



HEALTH INFORMATION TECHNOLOGY,
HITEQ
EVALUATION, AND QUALITY CENTER

Preparing your people, processes, and technology for UDS+ and other patient level data submission

Please open the evaluation!

And complete before you
leave or as soon as we
wrap up!



SCAN ME!

Introduction to HITEQ

The HITEQ Center is a HRSA-funded National Training and Technical Assistance Partner (NTTAPs) that collaborates with HRSA partners including Health Center Controlled Networks, Primary Care Associations and other NTTAPs to engage health centers in the optimization of health IT to address key health center needs through:

- A **national website** with health center-focused resources, toolkits, training, and a calendar or related events.
- **Learning collaboratives, remote trainings, and on-demand technical assistance** on key content areas.



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HITEQ Topic Areas

Access to comprehensive care using health IT and telehealth

Privacy and security

Advancing interoperability

Electronic patient engagement

Readiness for value based care

Using health IT and telehealth to improve Clinical quality and Health equity

Using health IT or telehealth to address emerging issues: behavioral health, HIV prevention, and emergency preparedness



Outline

- **Overview**

- What is UDS?
- What is UDS+?
- What will this change look like at the broad scale?
- How does this relate to other regulations, programs, and initiatives health centers may be a part of?

- **What are the key readiness factors for health centers?**

- Technology and data
- Privacy and security
- Strategy and governance
- Program design

- **What are the areas of UDS data to consider**

- What are the pain points?
- What does improvement in these areas look like?
- How will this evolve as UDS evolves?





I do not represent HRSA.

We am not from HRSA, and although we have some insight, I am not speaking *FOR* HRSA.

Current activities will impact final guidance.

Some info about UDS Modernization/ UDS+ exists, the full systems are not built out and widely available yet.

Preparation is the name of the game.

UDS+ now comes to all health centers in for 2024 reporting! So, we're aiming to prepare for that.

We will have lots of time for questions!

We have a whole office hours section in July. I welcome all your UDS questions and will answer what I can, and be clear where I do not have answers.



How familiar are you with UDS in general?

Not familiar. What does UDS stand for?

Somewhat familiar. I have heard the phrase and know some people in my health center work on it.

Quite familiar. I am involved in compiling the data or completing the report.

Extremely familiar. I can tell you the 11 tables off the top of my head.



How familiar are you with UDS+?

Not familiar. I have not heard of it.

Somewhat familiar. I have heard the phrase but have little sense of what it is or what will be required.

Quite familiar. I am involved planning or getting our health center ready for UDS+ submission.

Extremely familiar. I am involved in the UTC and getting ready to do some testing or submission.

Modernization of UDS Reporting



Paper reports sent back and forth.



Sending CDs back and forth with standard UDS tables!



Reporting standard UDS tables by entering data in EHBs according to definitions in UDS Manual.



Reporting standard UDS tables in the EHBs, but modernized with Excel upload/ download option, EHR mapping guidance, and CQM standardization.



Reporting some information still in aggregate “legacy” system (Table 5, Financial Tables, Forms) and some information (demographics and clinical) using standards-based exchange to report at the patient level, allowing deeper analysis.



Health centers report the Uniform Data System (UDS) report each year, and the process continues to modernize through the **UDS modernization initiative**.



The next level of UDS modernization is UDS Patient-Level Submission (UDS+) which is a redesigned section of the UDS report that will augment existing aggregated tables with de-identified patient-level data. UDS+ will leverage electronic health information interoperability standards including FHIR and FHIR-based APIs.



The modernization initiative aims to reduce reporting burden, improve data quality, and better measure program services and outcomes. The goal is to expand the value of UDS data to the Health Center Program while improving how health centers prepare and submit UDS data.



