National Healthcare Safety Network (NHSN)

NHSN's New Digital Quality Measures: Introduction and Overview

2024 NHSN Annual Training

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Objectives

- Discuss NHSN's approach to digital quality measures (dQMs) for patient safety and public health preparedness

- Describe the first dQMs planned for release:
  - Glycemic Control (Medication-related hypoglycemia)
  - Healthcare facility-onset, antibiotic-Treated *C. difficile* Infection (HT-CDI)
  - Hospital-Onset Bacteremia and fungemia (HOB)
  - Respiratory Pathogens Surveillance (RPS)

- Identify resources to support your facility in NHSN dQM implementation

- Identify your role in implementation of NHSN dQMs at your facility

Mission of CDC's Division of Healthcare Quality Promotion (DHQP)

To protect patients; protect healthcare personnel; and promote safety, quality, and value in both national and international healthcare delivery systems.

Image by David Mark from Pixabay

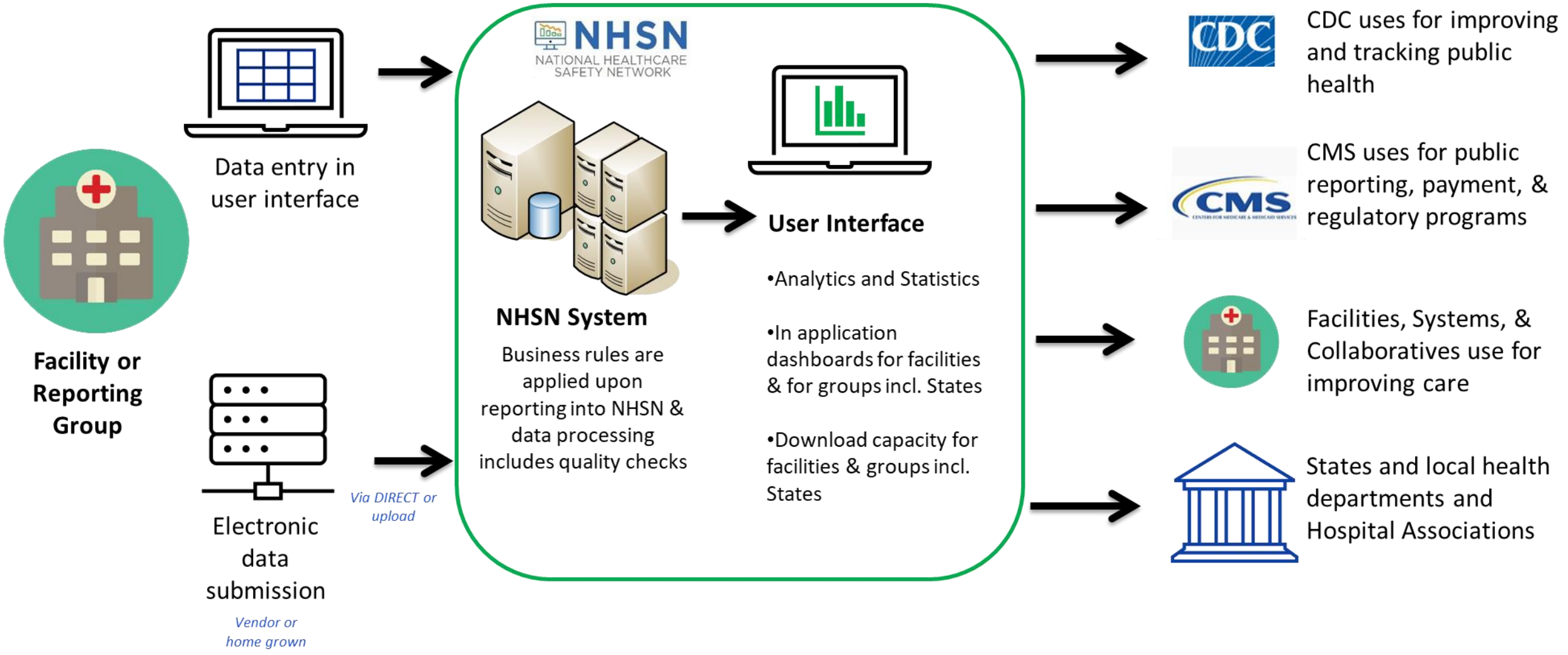
National Healthcare Safety Network (NHSN):

CDC's domestic tracking and response system to identify emerging and enduring threats across healthcare

Surveillance Program with risk-adjusted, national benchmarking of:

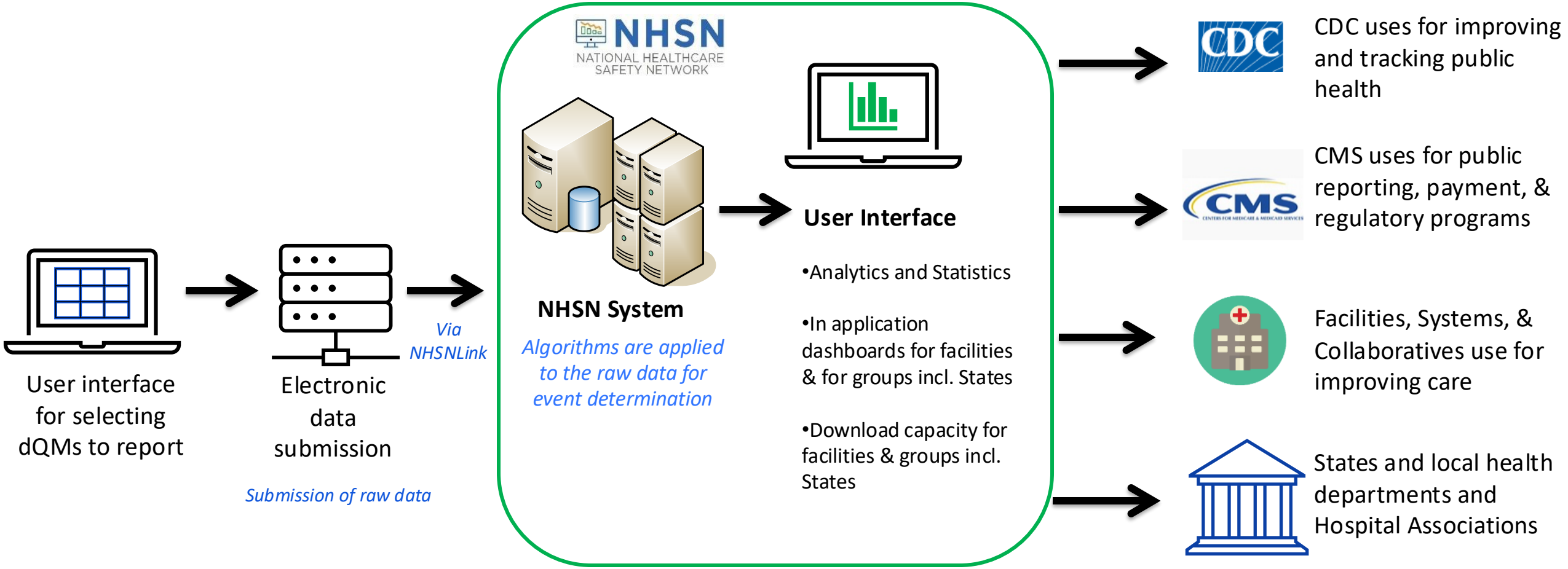
- Healthcare-associated infections (HAIs) and conditions
- Patient-safety events
- Antimicrobial use and resistance
- Vaccination of healthcare personnel
- Emerging pathogens and diseases
  - E.g., COVID-19, Influenza
- All hazards preparedness & bed capacity

