection between increased knowledge/awareness and increased access to SRH services. What studies have demonstrated, however, is that an interactive component to mobile phone-based interventions (e.g. quizzes, personalized call-back/sms reminders) increased client-engagement and ultimately increased access to SRH services. (30, 23, 29) Insights from the for-profit digital industry show that customer engagement is related to overall profitability, as engaged users are more likely to buy, become repeat customers, and share the product/service with others. (32)

Client engagement with the DHI can be measured and interpreted alongside health and process outcomes to understand the relationship between DHI engagement and SRH access. (33) Harmonization of engagement metrics across SRHR stakeholders can further inform best practices on measuring DHI outcomes and impact. (31) Engagement metrics include quantitative analytic data from websites/apps and surveys. Commonly used key performance indicators (KPIs) to assess DHI engagement include:

- websites/apps: # of users, # of new vs returning users, # of pageviews, # of pages per session, average session duration, and bounce rate.
- social media: # of impressions, # of likes, # of followers, # of conversions.
- SMS: interaction rate, unsubscribe rate, conversion rate
- call/chat centers: net promoter score

Comprehensive lists of KPIs across platforms are given in [Annex 4](#).

Applying HCD and engaging the clients in the design and implementation of the DHI will ensure that they are satisfied and comfortable

using the DHI because it is tailored to their needs and context. (19) Client feedback should be considered on an ongoing basis to assess quality of care and to continuously make improvements to the DHI. Quality of experience and client satisfaction can be measured and evaluated using client surveys, exit interviews, and net-promoter scores (client's willingness to promote this service among peers).

## 6. Measurement for Improvement

There is a lack of consensus among global experts on how to evaluate DHIs and measure their effectiveness. A DHI theory of change can help to identify KPIs. For hybrid models, KPIs need to be aligned across the various access/care points and data collection should be coordinated between the DHI and the service delivery point in order to assess the impact of the DHI on increasing SRH service uptake (in-person, virtually, and/or through self-care practices). Following these KPIs through the full client journey can help identify challenges and barriers at the different access and care points, and then inform DHI adaptation and iteration to improve the client experience. Refer to [Annex 3](#) for DHI monitoring and evaluation resources and [Annex 4](#) for examples of DHI SRH outcomes and tools.

## Recommendations.

- Human-centered design should be applied to development of DHIs within a hybrid model of care to address the needs of underserved populations.
- Quality of Care standards and approaches need to be adapted to address digital, in-person, and self-care aspects. DHI design and content should be aligned with evidence-based guidelines.
- Cybersecurity and safeguarding experts<sup>4</sup> should guide the development of context specific DHI policies and protocols for ensuring privacy, protection and confidentiality of

clients and providers.

- Data should be collected and used to evaluate whether the DHI is supporting clients to access SRH information and services, and to inform changes to improve the DHI. Identifying KPIs across the hybrid model allows measurement of the impact of DHI on service uptake.
- Collect qualitative information from DHI users to understand how people are engaging with the DHI and the quality of their experience.
- A viable business model for the DHI needs to be in place before embarking on development of an effective model.
- Establish strategic partnerships in both the public and private sectors to ensure sustainability.

## Conclusion

During the COVID-19 pandemic, digital technology increased access to SRH information and services. In the post-COVID era, there is great potential for SRH DHIs. to deliver truly person-centered care and to provide clients with a full range of access through hybrid models of care that integrate digital, in-person and self-care approaches.

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<sup>4</sup> Examples of organizations that provide cybersecurity and safeguarding expertise and consultation support for SRHR activities include: [Técnicas Rudas](#) (38), [Digital Defense Fund](#) (39)



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### Who we are

The International Planned Parenthood Federation (IPPF) is a global service provider and a leading advocate of sexual and reproductive health and rights for all. We are a worldwide movement of national organizations working with and for communities and individuals

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## Annex 1: Applying the Human-Centered Design Approach

There are many free practical resources to apply the HCD methodology which include how to conduct: 1. user-centered research, 2. stakeholder mapping and analysis, 3. co-creation workshops, 4. design thinking, 5. developing and

mapping user personas prototyping, 6. user-testing/validation activities, 7. implementation, and 8. monitoring and evaluation. It is important to review these toolkits to understand the time and resources required to ensure a person-centered approach to the design and implementation of DHIs.