The latest from HRSA on UDS Modernization and UDS+ is available to health centers in the following locations:

HRSA BPHC UDS

Modernization Page



- [Uniform Data System \(UDS\) Modernization Initiative | Bureau of Primary Health Care](#)
- Describes the whole UDS Modernization initiative-- past, present, and future.
- Provides foundational definitions and references.
- Describes recent testing done.

HRSA BPHC UDS

Modernization FAQ



- [Uniform Data System \(UDS\) Modernization Frequently Asked Questions \(FAQ\) | Bureau of Primary Health Care](#)
- Answers specific, common questions. I find the answers under the Implementation heading particularly useful.
- Updated regularly.

UDS+

Salesforce Community



- This is specifically for health centers for UDS+ information from HRSA.
- HRSA encourages health centers and other stakeholders to register for access by going to the Salesforce Community login page at <https://hrsa.force.com/HRSABPHC/s/> if they have not already registered.

Get (and Stay) Connected with the UTC



There are regular UTC meetings where technical details are discussed.



The UDS+ FHIR Implementation Guide (IG) is available publicly [here](#).



Use the [BPHC contact form](#) to request access to the UTC, if you haven't already done so. → Select “UDS Modernization” under “Uniform Data System (UDS)” heading to be sure your request is routed correctly.

Only **SOME** UDS Tables will be replaced by UDS+

Demographics tables:

ZIP code table: Zip code and insurance

Table 3A: Age and sex assigned at birth

Table 3B: Race, ethnicity, language, sexual orientation, identity

Table 4: income (% of federal poverty level), insurance, special population status

Clinical tables:

Table 6A: Selected diagnoses and services

Table 6B: Clinical quality measures

Table 7: Clinical quality outcome measures.

Other tables still collected by each health center system and then reported using “legacy system”, meaning, in the EHBs.





What are the potential benefits of de-identified patient level reporting of **these tables?**



How did UDS+ come about more broadly?

Much of the US health IT landscape is defined via the Office of the National Coordinator or ONC's definition of "a certified EHR." This is called CEHRT. ONC provisions in 21st Century Cures Act included updates to CEHRT.

The most impactful prescriptive provisions of ONC Cures Rule update the ONC's definition, pushing certified EHRs to create FHIR APIs for patient and population services.



This advances things in **three** ways:

FHIR has existed for a while, but the regulations have **centered FHIR R4** in a way that makes things a bit easier.

- Uniform FHIR integration for business associate applications needing to read data from the EHR (but not write). The advent of EHR API programs is the big shift here, potentially allowing more modern developer experiences.
- A net new FHIR export capability for populations of the United States Core Data for Interoperability (USCDI) data set in bulk FHIR format, revolutionizing data exchange for use cases like analytics or public health that previously were underserved by things like custom CSV exports.

These capabilities were required to be available by Dec. 31, 2022.

Is there a list of vendors who are UDS+ Ready?

We know several EHR and population health tools worked with HRSA and were ready for test submission in Spring 2024:

- Azara, Relevant, and i2i
- eClinicalWorks and NextGen

Other common EHRs have reported that they are engaged with the process and are involved in testing.

★ But there are also some who are *NOT*, so talk with your vendor!

ONC health IT certification requirements were updated in 21st Century Cures Act, to include bulk FHIR capability (more generally).

- Search here: [Certified Health IT Product List](#)



Concurrent Trends



- **FHIR**
 - Will be used for UDS+ (testing for 2023 reporting, likely required for all with 2024 reporting)
 - Will be used for reporting HEDIS measures per NCQA
 - HL7 interfaces for other data (like radiology, labs, HIE, etc.)
- **Disaggregated data submission/ reporting**
 - Has been happening for Ryan White RSR for more than 10 years!
 - Title X family planning report, FPAR 2.0 is reported at encounter level, beginning in 2023. EHRs have assisted with this!

UDS Process: 2023-2024

→ All health centers submitted a full aggregated UDS Report in EHBs.