How NHSN Works: NHSN Data Flow (Current)



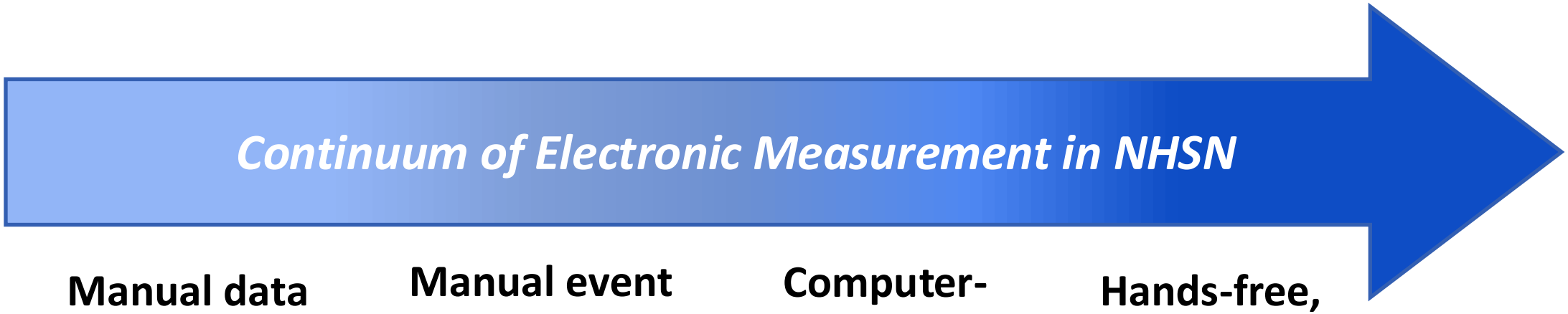
How NHSN Digital Measure Reporting Works:

NHSN Data Flow



New NHSN Digital Quality Measures

NHSN: Transforming from current state to future state



Manual data collection & entry

Data manually submitted via NHSN webform

Manual event determination with electronic data transfer

Electronic data submitted using CDA

Computer-assisted

*Electronic data submitted using FHIR; selected data can be user-confirmed**

Hands-free, automated

Electronic data submitted using FHIR; fully automated

*Some measures will have additional format options for submitting data (e.g., CSV)
CDA: Clinical Document Architecture

NHSN Digital Quality Measures (dQMs) to Drive Patient Safety

Fully-automated, digital quality measures based on standards, measurement science, and clinical science with rigorous benchmarking and appropriate risk-adjustment used to drive patient-safety

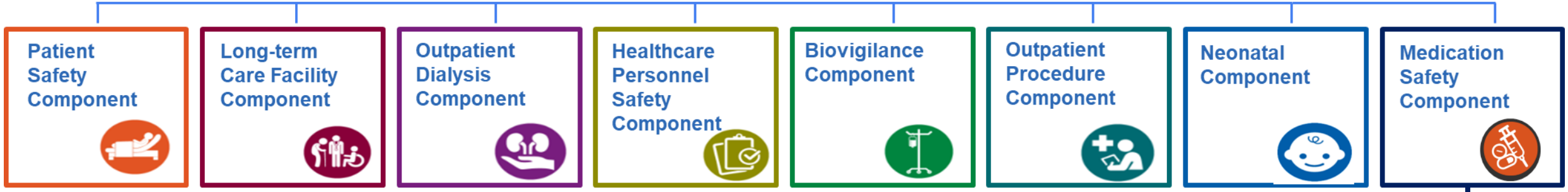
Manual and Semi-Automated Measures

Digital Quality Measures

Benefits of Digital Quality Measures

- ✓ *Reduce time* for data collection
- ✓ Provide *patient-level* data for risk adjustment and stratification
- ✓ *Remove* potential *biases* due to different interpretations
- ✓ *Adjust* measures quickly in response to changes in practices

NHSN
NATIONAL HEALTHCARE SAFETY NETWORK



- CLABSI
- CAUTI
- VAE
- pedVAE
- SSI
- MDRO/CDI
- AUR
- Hospital COVID, Flu
- Nursing Hours

New digital quality measures under development

Glycemic control: hypoglycemia and hyperglycemia

Respiratory pathogen surveillance
Healthcare facility-onset, antibiotic-treated *C. difficile* infection
Hospital-onset bacteremia and fungemia
Healthcare-associated VTE
Sepsis

AUR: antimicrobial use and resistance; CDI: *Clostridioides difficile* infection; CAUTI: catheter-associated urinary tract infection; CLABSI: central line-associated bloodstream infection; MDRO: multi-drug resistant organism; SSI: surgical site infection; VAE: ventilator-associated event; pedVAE: pediatric VAE

NHSNCoLab

A formal, funded collaboration between NHSN and selected U.S. healthcare facilities to test, pilot, and validate new NHSN dQMs and data exchange approaches