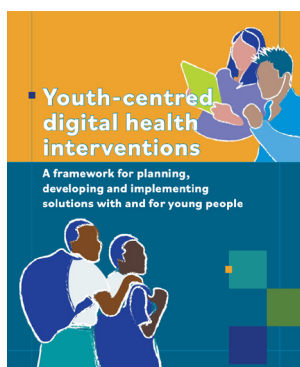
IPPF: Using Digital Health Interventions to Increase Access to Abortion and Contraception Services [\(7\)](#)



[Ideo.org](#): IDEO.org is a nonprofit design studio that designs products and services alongside organizations that are committed to creating a more just and inclusive world. [\(5\)](#)



[UNICEF: Designing Digital Interventions for Lasting Impact - A Human-Centred Guide to Digital Health Deployments](#) [\(3\)](#)



[WHO/UNFPA: Youth-Centered Digital Health Interventions - A framework for planning, developing and implementing solutions with and for young people](#) [\(8\)](#)



[Principles for Digital Development](#) [\(6\)](#)



[GSMA + Frog: mHealth Design Toolkit \(9\)](#)



[Self-Care Trailblazer Group. Digital Self Care; A Framework for Design, Implementation & Evaluation \(10\)](#)

## Annex 2: Checklist for DHI Attributes

### Leave No One Behind

Mitigate DHI exclusion:

- ☐ Use HCD to include the needs of potentially excluded groups
- ☐ Complement DHIs with in-person and community-based approaches to ensure communities and demographics are not excluded
- ☐ Consider digital literacy of client (i.e. using hotlines and or interactive voice response) and provider (i.e. provide trainings)
- ☐ Include gender inclusive language and content
- ☐ Address socio-cultural differences within the DHI e.g. indigenous beliefs and customs
- ☐ Address digital accessibility for those with disabilities

### Quality of Care

- ☐ Ensure highest quality of care (QoC) across the DHI hybrid delivery model
- ☐ Apply QoC standards for in-person services to DHIs
  - ☐ Adapt them using HCD to reflect the realities of out-of-clinic delivery
- ☐ Wherever possible, refer to evidence-based guidelines, papers, reports to inform the content and design of DHIs.
- ☐ Ensure quality of experience is a core component of QoC standards and QoC outcomes being measured

### Client Rights and Do No Harm

- ☐ Understand the national laws/regulations on data protection
- ☐ Privacy and data protection considerations:
  - ☐ Privacy policy and Terms and Conditions in the DHI
  - ☐ Security PIN option for user
  - ☐ How data is acquired (consent), used, stored, and shared - collect the minimal information required
  - ☐ Ask for consent to contact client (e.g. shared mobile phones)
  - ☐ Provide education materials to clients on how to protect themselves from potential breaches (e.g. use a free VPN when accessing the DHI, delete apps when not in use, etc)
- ☐ Safeguarding considerations:
  - ☐ Providers can use a VPN when using the DHI to communicate with clients
  - ☐ Set up 2-factor authentication to access shared platforms with client information
  - ☐ Have appropriate incident reporting and safeguarding protocols in place to protect providers and clients.
- ☐ Consult with cybersecurity and safeguarding experts to ensure policies and practices are robust

### Measurement for Improvement

- ☐ Create a monitoring and evaluation plan from the start alongside the DHI's theory of change
- ☐ Include health outcomes (i.e. changes in health seeking behavior), process outcomes (i.e. number of services provided), engagement outcomes (i.e. client satisfaction and referral), and quality of care outcomes (i.e. Clients understand the information provided.)
- ☐ Coordinate all data collected at various points in the hybrid model (DHI, referrals, services accessed at referral points) and integrate it into one database for cross-evaluation
- ☐ Identify Key Performance Indicators (KPIs) - discuss with all partners/stakeholders involved so that they align with their goals
- ☐ Report regularly on KPIs (monthly or quarterly):
  - ☐ For providers to take adaptive data-driven decisions to improve quality of care and address accessibility issues
  - ☐ To showcase how the DHI delivers value to all stakeholders, and thus encourage them to continue supporting and sustaining the initiative.
- ☐ Include a cost evaluation to assess cost-benefit of DHI