→ In addition to an aggregate UDS Report submission with EHBs, **some health centers** have/ will voluntarily submit de-identified patient-level data (UDS+) using HL7® FHIR® R4 standards. This has started and will continue through mid-2024.

→ For 2024 reporting, EHBs will remain the submission of record, and there will likely be a *table* of UDS+ mandatory. To our knowledge, BPHC is still working out the details, but it's time to get ready!

Cohorts for CY2023 UDS+ Voluntary Reporting

Cohort 1 – March Submission and Full Data Review

Description: Submit live data during the voluntary UDS+ submission period **before March 31st**.

Submission: February through March 2024.

Benefits:

- Dedicated submission support.
- Detailed submission review.
- Full Data Review – Detailed review and analysis with UDS and UDS+ comparison reports.
- Heavily influence future data and reporting needs.
- Heavily influence future IG changes.

Cohort 2 - Extended Testing, June Submission, Partial Data Review

Description: Continue Synthetic Testing and submit live data during the voluntary UDS+ submission period **before June 30th**.

Submission: May through June 2024.

Benefits:

- Allow continued synthetic testing through Spring 2024.
- Allow voluntary 2023 data submissions through mid-2024.
- Allow testing and submission for unique scenarios (multi-system for example).
- Partial data review and analysis.
- Influence future UDS+ needs.

Cohort 3 – Focus on Testing

Description: Vendors and Health Centers interested in participating but have not participated in testing and still monitoring UDS+ participation and readiness.

No Voluntary 2023 Submission

Benefits:

- Continued engagement in public forums and outreach efforts to navigate any looming questions or plans for UDS+.
- Continued support and encouragement to participate in Synthetic Testing in 2023.

Note: Vendors (submitting on behalf of a Health Center) and Health Centers using in-house systems must successfully complete testing before submitting UDS+ data.