Site	Site Name	EHR Vendor*	Measures	Site Leads
1	Billings Clinic	Oracle/Cerner	Glycemic Control	Randy Thompson, MD Lisa Ranes, RD, LN, CDCES
2	Geisinger	Epic	CDI/HOB, RPS	Mark Shelly, MD
3	HCA Healthcare	Meditech, Allscripts, Oracle/Cerner	CDI/HOB, Glycemic Control	Kenneth Sands, MD, MPH William Gregg, MD, MS, MPH
4	Mass General Brigham	Epic	Sepsis	Sayon Dutta, MD, MPH Chanu Rhee, MD, MPH
5	Michigan Medicine	Epic	Glycemic Control, CDI/HOB, HA-VTE	Michael Lanham, MD
6	Nebraska Medicine	Epic	Glycemic Control	Andjela Drincic, MD Ron Carson
7	University of California, Davis Medical Center	Epic	Glycemic Control	Greg Maynard, MD, MS, MHM Yauheni Solad, MD, MHS, MBA
8	University of North Carolina Hospitals	Epic	CDI/HOB, RPS	Lisa Stancill, MPH
9	University of Oklahoma Health Sciences Center	Epic	HA-VTE	Aaron Wendelboe, PhD Justin Dvorak, PhD
10	University of Rochester Medical Center	Epic	CDI/HOB	Brenda Tesini, MD
11	Yale New Haven Health	Epic	Glycemic Control	Hyung Paek, MD, MSEE

*Abbreviations: CDI/HOB = Hospital-onset, antibiotic-treated C. difficile infection (CDI) / Hospital–onset bacteremia/fungemia (HOB), HA-VTE= Healthcare-associated venous thromboembolism *Listing of EHR vendors does not imply endorsement by the vendors.*

www.cdc.gov/nhsn/nhsncolab

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

National Healthcare Safety Network (NHSN)

NHSNCoLab

Print

Open All | Close All

Ushering in a new era of NHSN data modernization, innovation, and collaboration for public health surveillance.

About NHSNCoLab

The NHSN Collaborative, or NHSNCoLab, is a collaboration between public and private stakeholders to test, pilot, implement, and validate new National Healthcare Safety Network (NHSN) healthcare surveillance measures and approaches in alignment with CDC's Data Modernization Initiative.

The program established a committed network of CDC's healthcare partners with institutional agreements in place to increase the efficiency and effectiveness of collaboration.

This collaboration will inform new NHSN measures and approaches to healthcare event data collection, assessing the feasibility and validity of new NHSN surveillance concepts that support patient safety, quality reporting, national benchmarking, and public health preparedness and response.

NHSN FHIR dQMs in Development & Implementation

- Hyperglycemia
- Neonatal late-onset sepsis/meningitis
- Opioid-related harm
- Acute kidney injury
- Medication-related bleeding
- Antibiotic use
- Antibiotic-associated adverse events

- Respiratory pathogen surveillance
- Adult sepsis
- Healthcare-associated VTE

- Medication-related hypoglycemia
- Healthcare facility-onset, antibiotic-treated *Clostridioides difficile* infection
- Hospital-onset bacteremia and fungemia

- Medication-related hypoglycemia
- Healthcare facility-onset, antibiotic-treated *Clostridioides difficile* infection
- Hospital-onset bacteremia and fungemia

VTE: venous thromboembolism

NHSNLink & FHIR

NHSNLink Overview

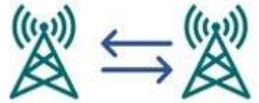
- NHSN's FHIR application for public health reporting
- Digital quality measures (dQMs) are reported via NHSNLink
- NHSNLink connects securely with the facility's electronic health record (EHR) endpoint and pulls selected FHIR Resources required for dQM calculation
- Unidirectional (no write-back to the EHR)
- NHSNLink is open-source. No external or "third-party" vendor software purchase or installation is required.

FHIR terms you may hear

- **FHIR**: Fast Healthcare Interoperability Resources®
  - International standard for healthcare-data exchange, published by Health Level Seven International® (HL7)
  - A standards-based approach to accessing "patient-level" data
  - Increasingly adopted by EHR vendors, hospitals, and government agencies
  - Most US EHRs have FHIR capabilities and may already be in use

FHIR terms you may hear

API (Application Programming Interface)



- Software interfaces that allow applications to communicate with each other

Resources

- Packets of information that contain data elements
- For example, the Patient Resource contains demographic and administrative data about the patient, like date of birth, sex, etc.

FHIR terms you may hear

Profiles

- Helps to focus resources for specific implementation need

- For example, a Profile could constrain the FHIR Patient Resource to represent a patient's demographic information for specific use cases. It could make name, sex, birthdate, address, and contact details mandatory elements.

FHIR terms you may hear

ValueSets

- A specific set of codes that may be selected from for a particular element within a FHIR resource
- For example, Condition codes have a ValueSet that contains both SNOMED and ICD. The codes that are used depend on the context of the use case.

Implementation Guide (IG)

- A set of instructions that describe how FHIR resources, profiles, and other FHIR artifacts should be used to solve a particular problem

FHIR terms you may hear

USCDI (United States Core Data for Interoperability)

- Standards specifying data elements that must be shared to promote interoperability

US Core IG

- A FHIR Implementation Guide with detailed technical guidance and profiles supporting USCDI data elements

FHIR Release 4 (R4)

- This is the version of FHIR required per the US Core IG

Patient-Level Data Collection for NHSN dQMs

Process flow from facility EHR to NHSN application

Facility

NHSNLink identifies patients of interest from EHR*

NHSN connects securely to facility via FHIR API

NHSNLink queries EHR to identify data elements required to calculate measures (e.g., medications, labs) for patients of interest