### Client Engagement and Satisfaction

- ☐ Ensure quality of experience as an integral part of QoC standards and outcomes being measured
- ☐ Include DHI engagement metrics (e.g. analytics data from websites/apps)
- ☐ Include ongoing client-feedback to assess acceptability and satisfaction (e.g. usability tests, exit interviews, satisfaction/net promoter score surveys)
- ☐ Iterate the DHIs based on DHI engagement metrics and client feedback
- ☐ Diversify outreach strategies to increase engagement from different clients (both new and existing clients)

### Sustainability

- ☐ Establish strategic partnerships with public and private sector stakeholders to decrease costs and increase reach
- ☐ Reuse and build on existing DHIs where possible
  - ☐ Need to factor in the time and cost of adapting DHI to the specific context using HCD
- ☐ Identify and implement a sustainable business model (i.e. charge clients, health insurance, cost-sharing with partner orgs)
- ☐ Understand the costs associated with the design, development, implementation, promotion, and maintenance of the DHIs
- ☐ Forecast a budget for DHI with DHI specific resources needed: e.g. HCD activities, design, development, outreach/marketing, cybersecurity experts, implementation, and maintenance
- ☐ Include sustainability indicators in M&E plan (i.e. to conduct a cost analysis)
- ☐ Collaborate, and share

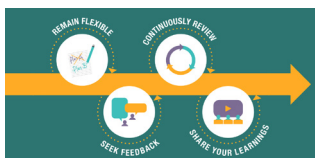
## Annex 3: Monitoring and Evaluation Resources (48)

In order to measure DHIs effectiveness, it is crucial to have a robust M&E framework and

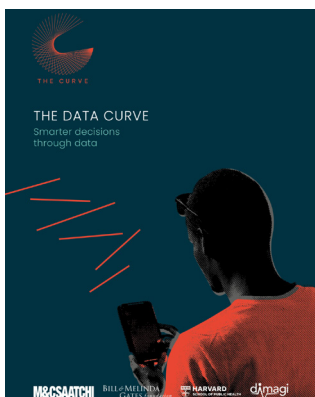
plan in place from the outset. Here are various resources that provide guidance on how to be data-driven and use the data to drive impact.



[Principles for Digital Development - Be Data Driven \(6\)](#)



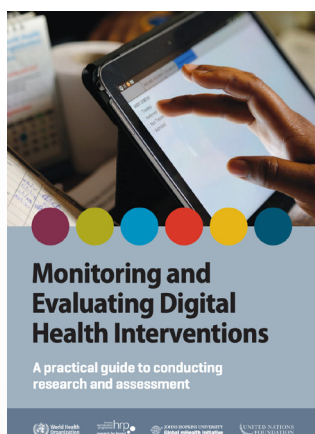
[ODI - Monitoring and Evaluation: 5 reality checks for adaptive management \(40\)](#)



[The Curve - Smarter decisions through data \(41\)](#)



[GSMA - Creating Mobile Health Solutions for Behaviour change \(35\)](#)



[WHO - Monitoring and evaluating digital health interventions \(48\)](#)



## Annex 4: Example outcome measures and tools from SRHR DHIs studies

### Outcomes for behavior change through mobile phone apps [\(42\)](#)

- Self-efficacy (using a validated scale such as the Rosenberg self-esteem scale)
- Psychosocial outcomes such as depression and anxiety (using a validated tool, e.g. Cambridge Worry Scale, State-Trait Anxiety Index, or Edinburgh Depression Scale)
- General health (using standardized measure such as a general health assessment tool)
- Knowledge of targeted intervention topic
- Evaluation of the intervention (as reported by the trial authors, e.g. adherence lifestyle recommendations)
- Health service utilization (e.g. outpatient clinic appointment for management of health or lifestyle, interaction with health service program, interaction with GP services, use of inpatient services or length of stay in hospital)

### Example Abortion Telemedicine Outcomes (from protocol for Cochrane systematic review) [\(43\)](#)

This Cochrane review will assess the safety, success rate, and acceptability of medical abortion care provided through Telemedicine (TM), either as the sole approach or with TM as a component of the abortion care process, as compared to inperson abortion care. In practice, providers should align their in-person abortion service outputs and quality of care outcomes with those for DHI abortion services, in order to assess effectiveness, safety and acceptability of DHI vs gold standard of in-person abortion care.