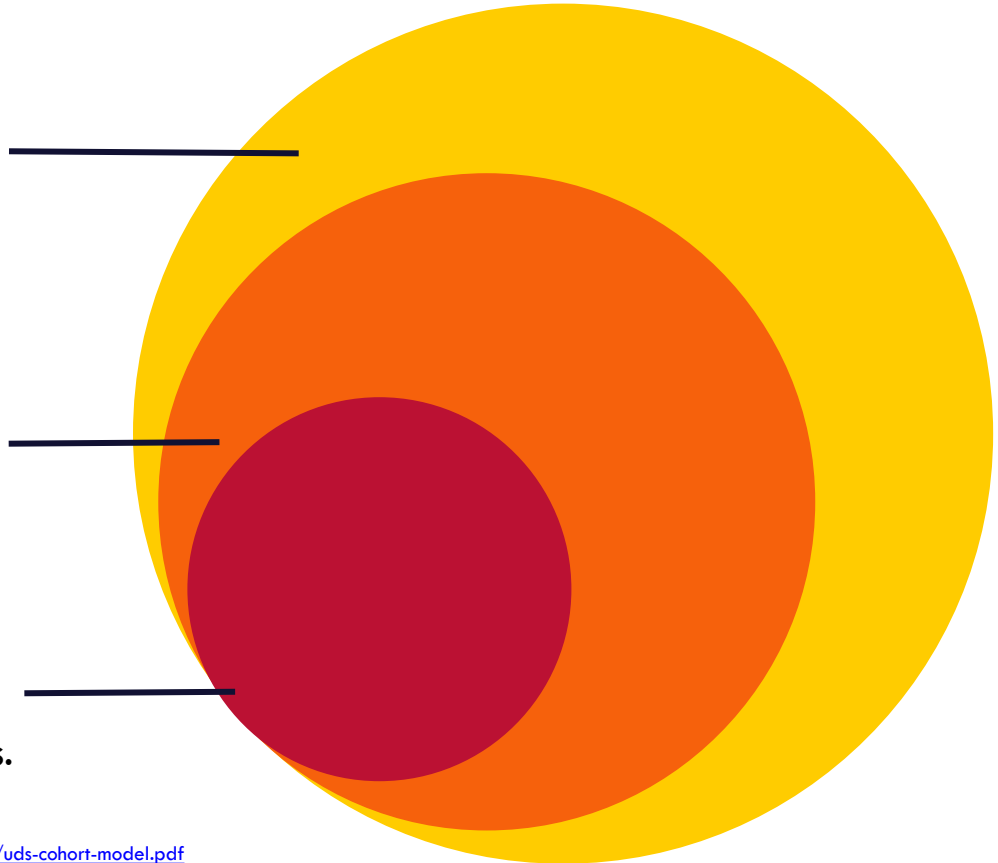


Which cohort is your health center in?

Cohort 3: Nothing submitted this year, focused on readiness! This is all other other vendors and health centers.

Cohort 2: Happening this summer! Still a limited group of vendors and centers, but larger group.

Cohort 1: Already submitted! Small group of vendors and centers.





What is FHIR?

Fast Healthcare Interoperability Resources (FHIR) is a standard for exchanging healthcare information electronically. It enables seamless data exchange between healthcare systems, making it easier for providers to access and share patient data across different organizations. FHIR supports patient level reporting and is a key component of UDS modernization (and by extension UDS+).



Reminder of Key FHIR Details

- HL7 Fast Healthcare Interoperability Resources (FHIR)
- Supports all paradigms of exchange
- Adopted by all certified EHR vendors
- Supports real-time APIs
- Documents, Messages & Operations
- Supports patient-level and bulk patient transactions
- Freely available tooling, servers, libraries
- Written into latest HHS regulations (21st Century Cures)



What's an API, exactly?

An API is an entry point, or interface, that allows a system to access the features and data of a different system. This entry point defines how data must be formatted and the types of interactions supported, such as how data can be searched. The FHIR API mainly involves the access and exchange of data.

Many modern computer and mobile applications (including outside of healthcare), use APIs to retrieve, store, and update data.

Do you use any FHIR APIs to access or exchange information currently?



What is Bulk FHIR?

Bulk FHIR is a standardized, FHIR-based approach for exporting bulk data from a FHIR server to a pre-authorized client (e.g., ONC/ HRSA's UDS+ Server).

It will allow data from the EHRs of Health Centers to be transmitted to HRSA in a standardized and secure way without manual processes and without having to customize routines for every vendor or every site.

EHR vendors have rolled out this capability to comply with federal regulations that went into effect in Dec. of 2022.



What is USCDI?

The United States Core Data for Interoperability (USCDI) is a standardized set of health data classes and elements that support nationwide interoperability of electronic health information. It includes patient demographics, clinical notes, medications, allergies, and more. USCDI enables electronic health data to be exchanged between different healthcare systems and providers, improving patient care and outcomes.

USCDI+:

USCDI supplemented with program specific elements

USCDI+ is a service ONC provides to federal partners to establish, harmonize, and advance the use of interoperable data element lists that extend beyond the core data in USCDI in order to meet specific programmatic requirements.

An example of a likely USCDI+ data element for UDS+: Health insurance differs in USCDI from what is reported in the UDS. To address this, there is a health insurance HL7 data element specific to UDS+ in development, so insurance will continue to be collected consistent with the UDS Manual and *that* will be submitted via bulk FHIR for UDS+.