Data further validated and analyzed

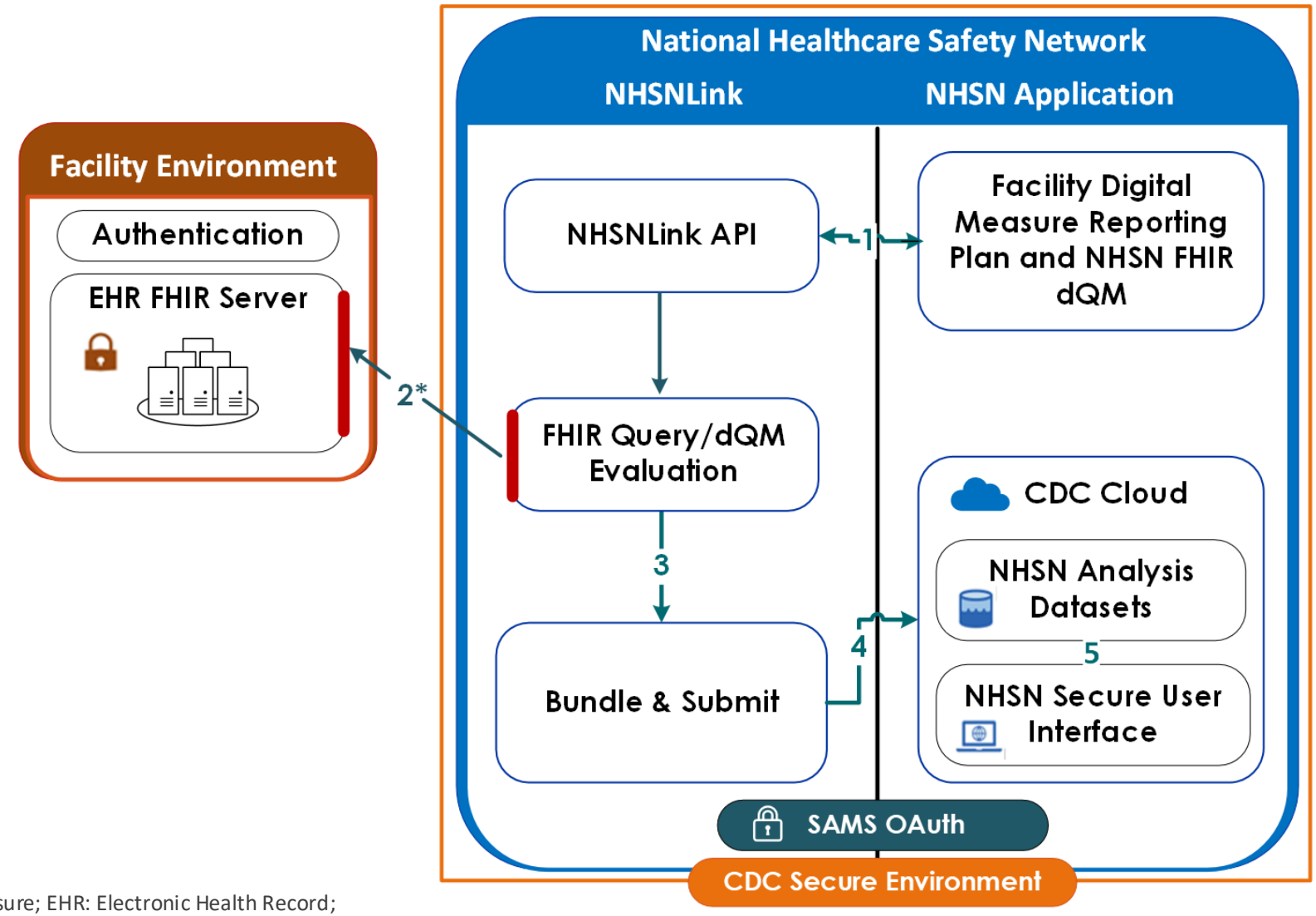
NHSN NATIONAL HEALTHCARE SAFETY NETWORK

NHSN application runs algorithms to determine if patient meets measure denominator and numerator criteria. Analytics performed and measure reports available for NHSN users.

*Patients in ED, observation, or inpatient *location* or *status* during the measurement period

NHSNLink: How it Works

1. Confirm facility enrollment; request and receive NHSN FHIR dQM
2. Request and receive Patients of Interest, then query for required data
3. Evaluate and filter data using dQM criteria
4. Submit data for patients meeting dQM definition
5. NHSN ingests and analyzes submission and makes reports available via secure NHSN user interface



API: Application Programing Interface; dQM: digital quality measure; EHR: Electronic Health Record; FHIR: Fast Healthcare Interoperability Resources; SAMS: Secure Access Management Services

Is My Facility Ready to Report FHIR dQMs to NHSN?

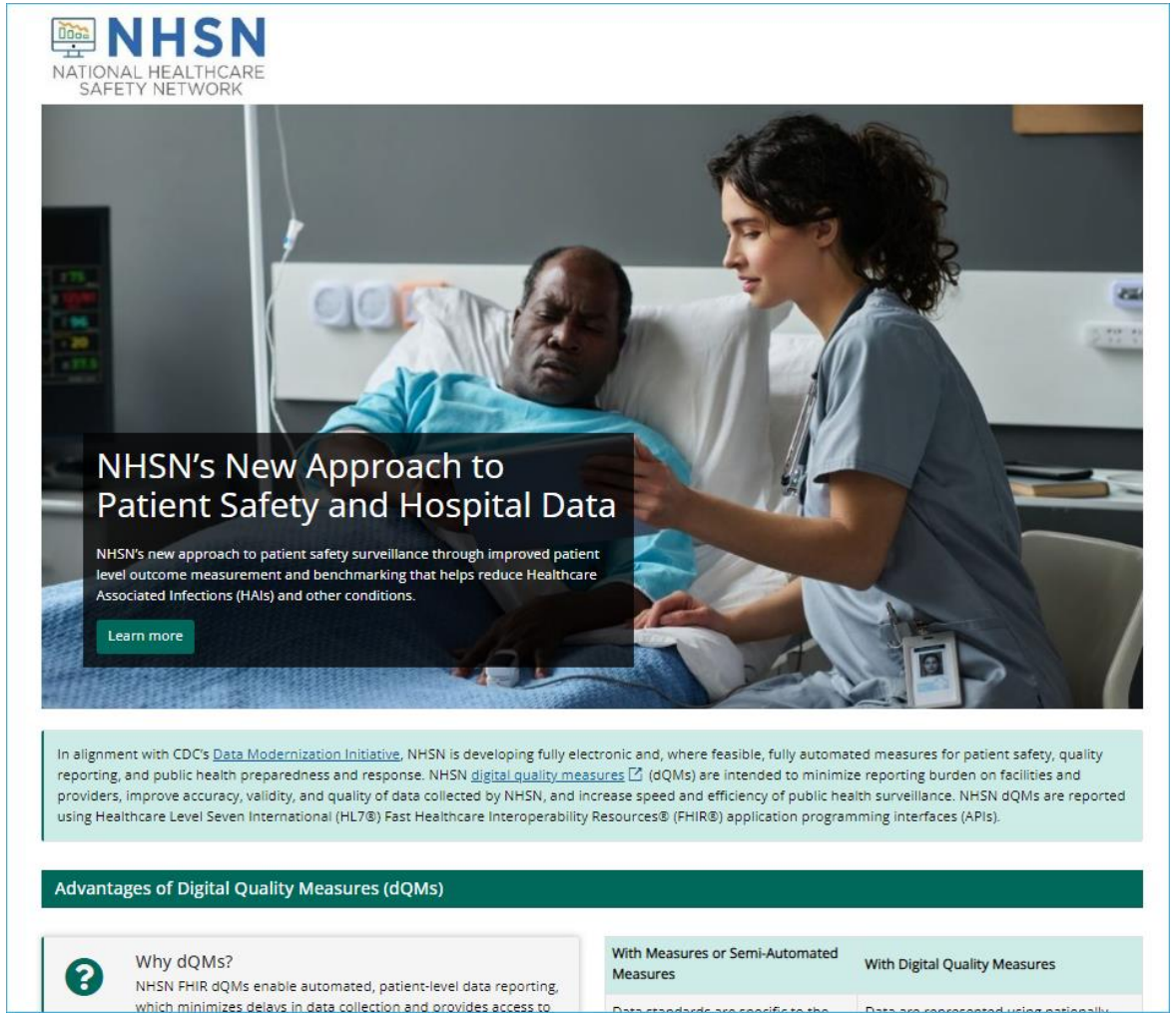
- You can work with your Information Technology (IT) department to identify if your facility is ready to report FHIR dQMs to NHSN
- Examples of questions for your IT teams:
  - *Are your FHIR APIs in Release 4 or later?**
  - *Are your FHIR R4 APIs in a Production environment?*
  - *Do your FHIR R4 APIs conform to the US Core Data for Interoperability Standard?**
- Online resources for IT teams and EHR vendors will be available via the "NHSN dQM Instruction book" that will be available on cdc.gov/nhsn