#### Primary outcomes

- Success rate outcomes
  - complete abortion defined as a terminated pregnancy without the need for additional medication and/or surgical intervention to complete the abortion within 42 days of the abortion start
- Safety outcomes
  - blood transfusion for reasons related to the abortion within 42 days of the abortion
  - hospitalisation for reasons related to the abortion within 42 days of the abortion
- Acceptability for women
  - satisfaction with the TM abortion service (unlimited timeframe for outcome measurement)

## Secondary outcomes

- Success rate, safety or acceptability
  - mortality for reasons related to the abortion within 42 days of the abortion
  - emergency visits to the hospital for reasons related to the abortion within 2 days of the abortion
  - continuing viable pregnancy after intake of abortion medication
  - experiences of severe pain
  - experience of heavy bleeding (defined as soaking more than two maxi pads per hour for more than two consecutive hours or equivalent definition) during the abortion process
  - met expectations of medical abortion through TM (unlimited timeframe)
  - preference for TM over in-person care (unlimited timeframe)
- Adherence
  - rate of adherence to recommended dose regimen (self-reported correct dose and timing intake of recommended abortion medication)

## Targeted Client Communication via Mobile Devices Outcomes [\(23\)](#)

### Primary Outcomes

#### Health behavior change:

- STI/HIV prevention:
  - Condom use
  - Partner communication - safer sex practices (self-reported)
- STI/HIV treatment:
  - Adherence to antiretroviral therapy (ART) (e.g. pill count, prescription data)
  - Adherence to correct treatment for treatable STIs
  - Partner communication - disclosure
- Contraception/family planning:
  - Use of modern method of contraception
  - Contraceptive adherence (self-report and objectively measured)
  - Partner communication – fertility intentions (self-report)
- Pre-conception care:
  - Folic acid (objective and self-report measures)
- Partner violence:
  - Reporting of experience of violence (sexual, physical, emotional) to a health professional

### Service utilization:

- STI/HIV prevention/treatment:
  - Clinic attendance for testing
  - Clinic attendance for treatment (objective and self-report measures)
- Contraception/family planning
  - Clinic attendance for contraception
  - Clinic attendance abortion
  - Clinic attendance for pregnancy testing
  - Clinic attendance for management of abortion complications (objective and self-report measure)
- HPV vaccination:
  - Receipt of HPV vaccination (objective and self-report measures)
- Cervical screening:
  - Clinic attendance for cervical screening (objective and self-report measures)
- Pre-conception care
  - Clinic attendance for pre-conception care (objective and self-report measures)
- Partner violence:
  - Use of services designed for those who have experienced partner violence

### Health status and well being:

- STI/HIV prevention:
  - STI (any) status
  - HIV status (objective and self-reported measures)
- STI/HIV treatment:
  - CD4 count
  - Viral load
  - Cured (for curable STI) (objective and self-reported measures)
- Contraception/family planning:
  - Pregnancy (e.g. conception rate)
  - Abortion (e.g. abortion rate)
  - Unsafe abortion (e.g. hospitalisation due to complications)
  - Experience of infertility (e.g. failure to get pregnant aPer 12 months of trying) (objective and self-report measures)
- Partner violence:
  - Sexual violence
  - Physical violence
  - Emotional violence (objective e.g. hospital admissions and self-report measures)
- Well-being:
  - Validated measures of health-related quality of life
  - Psychological health related to experience of abuse (e.g. depression, anxiety, post-traumatic stress disorder (PTSD))

### **For adolescent populations only:**

- Any measure of knowledge or attitudes relating to the following:
  - STI prevention and/or treatment
  - Contraception/family planning
  - Cervical cancer screening
  - Sexual violence
  - HPV vaccination
  - Puberty

### **Secondary Outcomes**

- Experience:
  - Patient/client acceptability and satisfaction with the intervention (among those who received the intervention)
- Sustainability:
  - Resource use, including cost to the system (e.g. human resources, time, supplies and equipment)