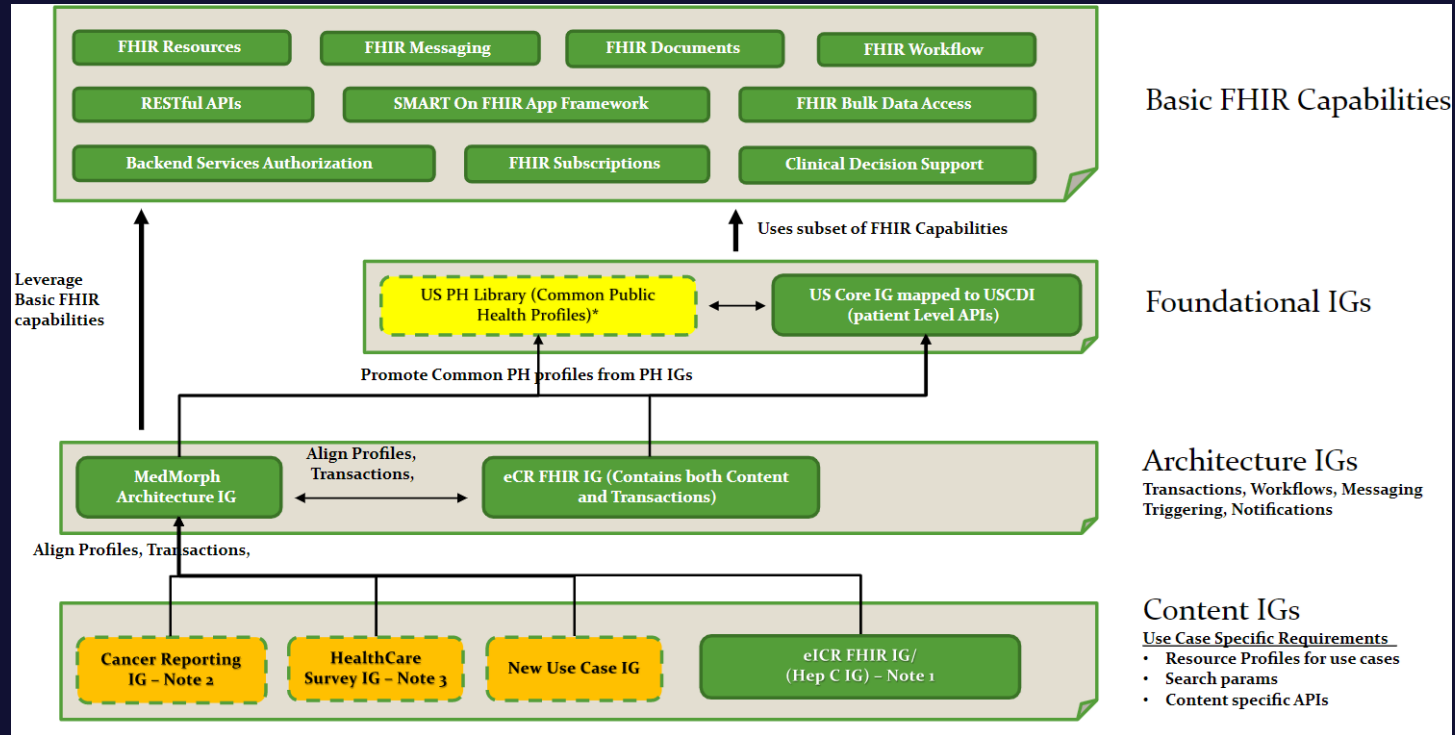


Relationship between Basic FHIR Capabilities and the different use case Implementation Guides such as

UDS+

Basic FHIR Capabilities

Use Case Specific



What are some details on what a bulk FHIR submission looks like **in general**?



How frequently will this happen?

As frequently the use case specifies. For UDS+ it will be annually, by Feb. 15.



Will this be extracting patient data directly from within our system?

The bulk FHIR API is *within* your system. It gathers up specific data elements according to the specifications, then will de-identify it according to the specifications. Once that has been done by the system, the system will then send it to the specified data receiver, in this case, the ONC UDS+ FHIR Server.



Are we able to review the data before it's sent via bulk FHIR?

Bulk FHIR does not generate a table or spreadsheet of patients as you may currently use. But your *system* might and you do want to have a plan for that! Health centers should have ongoing processes to validate and review data from their systems throughout the year.