*Refers to HL7 FHIR Release 4: https://hl7.org/fhir/R4 and US Core: hl7.org/fhir/us/core/STU3.1.1

NHSN dQM Instruction Book

NHSN dQM Instruction Book

- Dedicated web-based resource for reporting dQMs to NHSN via NHSNLink
- Intended for EHR vendors and facilities
- Preliminary information currently available, with additional resources to be published later this year

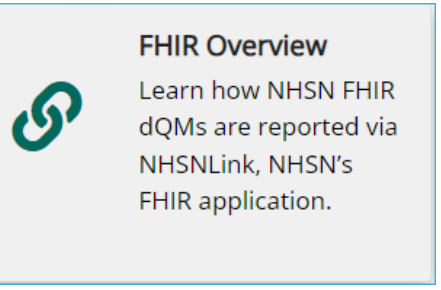


Current Site and Resources Available Now

FHIR Overview

Page includes introductory information about FHIR and NHSNLink:

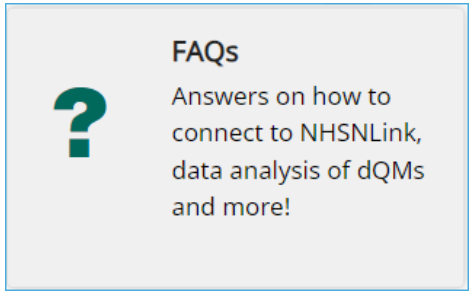
- Advantages of automated data submissions
- Resources to make your facility FHIR Ready
- Introduction to Clinical Query Language
- Data security measures being taken



FAQs

Initial questions implementers may have about FHIR adoption:

- How will data be submitted?
- How will data submitted via NHSNLink be protected?
- What does my facility need to establish a connection with NHSNLINK?
- How will FHIR data be analyzed in NHSN?



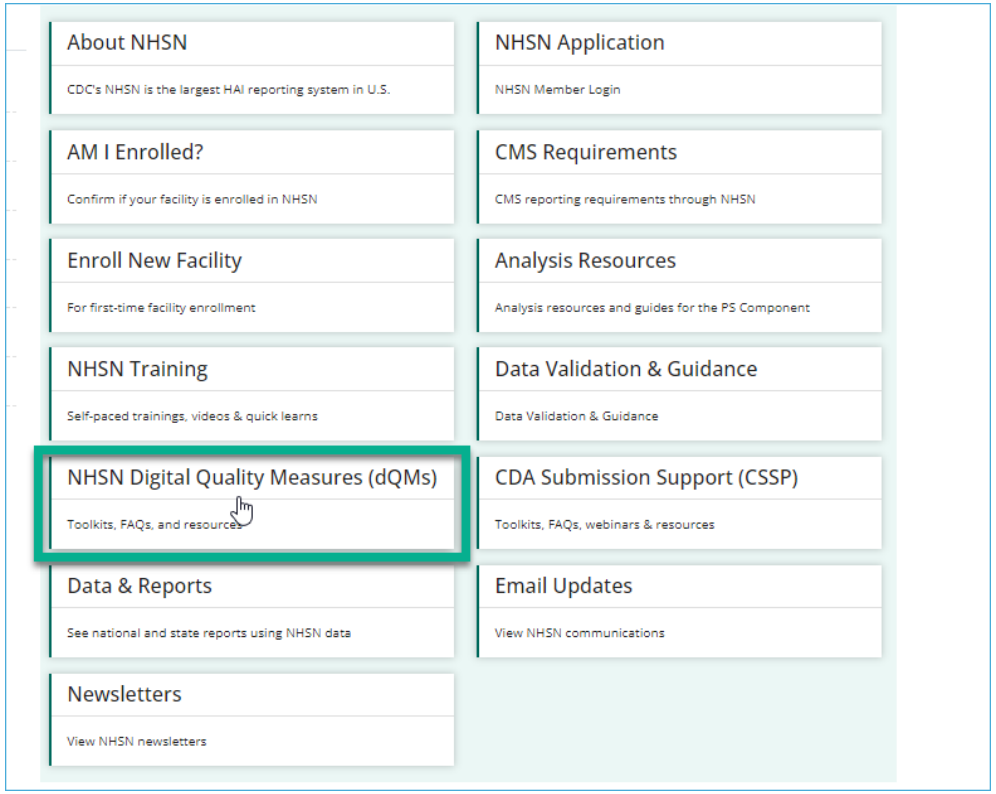
NHSNCoLab

Information about how NHSN dQM's are being piloted:

- How the collaboration works
- Benefits of the NHSNCoLab
- Supported dQMs and piloting sites
- FAQs about the program

How To Find dQM Resources

- dQM information can be found at: https://www.cdc.gov/nhsn/fhirportal
- Can be accessed
  - via the cdc.gov/nhsn homepage, or
  - via the Patient Safety Component homepage under the "PSC Resources" section

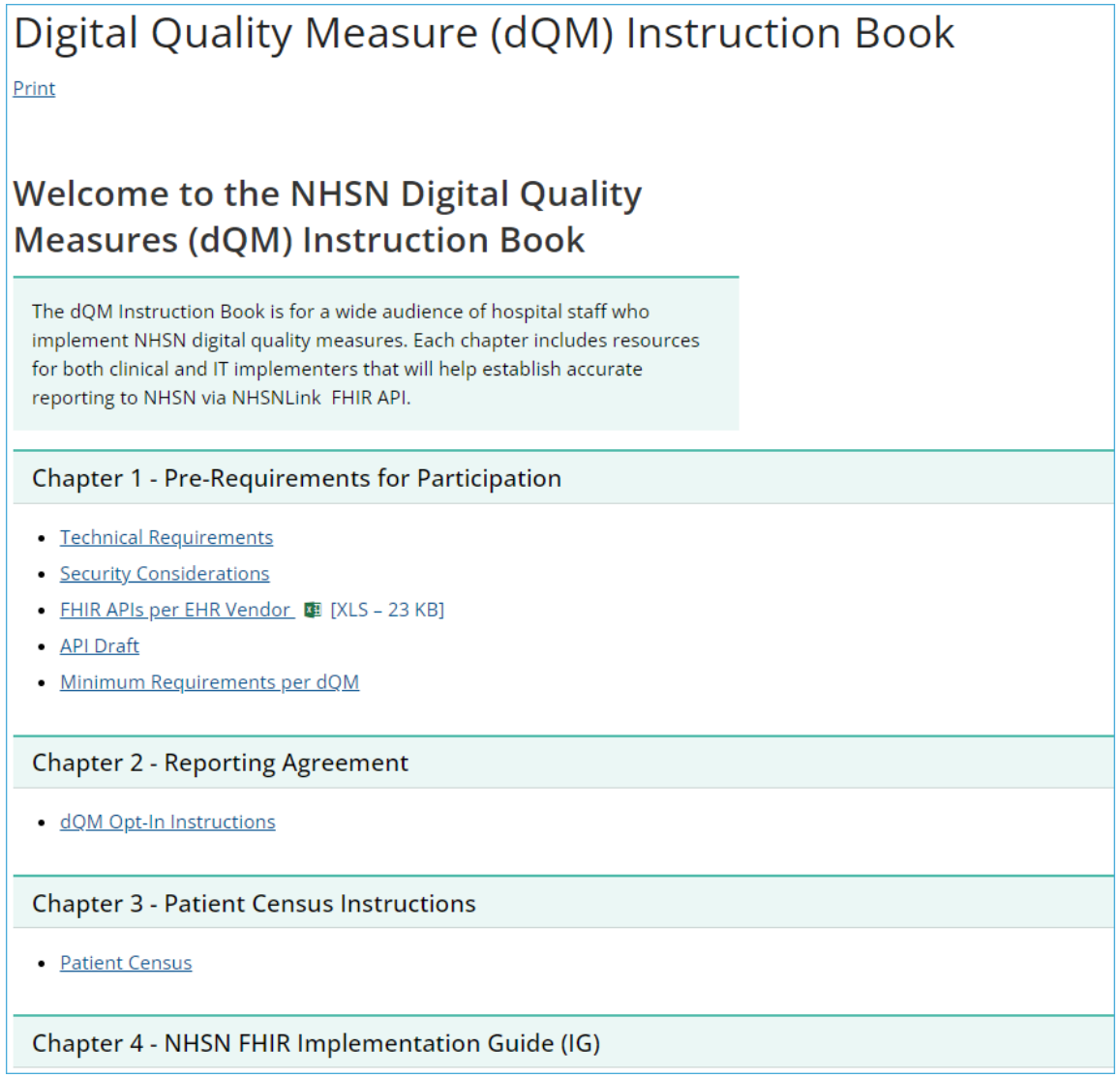


https://www.cdc.nhsn.gov/

Resources in Development

Additional resources for facilities and EHR vendors are under development:

- Pre-Requirements for Participation
- Minimum Requirements for Participation
- Digital Measure Reporting Plan Instructions
- Patient Census Instructions
- FHIR Implementation Guide
- Data Dictionaries
- dQM Protocols


Digital Quality Measure (dQM) Instruction Book

Print

Welcome to the NHSN Digital Quality Measures (dQM) Instruction Book

The dQM Instruction Book is for a wide audience of hospital staff who implement NHSN digital quality measures. Each chapter includes resources for both clinical and IT implementers that will help establish accurate reporting to NHSN via NHSNLink FHIR API.

Chapter 1 - Pre-Requirements for Participation

- Technical Requirements
- Security Considerations
- FHIR APIs per EHR Vendor [XLS – 23 KB]
- API Draft
- Minimum Requirements per dQM

Chapter 2 - Reporting Agreement

- dQM Opt-In Instructions

Chapter 3 - Patient Census Instructions

- Patient Census

Chapter 4 - NHSN FHIR Implementation Guide (IG)

NHSN Glycemic Control, Hypoglycemia

NHSN Glycemic Control Module, Hypoglycemia

- **Purpose:** Establish a vendor-neutral, FHIR digital measure standard for reporting patient-level, linked medication and blood glucose data electronically to CDC's NHSN
- **Definitions:**
  - Primary metric: Rate of severe medication-related hypoglycemia events (blood glucose <40 mg/dL) in hospitalized* patients receiving diabetes medications
- **Key Data Elements:** Laboratory, Medications

*Includes emergency department/observation status that end within one hour of the inpatient admission