## Annex 5: Common user engagement KPIs for DHIs success

Websites/Apps Analytics <a href="#">(32)</a>	
# of Users, Pageviews and Sessions:	<ul style="list-style-type: none"> <li>• most common metrics used to indicate traffic on the digital platform</li> <li>• shows how many people visited website/app over a given period of time, and can also be used to show whether website changes (i.e., a new layout, an online ad campaign, etc) are performing as expected</li> <li>• Google Analytics is the most comprehensive free analytics software tool available</li> </ul>
Unique Visitors:	<ul style="list-style-type: none"> <li>• Shows how many individuals your website actually reaches</li> </ul>
New vs Returning Visitors:	<ul style="list-style-type: none"> <li>• If your returning visitors metric is higher than new users, this might be a sign that you have a loyal band of followers.</li> </ul>
# of Pages/session:	<ul style="list-style-type: none"> <li>• another way of measuring interest in your content</li> </ul>
# of Sessions/user:	<ul style="list-style-type: none"> <li>• another way of measuring interest in your contents</li> </ul>
Average Session Duration:	<ul style="list-style-type: none"> <li>• total time spent on website/app - tracks all the activity a visitor has completed over a specific time period</li> <li>• you need to consider the overall user experience on your site. This includes: <ul style="list-style-type: none"> <li>• The variety and value of content on your site.</li> <li>• Ease of navigation on your site and user site experience.</li> <li>• Clear calls-to-action (CTAs)</li> </ul> </li> </ul>



Bounce rate %:	<ul style="list-style-type: none"> <li>the bounce rate is inversely proportional to the average session duration: as the bounce rate increases, the average session duration decreases.</li> <li>The bounce rate is the percentage of visitors to a website that exit after only viewing one page. The bounce rate gives an indication of how good your content is, because if people are leaving without taking action, then your content isn't doing its job</li> <li>A low bounce rate is preferred (between 10-40%)</li> <li>People may bounce for several reasons: <ul style="list-style-type: none"> <li>Your call to action/offer is not clear</li> <li>Your content/offer isn't what they expected</li> <li>They got bored</li> <li>You're not offering something different</li> </ul> </li> </ul>
Conversion Rate:	<ul style="list-style-type: none"> <li>The conversion rate is the percentage of website visitors that complete desired actions, such as: <ul style="list-style-type: none"> <li>Purchasing any of your products or services.</li> <li>Contacting your business/submitting a form</li> <li>Engaging with your website in some way.</li> </ul> </li> <li>A high conversion rate tells you that your marketing tactics are effective because they resulted in your website/app visitors completing your end goal</li> </ul>
Abandonment rate %:	<ul style="list-style-type: none"> <li>the percentage of clients who leave or quit the DHIs before completing an intended task</li> </ul>

### Social Media Analytics [\(44,45\)](#)

Reach KPIs:	<ul style="list-style-type: none"> <li># of Followers</li> <li># of Impressions</li> <li>Audience growth rate <ul style="list-style-type: none"> <li># of new followers divided by total follower count</li> </ul> </li> <li>Reach <ul style="list-style-type: none"> <li># of post views, divided total followers</li> </ul> </li> <li>Potential Reach <ul style="list-style-type: none"> <li># of mentions multiply by Followers of Account that mentioned it</li> </ul> </li> <li># of Brand mentions (via Google Alerts)</li> </ul>
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Engagement KPIs:	<ul style="list-style-type: none"> <li>• # of Likes</li> <li>• # of Shares</li> <li>• # of Comments</li> <li>• # of saves</li> <li>• # of direct messages</li> <li>• # of mentions (tagged or untagged)</li> <li>• # of click-throughs</li> <li>• # of clicks</li> <li>• # of profile visits</li> <li>• # of eplies</li> <li>• # of retweets</li> <li>• # of quote tweets</li> </ul>
Engagement Rate:	<ul style="list-style-type: none"> <li>• Most social media marketing experts agree that a good engagement rate is between 1% to 5% <ul style="list-style-type: none"> <li>• Engagement rate by reach (ERR) = total engagements per post / reach per post * 100 <ul style="list-style-type: none"> <li>▪ Average ERR = Total ERR / Total posts</li> </ul> </li> <li>• Engagement rate by posts (ER post) = Total engagements on a post / Total followers * 100 <ul style="list-style-type: none"> <li>▪ Average ER by post = Total ER by post / Total posts</li> </ul> </li> <li>• Engagement rate by impressions (ER impressions) = Total engagements on a post / Total impressions * 100 <ul style="list-style-type: none"> <li>▪ Average ER impressions = Total ER impressions / Total posts</li> </ul> </li> <li>• Daily engagement rate (Daily ER) = Total engagements in a day / Total followers * 100 <ul style="list-style-type: none"> <li>▪ Average Daily ER = Total engagements for X days / (X days * followers) * 100</li> </ul> </li> </ul> </li> </ul>
Conversion KPIs:	<ul style="list-style-type: none"> <li>• Conversion rate: the number of users who perform the actions outlined in your social media CTA (visit website/download app, subscribe to a mailing list, make a purchase, etc.) <ul style="list-style-type: none"> <li>• Conversions divided by total clicks</li> </ul> </li> <li>• Click through rate: CTR is the percentage of people who viewed your post and clicked on the CTA (call to action) it included. This provides insight into whether your content captures your audience's attention and inspires them to act <ul style="list-style-type: none"> <li>▪ total clicks divided by total impressions multiply by 100</li> </ul> </li> </ul>

### SMS Campaign Metrics (46)

Interaction rate:	<ul style="list-style-type: none"> <li>how many clients took action after receiving the text message <ul style="list-style-type: none"> <li>Total clicks divided by delivered messages</li> </ul> </li> </ul>
Delivery rate:	<ul style="list-style-type: none"> <li>to understand if the texts are successfully reaching their destination</li> <li># of delivered texts divided by total # of texts sent</li> </ul>
Unsubscribe rate:	<ul style="list-style-type: none"> <li>Opt-outs divided by # of subscriptions</li> </ul>
Conversion rate	<ul style="list-style-type: none"> <li># of conversions divided by # messages sent</li> </ul>
List Growth Rate	<ul style="list-style-type: none"> <li>New subscriptions minus unsubscriptions then divided by total subscriptions</li> </ul>
Customer acquisition cost:	<ul style="list-style-type: none"> <li>is the spend required to gain a new customer <ul style="list-style-type: none"> <li>Total campaign expenses divided by new subscriptions</li> </ul> </li> </ul>

### Hotlines and Call/Chat Centers (48)

Customer Experience:	<ul style="list-style-type: none"> <li>First contact resolution: <ul style="list-style-type: none"> <li>tracks the number of times an agent successfully handled the customer's issue without needing a callback/follow-up</li> </ul> </li> <li>Customer Satisfaction Score (CSAT), for example: <ul style="list-style-type: none"> <li>Very Satisfied, Satisfied, Not Satisfied, Very Unsatisfied</li> </ul> </li> <li>Customer Effort Score (CES) <ul style="list-style-type: none"> <li>"On a scale of one to seven (seven stands for Strongly Agree and one for Strongly Disagree), did the service make it easier for you to solve your problem?"</li> </ul> </li> <li>Net Promoter Scores (NPS) <ul style="list-style-type: none"> <li>"How likely is it that you would recommend this agent or company?"</li> <li>Scoring is based on a sliding scale, with 9 and 10 being promoters, 7 to 8 are passive, and 0 to 6 are described as detractors.</li> <li>You get the NPS from subtracting the percentage of detractors from promoters. A score of over 50 is considered acceptable</li> </ul> </li> </ul>
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Agent Productivity:	<ul style="list-style-type: none"> <li>• Average Handling Time</li> <li>• Agent Utilization Rate</li> <li>• Average Speed of Answer</li> </ul>
Call Initiation:	<ul style="list-style-type: none"> <li>• First Response Time (FRT)</li> <li>• Percentage of Calls Blocked</li> <li>• Average Call Abandonment Rate</li> </ul>
Call center Operations	<ul style="list-style-type: none"> <li>• Calls Handled</li> <li>• Cost Per Call (CPC)</li> <li>• Call Arrival Rate</li> <li>• Peak Hour Traffic</li> <li>• Average Call Lengths</li> <li>• Average Age of Query</li> <li>• Callback Messaging</li> <li>• Repeat Calls</li> </ul>