UDS+ Implementation Guide

- Spells out **FHIR implementation for technical vendors** (e.g., EHRs, data warehouses, etc.) submitting through the designated UDS+ FHIR API.
- Only relevant for data elements that will be submitted via FHIR.
- Used for technical configuration and implementation (think, backend system set up). Available [here](#).



UDS Reporting Instructions (aka UDS Manual)

- Spells out HRSA reporting requirements for all tables and forms on the UDS.
- Used by each clinic to review and reference when setting up workflows to ensure that needed information is collected and captured. (think, front end processes, user training).
- Available [here](#).

If you are responsible for submission of the annual UDS, what exactly will submission look like?

Something like this:

Collect and validate data in your system throughout the year.

Early in the year,, you'll 'push a button' in your system to initiate submission.

Your system will send the specified de-identified patient-level data to data receiver.

You will ALSO submit *non-UDS+* tables through legacy system.

So, unlike in the past, you will not run tables for UDS+ data from your system and then enter or upload tables. Instead, much of the work is done in advance, and the data submission will likely be initiated by your health center and then be done 'behind the scenes'. The non-UDS+ tables will still be submitted in the EHBs.

Reminder that 2024 UDS will still require FULL legacy UDS+ submission as well as SOME UDS+.



Value of Patient Level Reporting like UDS+

- More prepared for the next public health emergency.
- Reduce reporting burden for health centers by harmonizing with digital quality measure reporting efforts.
- Identify potential creation of new funding opportunities based on data (e.g., target needs of specific communities/patients, e.g., housing insecure).
- Aligning with ONC's certification requirements for health IT.
- Collaboration between CMS, ONC, and the CDC may lead to additional updates/advances to the Promoting Interoperability Program and consistency across federal requirements.
- Identify data quality and warehousing needs.
- Better measure program services and health outcomes (e.g., immunization rates and other preventative care).
- Ensure public health professionals have greater awareness of, and a seat at the table, when data/ tech standards are being developed/ adopted nationwide.

There will not be an option for submitting via CSV or Excel.

HRSA has noted that there will NOT be the option to submit via CSV or Excel.

The only functionality being built is that for bulk FHIR based submission.

This means that your systems need to be set up and ready for that! There isn't likely to be a workaround process.





**How much do you see
this changing your
UDS reporting?**

Where do you see pain points?

How Can Your Health Center be Ready?



Regular contact with vendor about UDS+ readiness rollout



Identify additional FHIR opportunities in your current care landscape



Increase workflow and documentation standardization and alignment with reporting requirements.



Regular contact with vendor about UDS+ rollout

- Determine what system you will use for UDS+
- Establish reliable contact/ relationship with that vendor
- Identify the version of the system that is needed

Poll: Take stock of your reporting options for

- **Has your health center been engaged in any BPHC discussions about UDS+ options?**
- **Have you or your vendor done any testing?**
- **How are you planning to submit?**



What will help with deciding between your options?

What tools do you have?

- If your health center is using multiple systems, the priority is a platform that includes all needed patient and service information.
- Is there a system that has been reliably more accurate in your past experience?


What resources are you able to dedicate?

- Who will spearhead this effort within your clinic? How much time to they have to dedicate, particularly early on?
- Some systems require more manual intervention, maintenance, and validation than others.

What support do you need?

- Options that include additional support (such as with your HCCN or a vendor that provides ongoing support) may be better if there is little internal capacity or experience.

Once you settle on an option, it's important to **be in contact** with the vendor or organization regularly.



Build a **productive relationship** with an account manager or point-of-contact at the vendor who is knowledgeable.

Determine what **updates will be needed**-- for example, will you have to update to another version? What will the timeframe be for that?



Challenges: Data for reporting

- Because submission will go directly from your health IT system, all of the needed information needs to be in that system.
- This means that information from various sources needs to be brought into the system as structured data (in the type and place required by the system).



Challenges: Review + Validation

- With the change in how information is submitted, there will also be changes in what is required for preparation.
- Review and validation need to be part of ongoing QI/QA activities.
- Not just monitoring clinical quality measure performance, but also demographic data completion, correct coding and mapping, etc.



Potential Challenges



Data in multiple systems, such as separate EHR and EDR systems.



Data not in standardized, structured format that aligns with requirements..



Information sent in fax, scan, etc.



Areas where your clinic struggles to collect information.

How can your health center increase readiness?



Assess your internal processes for non-standard documentation in the areas that will be impacted by UDS+.



Evaluate processes for why exactly documentation is not standardized; update policies, procedures, training, etc.



Standardize that documentation within the record; may involve using aggregation platform or tool.



Monitor on an ongoing basis for consistency, progress, etc.



While your EHR or health IT system will have the responsibility for technical capability, the **data governance and validation** will largely be the responsibility of your team.

Will this solve how workflow dependent current clinical quality reporting from the EHR is?

It's unlikely to, because the change to bulk FHIR submission is **primarily a change to the submission process (backend-to-backend)** that eliminates the need for health centers to hand compile and enter UDS information for certain tables. The questions of workflows mostly relate to **entering information into the system, and ensuring that is mapped appropriately.**





What do we need to do to update UDS processes and workflows?

Key examples:

- Ensure race, ethnicity, sexual orientation, gender identity, etc. collection options align with specifications.
- Update mapping, favorites, preferences, etc. with corresponding codes from measure value sets, to assist with aligning care and measure specifications.

Review and become familiar with data definitions for demographic and clinical tables.

Go deeper in clinical quality measures by reviewing eCQM specifications and value sets for each clinical quality measure.

Update EHR and EHR processes to align with data requirements and definitions as needed.



Benefits of being ready for UDS+.

UDS+ will offer streamlined data reporting, and FHIR more broadly will offer more simplified data exchange throughout healthcare. Being ready for UDS+ will support readiness for other data exchange, access, and use which is proliferating rapidly.

Patient level reporting allows for more detailed and relevant insight.

Resources available for UDS+

UDS Modernization FAQs

UDS Test Cooperative (UTC)

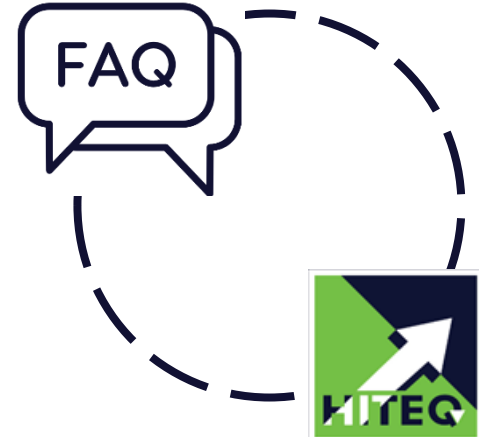
HITEQ Center



Preparing for Patient Level Reporting



FHIR 101



Resources available for UDS

UDS Training and TA site



[Clinical Care Resources](#)



[Upcoming and recent trainings](#)

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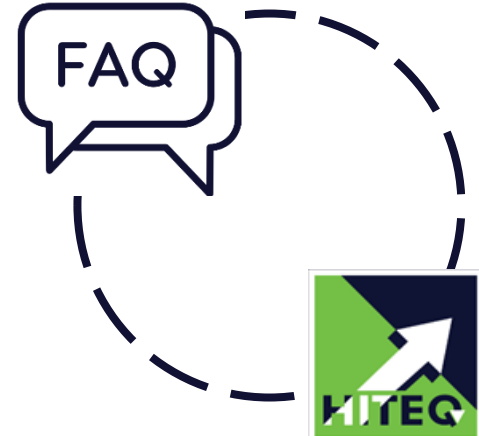
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Thank you!

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