NHSN Glycemic Control, Hypoglycemia Module: Surveillance Metrics

Measure	Numerator	Denominator
Primary Metric: Aligned with Centers for Medicare & Medicaid Services (CMS) Reporting Requirements		
Metric 1, Hospital Harm, Severe Hypoglycemia (NQF 3503e)	No. of (adult) inpatient encounters with BG <40 mg/dL preceded by ADD (24 hours prior)*	No. of (adult) inpatient encounters with ≥1 ADD administered**
Complementary Metrics: For Quality Improvement Dashboards		
Metric 2, Severe Hypoglycemia Days* **	No. of inpatient days with BG <40 mg/dL preceded by ADD (24 hours prior)	No. of inpatient days with ≥1 ADD administered
Metric 3, Recurrent Hypoglycemia	Percent of patients on ADDs with recurrent hypoglycemic day. A "recurrent hypoglycemic day" is an inpatient day with a documented hypoglycemia event that is preceded by another inpatient day within a 24-hour period where a hypoglycemia event is also documented; this will be reported at <40 mg/dL and 54-70 mg/dL	
Metric 4, Severe Hypoglycemia Resolution	Median time between BG <40 mg/dL and first BG ≥70 mg/dL thereafter (hypoglycemia resolution) per ADD days	

*And no subsequent repeat test for BG with a result >80 mg/dL within five minutes of the start of the initial low BG test.
**Includes instances of administration of ADDs in the emergency department or in observation status that end within one hour of the inpatient admission.
***Rate of severe hypoglycemia days will also be reported for moderate (40-53 mg/dL) and mild (54-70 mg/dL) mild hypoglycemia events.

NHSN Glycemic Control Module, Hypoglycemia: FHIR Resources

FHIR Resource Requested from EHR (US Core Resource*)	Data Elements Retrieved
Condition (US Core)	All
Coverage	All
Diagnostic Report (Lab) (US Core)	All
Encounter (US Core)	All
Implantable Device (US Core)	All
Location (US Core)	All
Medication (US Core)	All
MedicationAdministration	All
MedicationRequest (US Core)	All
Observation	Selected
Patient (US Core)	Selected
Procedure (US Core)	All
Specimen	All

- Data will be collected for all patients in an ED, observation, or inpatient *location* or with an ED, observation, or inpatient *status* during the measurement period
- The facility's FHIR endpoint can expose only selected, pre-specified FHIR resources that are invoked upon permission from the facility's server
- Data access can be controlled by the facility on a FHIR resource-by-resource basis

*US Core 3.1.1: hl7.org/fhir/us/core/STU3.1.1/
Resources not in US Core may require special request from EHR vendor

NHSN HT-CDI & HOB

NHSN Healthcare facility-Onset, antibiotic Treated *C. difficile* Infection (HT-CDI)

- **Purpose:** Improve upon the existing NHSN CDI measure by including evidence of *C. difficile* positive test AND antibiotic treatment
- **Definitions:**
  - HT-CDI: Positive *C. difficile* test on day ≥4 AND ≥5 days of *C. difficile* antibiotic treatment
- **Key Data Elements:** Microbiology, Medications

CDI: *Clostridiodes difficile* infection

NHSN HT-CDI: Metric Surveillance Metrics

Measure	Numerator	Denominator
Primary Metric: HT-CDI Event		
HT-CDI Event	Any (+) CD test AND ≥5 days of new CDI antibiotics started within 2 calendar days of CDI test*	Total no. of inpatient Admissions
Complementary Metrics: For Quality Improvement, NHSN Risk Adjustment		
CD Test Utilization	**Testing Prevalence**: Admissions with at least 1 CD test **Testing Intensity**: Total CD tests among patients with at least 1 CD test	
CD Test Positivity	CD positive tests	Total no. of CD tests
Outpatient CO-CDI Event	Any (+) CD test collected in ED/Observation location*	Total no. ED/Observation encounters
Community-Onset Antibiotic Treated CDI Event	Any (+) CD test collected from an inpatient location* AND ≥5 days of new CDI antibiotics started within 2 calendar days of CD test	Total no. of inpatient admissions
Inpatient CDI therapy utilization	Patients with ≥5 days of CDI therapy without CD test	Total no. of inpatient admissions
Positive CDI test without therapy	Any (+) CD test without any CDI therapy	Total no. of patient days

*Additional criteria apply to remove recurrent events

NHSN Hospital-Onset Bacteremia & Fungemia (HOB)

- **Purpose:** Expand NHSN surveillance of bloodstream infections, regardless of organism (e.g., MRSA) or association with device (CLABSI)
- **Definitions:**
  - HOB: Blood culture collected on day ≥4 with pathogenic bacteria or fungi
- **Key Data Elements:** Microbiology

CLABSI: Central Line-associated Bloodstream Infection; MRSA: Methicillin-resistant Staphylococcus aureus

NHSN HOB: Surveillance Metrics

Measure	Numerator	Denominator
Primary Metric: HOB Event		
HOB Event	Pathogenic bacteria or fungi from blood culture on hospital day ≥4 *(excluding patients with prior matching cultures and HOB events)*	Total no. of inpatient admissions
Complementary Metrics: For Quality Improvement, NHSN Risk Adjustment		
Blood Culture Utilization	**Testing Prevalence**: Admissions with at least 1 blood culture **Testing Intensity**: Total blood cultures among patients with at least 1 blood culture	
Blood Culture Contamination	Skin commensal organism in 1 of 2 blood cultures sets	Total no. of blood culture sets
Community-Onset Bacteremia & Fungemia Event	Pathogenic bacteria or fungi from blood culture prior to hospital day 4 *(excluding patients with prior matching cultures and COB events)*	Total no. of inpatient admissions
Matching Commensal HOB Event	Skin commensal from ≥2 blood cultures, AND ≥4 days of antibiotic treatment	Total no. of inpatient admissions
Non-Measure HOB Event	HOB events among patients with conditions that highly predict non-preventability	Total no. of inpatient admissions

NHSN HT-CDI and HOB: FHIR Resources

FHIR Resource Requested from EHR (US Core Resource*)	Data Elements Retrieved
Condition (US Core)	All
Coverage	All
Diagnostic Report (Lab) (US Core)	All
Encounter (US Core)	All
Implantable Device (US Core)	All
Location (US Core)	All
Medication (US Core)	All
MedicationAdministration	All
MedicationRequest (US Core)	All
Observation	Selected
Patient (US Core)	Selected
Procedure (US Core)	All
Specimen	All

- Data will be collected for all patients in an ED, observation, or inpatient *location* or with an ED, observation, or inpatient *status* during the measurement period
- The facility's FHIR endpoint can expose only selected, pre-specified FHIR resources that are invoked upon permission from the facility's server
- Data access can be controlled by the facility on a FHIR resource-by-resource basis

*US Core 3.1.1: hl7.org/fhir/us/core/STU3.1.1/
Resources not in US Core may require special request from EHR vendor

Summary

- NHSN is building digital measures that will provide automated approaches to measurement of healthcare-associated infections, adverse drug events, and other healthcare-associated events

- NHSN is piloting data collection of digital measures at selected U.S. hospital pilot sites

- It is anticipated that facilities can volunteer as “early adopters” for selected digital measures in late 2024/early 2025

Frequently Asked Questions

Q: When will HT-CDI and HOB open for enrolment?

A: It is anticipated that HT-CDI and HOB will be open for "early adopter" enrollment later in 2024

Q: Will HOB replace CLABSI and MRSA LabID?

A: For now, your facility should continue to report CLABSI events. The decision regarding replacing CLABSI and MRSA *LabID* in quality reporting programs has not yet been made.

Q: Will HT-CDI replace CDI LabID?

A: For now, your facility should continue to report CDI LabID events. The decision regarding a new measure to replace CDI *LabID* in quality reporting programs has not yet been made.

Respiratory Pathogen Surveillance (RPS)

NHSN Respiratory Pathogens Surveillance Module

- **Purpose:** To establish surveillance for acute care and post-acute care healthcare settings that meets the national needs for more comprehensive and timely surveillance of hospitalizations due to respiratory pathogens
- **Definitions:**
  - Respiratory pathogens: COVID-19, Influenza, RSV
  - Combination of laboratory- and medication-confirmed events
- **Key Data Elements:** Laboratory, Medications

COVID-19: Coronavirus 2019; RSV: Respiratory Syncytial Virus

Facilities will have 2 electronic reporting options:

- **Option 1:** Comma Separated Values (CSV) files
  - Uploaded via either manual upload or NHSN DIRECT protocol
  - Data included in CSV files includes:
    - All patient census
    - Laboratory testing for COVID-19, Influenza, and RSV
    - Active medication orders for a COVID-19 or Influenza-specific medication
    - Transmission-based Precautions
  - Reporting will be performed **daily**, with the exception that facilities lacking the staffing or ability to upload CSV files on weekends/holidays may upload their daily files by the end of the day on Monday or by the end of the first business day following a holiday.
  - CSV files will need to be run daily at midnight regardless of when they are uploaded to NHSN to enable correct capture of the measurement period.

- **Option 2:** FHIR bundle
  - Data submitted via HL7 FHIR R4 API
  - FHIR data will be pulled the following calendar day

Respiratory Pathogens Surveillance Metrics

- Hospitalized patients with respiratory viruses
- Evaluation of admissions and hospital-onset

RSV
Percent of all inpatients with RSV
Percent of all ICU patients with RSV
Percent of all NICU patients with RSV
Percent of all observation patients with RSV
Number of RSV admissions
Percent of new admissions that are RSV

COVID-19
Percent of all inpatients with COVID-19
Percent of all ICU patients with COVID-19
Percent of all NICU patients with COVID-19
Percent of all observation patients with COVID-19
Number of COVID-19 admissions
Percent of new admissions that are COVID-19

Influenza
Percent of all inpatients with influenza
Percent of all ICU patients with influenza
Percent of all NICU patients with Influenza
Percent of all observation patients with Influenza
Number of influenza admissions
Percent of new admissions that are influenza

NHSN Respiratory Pathogen Surveillance: FHIR Resources

FHIR Resource	Data Elements
Diagnostic Report (Lab) (US Core)	All
Encounter (US Core)	All
Location (US Core)	All
Medication (US Core)	All
MedicationAdministration	All
MedicationRequest (US Core)	All
Observation, Laboratory result (US Core)	Selected
Patient (US Core)	Selected
Procedure (US Core)	All
Service Request	All
Specimen	All
Observation	Selected

Initial Population:
The RPS Initial Population includes all encounters for patients of any age with an inpatient, observation, or short stay status during the measurement period.

hl7.org/fhir/us/core/

Timeline

- Manual submission of CSV files via user interface (UI)
  - Currently available in NHSN Application for testing by pilot facilities
- Automated upload of CSV files via NHSN DIRECT
  - Planned for late spring
- FHIR-based reporting
  - Planned for late spring for testing by CoLab facilities
- Protocol and supporting documents will be available on the NHSN website once pilot testing is completed

Next Steps

NHSN dQMs: What's My Role?

Short-term

- Serve as a **champion**, **educator**, **and administrator** for your facility during NHSN dQM implementation
  - Activating components
  - Liaising with Information Technology
  - Connecting stakeholders
  - Identifying and assisting new NHSN users
- Build, review, and validate **data analysis reports**

Mid-term

- **Communicate** with NHSN your experience in NHSN dQM implementation

Long-term

- Participate in **testing** and **research** to advance understanding of NHSN dQMs
  - Prevention tools
  - Measure validation

NHSN dQMs: Early Adopter Opportunity

- NHSN dQM modules anticipated for release in 2024:
  - Glycemic Control
  - HT-CDI/HOB
- These modules may open early to facilities that are ready to report measures to NHSN via FHIR
  - Contact your IT administrator to identify if your facility is ready
  - https://www.cdc.gov/nhsn/fhirportal
- Facilities participate as “early adopters” on a volunteer basis
- Participation is not guaranteed, dependent on release schedules and technology requirements

NHSN dQMs: Early Adopter Opportunity

- If you are interested in participating as an “early adopter” for NHSN dQM modules planned for release in 2024, please complete this form:

  https://tinyurl.com/583urbv7

For any questions or concerns, contact the NHSN Helpdesk using

NHSN-ServiceNow to submit questions to the NHSN Help Desk. The new portal can be accessed at **https://servicedesk.cdc.gov/nhsncsp** Users will be authenticated using CDC's Secure Access Management Services (SAMS) the same way you access NHSN. If you do not have a SAMS login, or are unable to access ServiceNow, you can still email the NHSN Help Desk at nhsn@cdc.gov.

For more information please contact Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

For more information…

Please consider listening the following on-demand NHSN Annual Training session for more information about NHSN Digital Quality Measures (dQMs).

NHSN Analysis for Digital Quality Measures (dQM)

Presented by:
Monica Schroeder, MPH, CPH
Derek Williams, PhD

Thank you!

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov