

**Helping Healthcare Providers Adopt
Digital Health Technologies and Achieve
HIE Connectivity in the District**



**ARPA Home and Community Based Services (HCBS)
Digital Health
Technical Assistance (TA) Program**

Best Practices for Improving EHR Data Quality



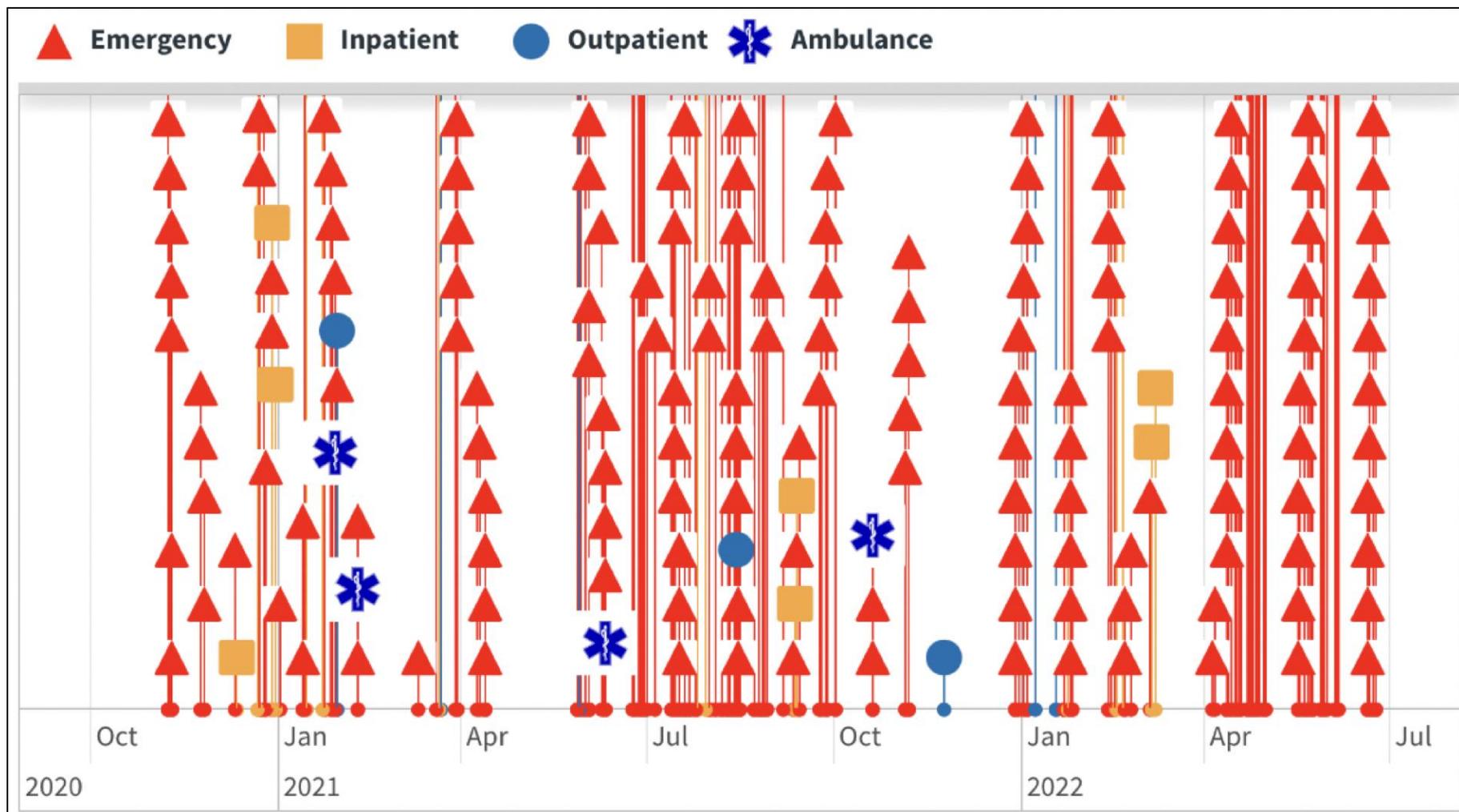


- Use **Chat** to share questions and comments with the group
- Use **Raise Hand** function to be queued up for commenting / unmuting and share your comments with the group





DC HIE Patient Snapshot





1

Gain insights into the critical role that data quality plays in agency decision-making processes, provider service delivery, patient health outcomes, and overall organizational success

2

Acquire comprehensive knowledge about six dimensions of data quality and gain insights into practical strategies for improving data quality in your electronic health records (EHR) system

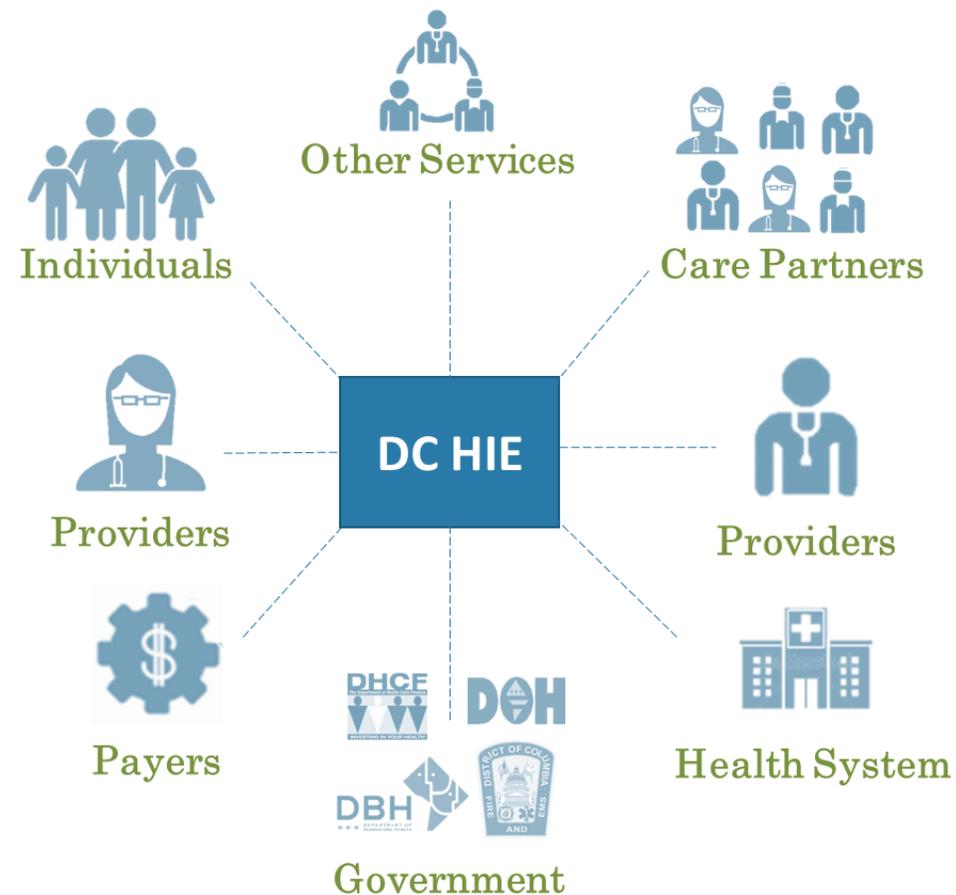
3

Enhance the value of the DC Health Information Exchange (HIE) for all stakeholders by implementing optimization techniques for Admission, Discharge, Transfer (ADT) and Continuity of Care Document (CCD) messages

4

Learn how to further elevate ADTs, CCDs, and overall EHR data by incorporating Social Determinants of Health (SDOH) information for a more holistic approach to care management and coordination

- **Individuals** connected to multiple providers
- **Providers** connected to care partners and payers
- **Payers** connected to clinical information & services provided
- **Government** agencies connected to public health information





ACCURACY

Records reflect the correct health status,
medical history, and services provided



ACTION

Incorrect documentation of height, weight, body mass index

Incorrect documentation of allergies

Incorrect documentation of medication dosage

Incorrect documentation of symptoms (underrepresented/over exaggerated)

Incorrect documentation of diagnosis

CONSEQUENCE

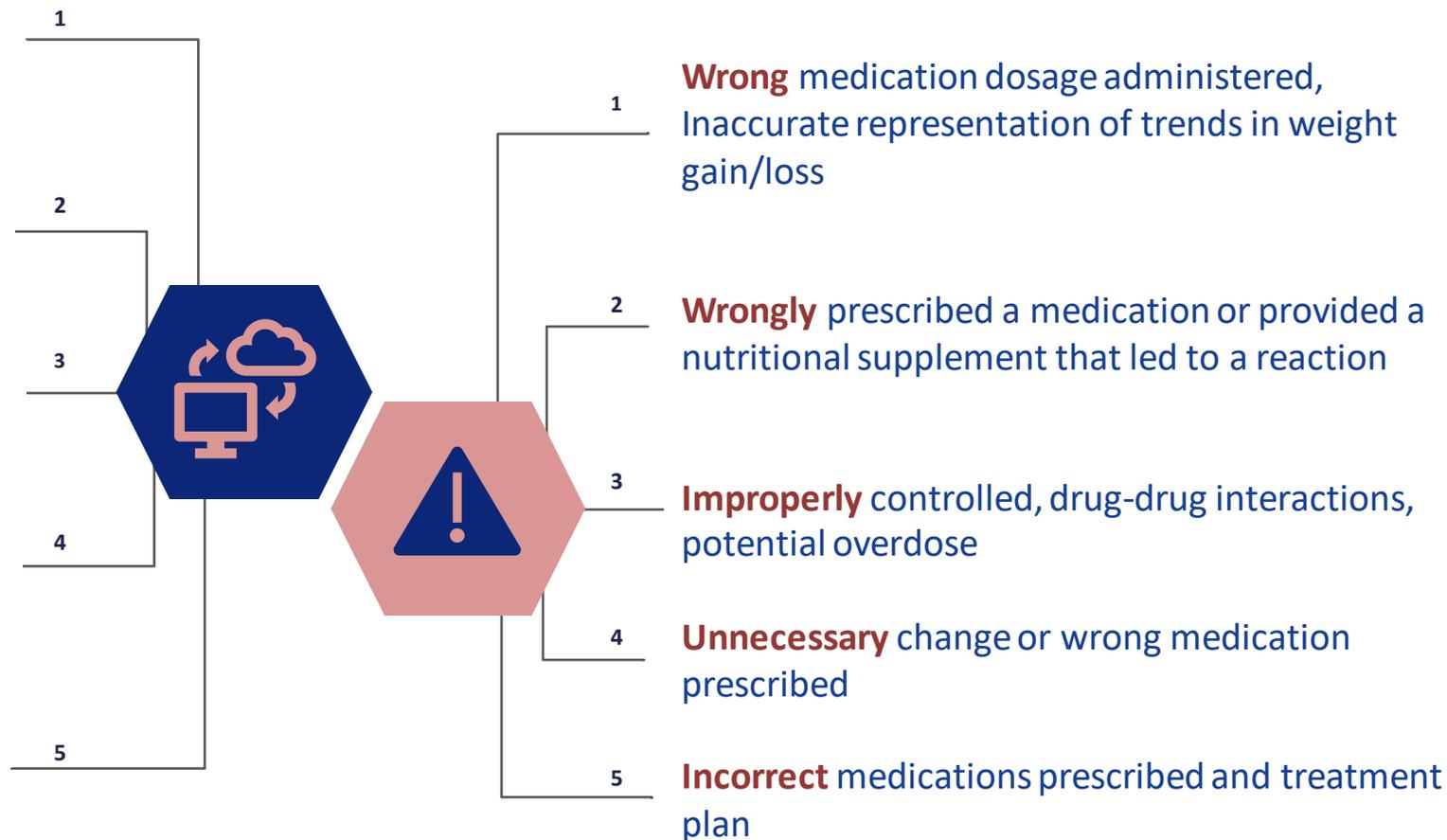
Wrong medication dosage administered, Inaccurate representation of trends in weight gain/loss

Wrongly prescribed a medication or provided a nutritional supplement that led to a reaction

Improperly controlled, drug-drug interactions, potential overdose

Unnecessary change or wrong medication prescribed

Incorrect medications prescribed and treatment plan



TIPS & BEST PRACTICES FOR IMPROVING DATA ACCURACY



Enter Accurate Data

Where possible, avoid using placeholder data such as entering all zeros for SSN or phone number



Promote a Culture of Accuracy

Instill a culture where accuracy is prioritized in data entry. Recognize and reward staff for maintaining high standards of data accuracy and integrity



Establish a Data Governance Team

Appoint a dedicated team or individual responsible for data quality and management (i.e., set standards, conduct audits, and be the go-to for any data-related issues)

COMPLETENESS

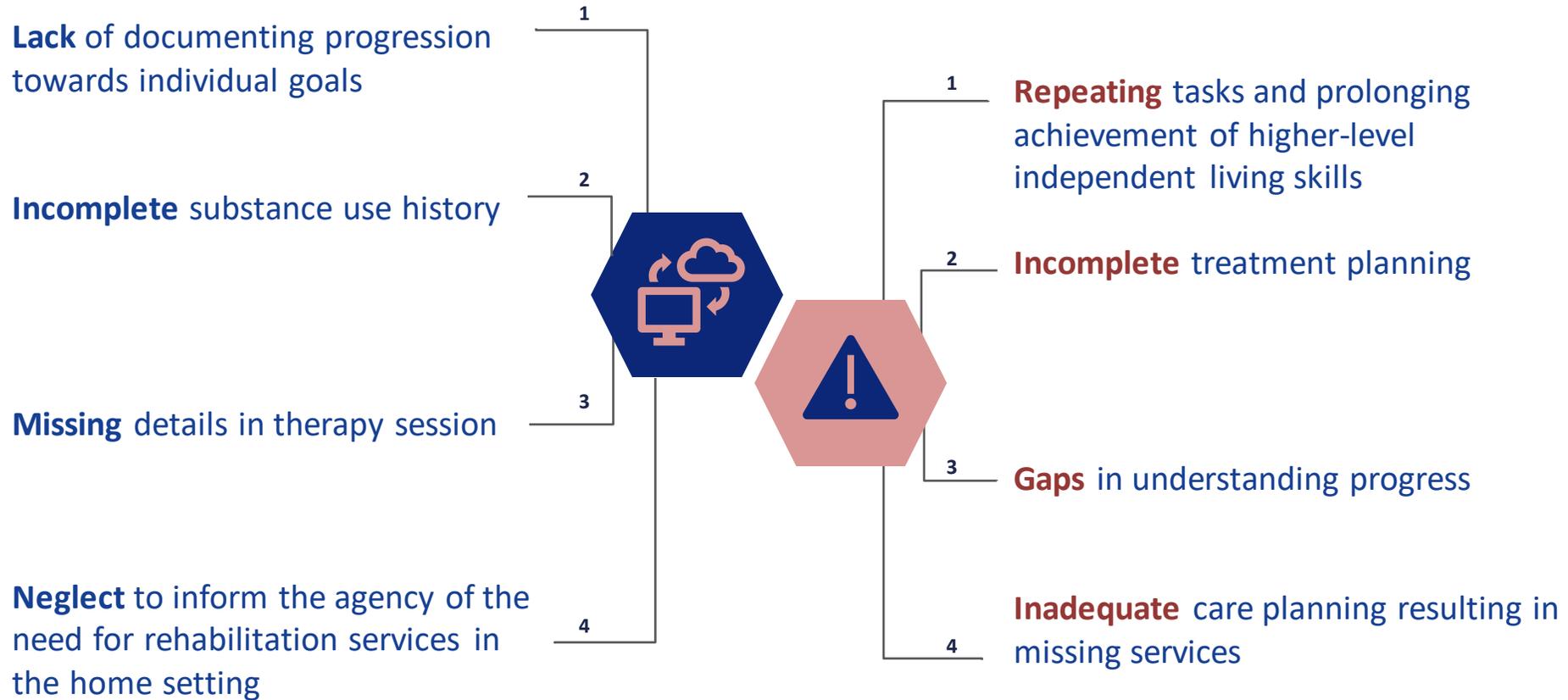
Records include all necessary data fields
and narratives





ACTION

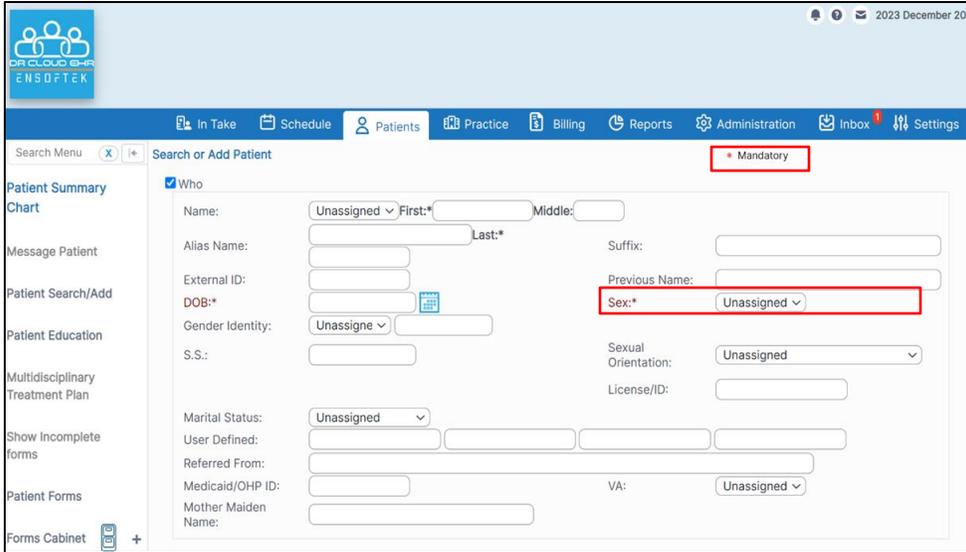
CONSEQUENCE



TIPS & BEST PRACTICES FOR IMPROVING DATA COMPLETENESS



-  **Double Check Documentation**
Ensure thorough documentation during treatment sessions
-  **Create Reports and Conduct Periodic Audits**
Conduct regular audits of patient records and employee tasks to identify and rectify gaps in data completeness
-  **Provide Ongoing Staff Training & Development**
Ensure that everyone involved in data entry or processing is adequately trained and understand the importance of data accuracy and completeness
-  **Utilize EHR Templates and Form Builders**
Implement mandatory fields in electronic forms for consistent and complete data capture



DR CLOUD EHR ENSUFTK

2023 December 20

In Take Schedule Patients Practice Billing Reports Administration Inbox Settings

Search Menu Search or Add Patient * Mandatory

Who

Name: Unassigned First:* Middle: Last:*

Alias Name: Suffix:

External ID: Previous Name:

DOB:* Sex:* Unassigned

Gender Identity: Unassigne

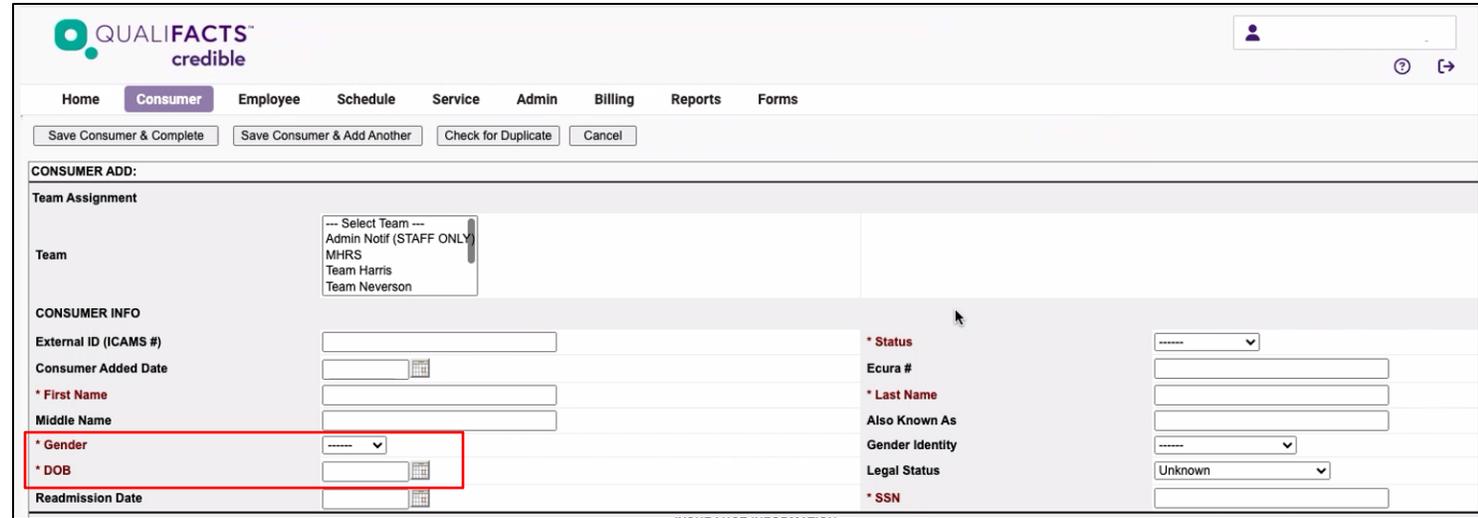
S.S.: Sexual Orientation: Unassigned

License/ID:

Marital Status: Unassigned

User Defined: Referred From: Medicaid/OHP ID: VA: Unassigned

Mother Maiden Name:



QUALIFACTS credible

Home Consumer Employee Schedule Service Admin Billing Reports Forms

Save Consumer & Complete Save Consumer & Add Another Check for Duplicate Cancel

CONSUMER ADD:

Team Assignment

Team: --- Select Team ---
Admin Notif (STAFF ONLY)
MHRS
Team Harris
Team Neverson

CONSUMER INFO

External ID (ICAMS #) * Status

Consumer Added Date Ecura #

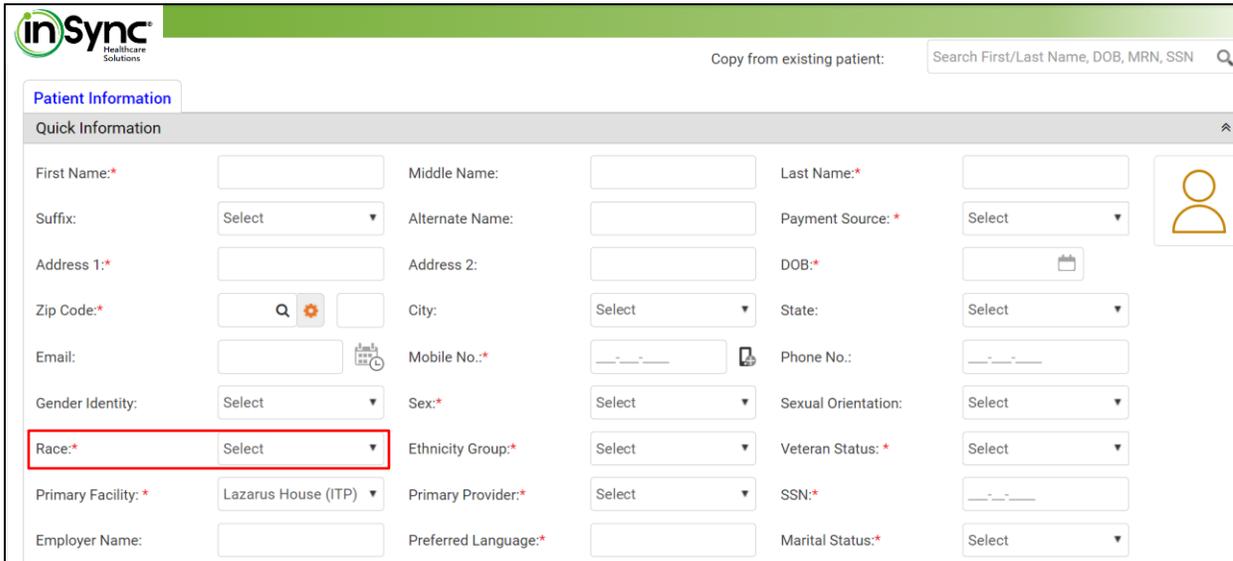
* First Name * Last Name

Middle Name Also Known As

* Gender Gender Identity

* DOB Legal Status

Readmission Date * SSN



inSync Healthcare Solutions

Copy from existing patient: Search First/Last Name, DOB, MRN, SSN

Patient Information

Quick Information

First Name:* Middle Name: Last Name:*

Suffix: Select Alternate Name: Payment Source: * Select

Address 1:* Address 2: DOB:*

Zip Code:* City: State: Select

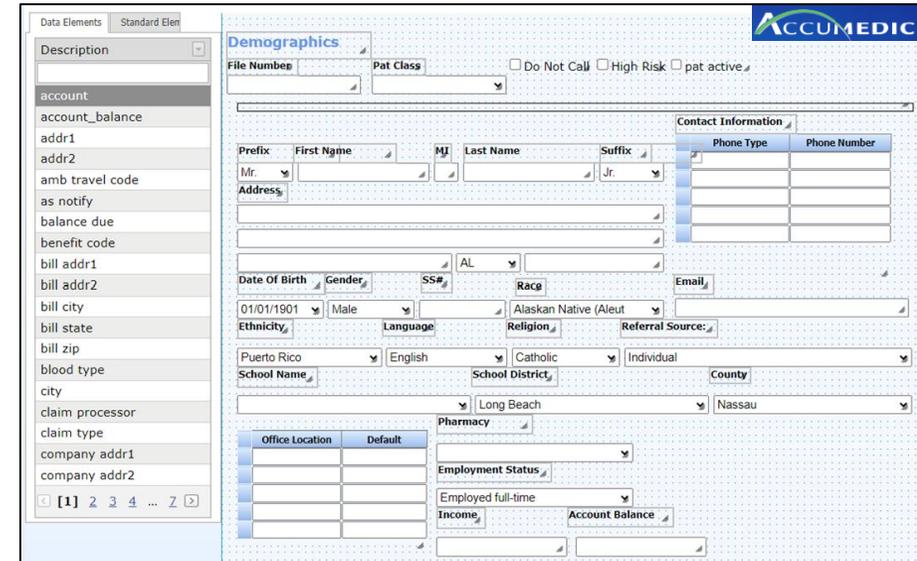
Email: Mobile No.: Phone No.:

Gender Identity: Select Sex:* Sexual Orientation: Select

Race:* Select Ethnicity Group:* Veteran Status: * Select

Primary Facility: * Lazarus House (ITP) Primary Provider:* SSN:*

Employer Name: Preferred Language:* Marital Status:* Select



ACCUMEDIC

Demographics

File Number Pat Class Do Not Call High Risk pat active

Prefix First Name MI Last Name Suffix Phone Type Phone Number

Address:

Date of Birth Gender SS# AL Race Email

01/01/1901 Male Alaskan Native (Aleut Ethnicity Language Religion Referral Source:

Puerto Rico English Catholic Individual School Name School District County

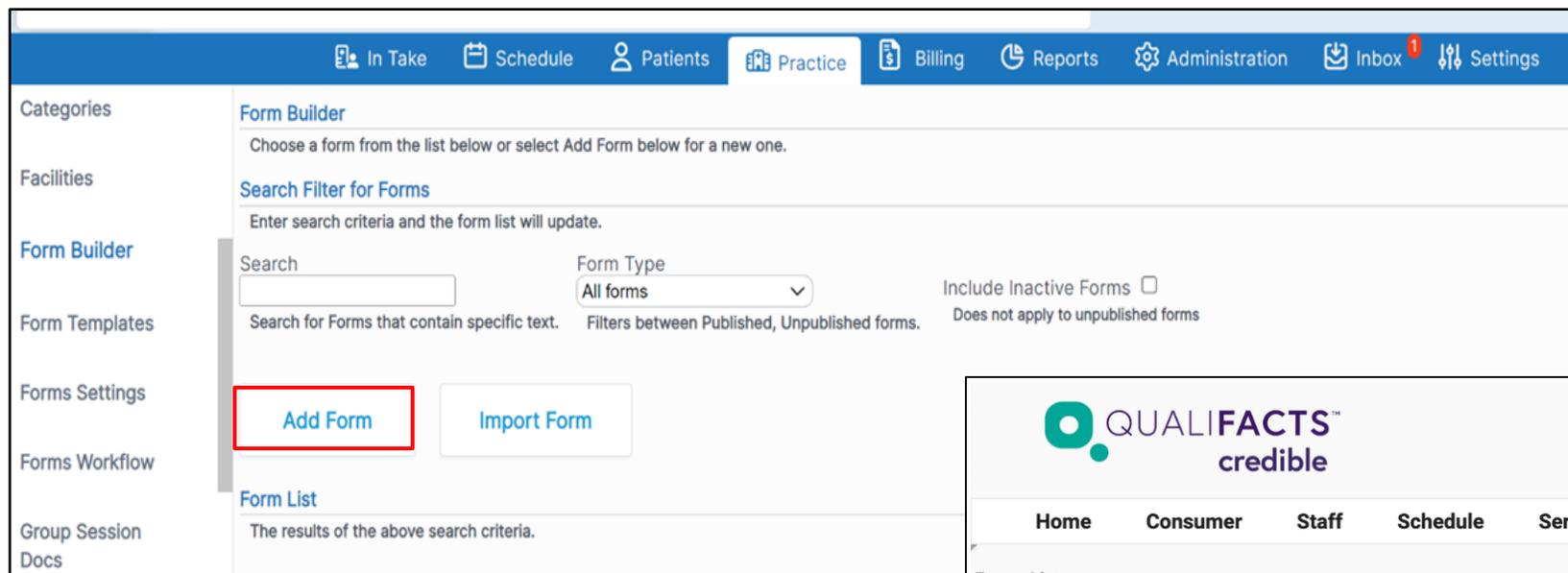
Long Beach Nassau

Pharmacy

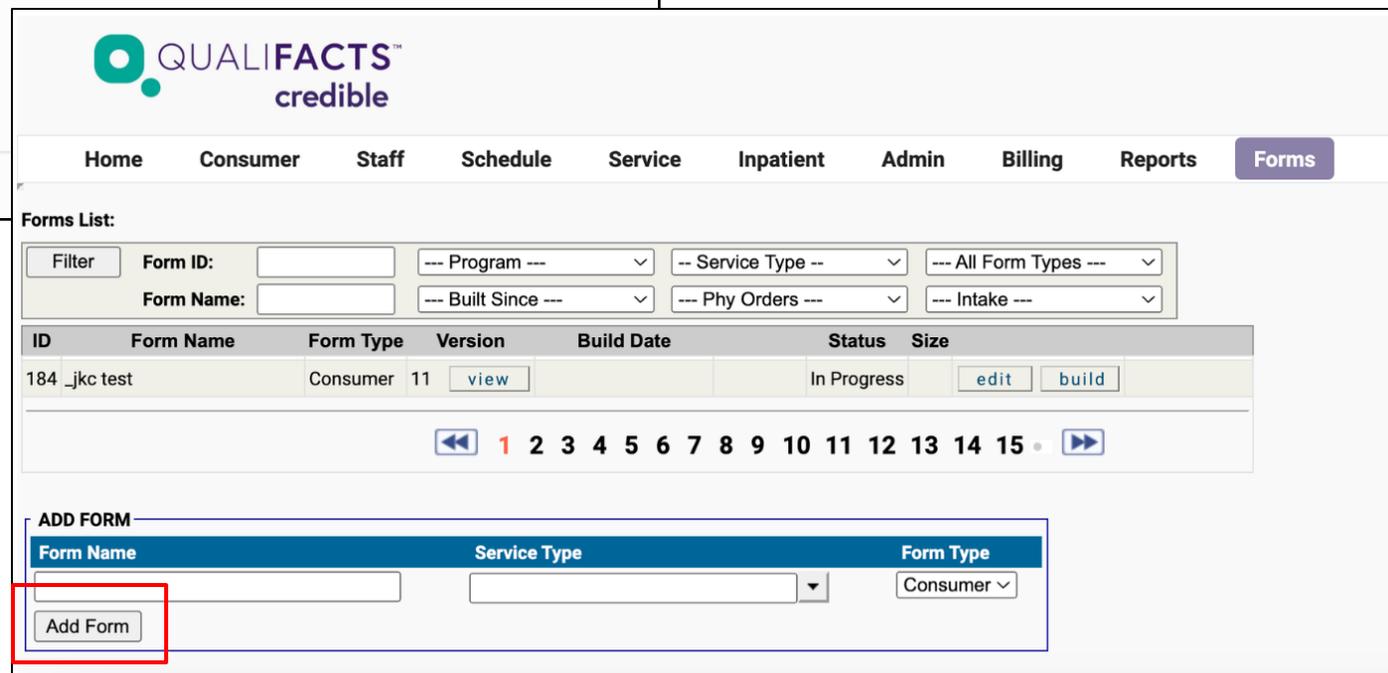
Office Location Default Employment Status

Employed full-time Income Account Balance

- Form Builder is a user-friendly tool designed to effortlessly create clear and compact clinical forms.



The screenshot shows the top navigation bar with icons for In Take, Schedule, Patients, Practice, Billing, Reports, Administration, Inbox (with a red notification badge), and Settings. On the left is a sidebar menu with categories: Categories, Facilities, Form Builder (highlighted), Form Templates, Forms Settings, Forms Workflow, Group Session Docs. The main content area shows the 'Form Builder' section with a sub-header 'Form Builder' and instructions: 'Choose a form from the list below or select Add Form below for a new one.' Below this is a 'Search Filter for Forms' section with a search input field, a 'Form Type' dropdown menu set to 'All forms', and an 'Include Inactive Forms' checkbox. Two buttons, 'Add Form' and 'Import Form', are visible at the bottom of the section.



The screenshot shows the QUALIFACTS credible interface. At the top is the logo and a navigation bar with tabs: Home, Consumer, Staff, Schedule, Service, Inpatient, Admin, Billing, Reports, and Forms (highlighted). Below the navigation bar is the 'Forms List' section. It includes a 'Filter' button and several dropdown menus for filtering forms by ID, Name, Program, Service Type, Form Type, Built Since, Phy Orders, and Intake. Below the filters is a table with the following data:

ID	Form Name	Form Type	Version	Build Date	Status	Size
184	_jkc test	Consumer	11		In Progress	edit build

Below the table is a pagination control showing page 1 of 15. At the bottom of the screenshot is an 'ADD FORM' form with fields for Form Name, Service Type, and Form Type (set to Consumer), and an 'Add Form' button.

CONSISTENCY

Records reflect appropriate use of tools and continuity of data across platforms





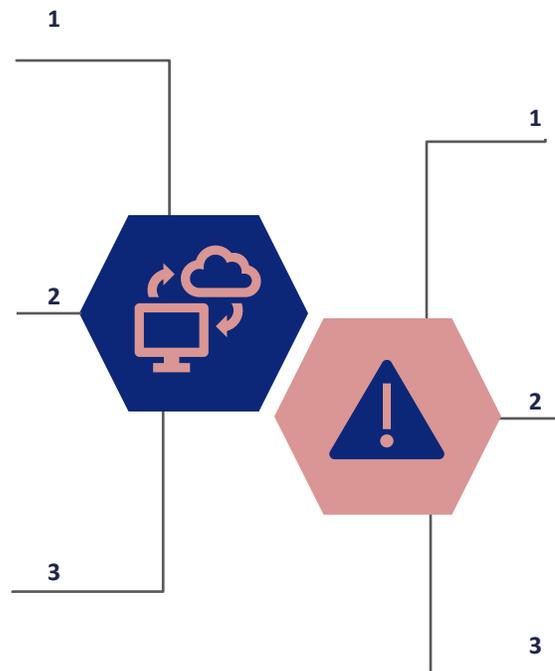
ACTION

CONSEQUENCE

Staff not checking HIE for Encounter Notification Services (ENS) alerts

Inconsistent use of assessment tools

Individual neglected to inform the provider of a recent visit to the emergency room



Missed individual's current Admission, Discharge, Transfer (ADT) state from other providers that could impact future care

Incorrect representation of individual's status

Missed medications and/or care plan changes and follow-up care

TIPS & BEST PRACTICES FOR IMPROVING DATA CONSISTENCY



Standardize Terminology and Assessments

Implement policies that encourage staff to use consistent assessment tools such as PHQ9 for Depression Screening, ASAM-American Society of Addiction Medicine, OASIS-Outcome Assessment and Information Set, Person Centered Questionnaire, Psychosocial Assessment, and other office form templates



Utilize Structured Data Entry

Encourage the use of structured data entry formats in your EHR for any data fields that are not a unique identifier



Develop and Utilize Workflow Documentation Tools

Leverage checklists, quick reference guides, and tip sheets, to promote consistent and timely data entry

TIMELINESS

Records reflect the most up-to-date changes and information





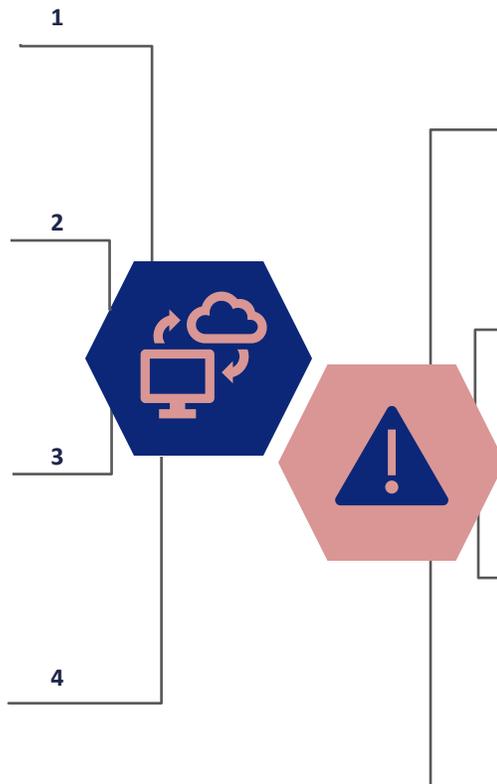
ACTION

Delay in transmitting the required information for the plan of care

Delay in entering a critical change in substance use pattern

Late documentation of a mood swing, affecting the treatment response

Late documentation of an achievement towards a goal



CONSEQUENCE

Outdated information could compromise the individual's health, affect treatment outcomes and services provided

Incorrect treatment plan causes delay in recovery

Treatment not aligned with current mental state

Prolongs the individual's opportunity to work on higher-level independent living skills

TIPS & BEST PRACTICES FOR IMPROVING DATA TIMELINESS



-  **Incorporate Review of HIE Encounter Notification Services (ENS) into Staff Workflow**
Encourage timely locking of encounter notes to ensure HIE reflects the most up-to-date changes and information
-  **Document and Enforce Prompt Data Entry Policies**
Encourage prompt data entry (24-48 hours is the suggested amount of time to complete documentation)
-  **Streamline Workflows**
Aim to reduce documentation burden in your clinical workflow to enable more comprehensive and timely data capture
-  **Turn On Automated Alerts and Reminders**
Set up automated alerts and reminders within EHR systems to notify staff about missing or incomplete data



Admin

Daily Activities

- Home Page
- Service Queue
- Staff Form Queue
- Dashboard
- Admin Time Queue
- Manage Teams
- Program Assignments
- Manage Resources
- Manage Foster Homes
- Bed Board Search
- Schedule Groups
- Notification Triggers

Trigger List:

Filter: -- Notification Triggers --

	Trigger	Notification Title
edit	Client Update	Upcoming Quarterly Review
edit	Employee Add	Employee Added
edit	Treatment Plan End Date	Consumer Plan of Care Notice Trigger
edit	Treatment Plan End Date	Consumer Plan of Care Notice Trigger
edit	Treatment Plan End Date	Consumer Plan of Care Notice Trigger
edit	Treatment Plan End Date	Consumer Plan of Care Notice Trigger-ACT 4
edit	Treatment Plan End Date	Consumer Plan of Care Notice Trigger-CSW
edit	Authorization End	Expired Authorizations
edit	Client Form Answer Selected	Consumer Referred to TIP
edit	Client Form Answer Selected	Consumer Referred for Community Support at M
edit	Client Form Answer Selected	Consumer Referred for Community Support at H
edit	Client Form Answer Selected	Consumer Referred for Community Support at M
edit	Client Form Answer Selected	Consumer Referred for Therapy at Minnesota
edit	Client Form Answer Selected	Consumer Referred for Therapy at Hunt Place
edit	Client Form Answer Selected	Consumer Referred for Therapy at MLK
edit	Client Form Answer Selected	Client Referred to Outreach
edit	Client Form Answer Selected	Consumer Referred for Day Treatment

Client N [delete](#)

To Do List

Summary	For	Begin Date
Consumer Plan of Care Notice Trigger-CSW	Consumer: Testing, John	1/15/2024
Consumer Plan of Care Notice Trigger-ACT 1	Consumer: Testing, John	1/15/2024
Consumer Plan of Care Notice Trigger-ACT 2	Consumer: Testing, John	1/15/2024
Consumer Plan of Care Notice Trigger-ACT 3	Consumer: Testing, John	1/15/2024
Consumer Plan of Care Notice Trigger-ACT 4	Consumer: Testing, John	1/15/2024
Consumer Plan of Care Notice Trigger-CSW	Consumer: Testing, John	1/14/2024
Consumer Plan of Care Notice Trigger-ACT 1	Consumer: Testing, John	1/14/2024
Consumer Plan of Care Notice Trigger-ACT 2	Consumer: Testing, John	1/14/2024

All Current To Do List Items

Trigger: ---- SELECT ----

Title:

Occur: days to start occurrence after trigger event

Reminder:

Send Email:

Must Dismiss:

To Do List:

Add a New Trigger Entry

VALIDITY

Records reflect the use of credible tools and sources of information





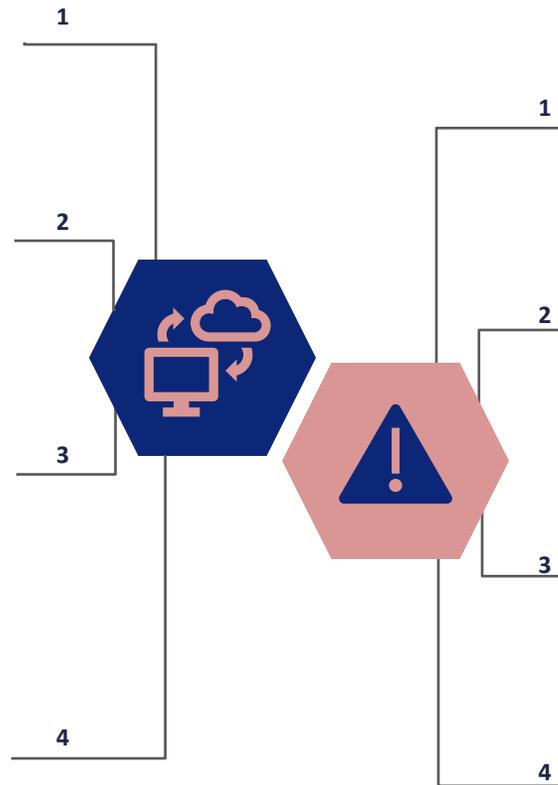
ACTION

Reliance on outdated substance use assessment tools

Use of unvalidated scales for symptom assessment

Relying on the individual or family member to provide information regarding medical appointments and treatments

Use of a method not stated in the Individual Service Plan (ISP) to measure progress towards goals can result in services being provided in an unsafe manner



CONSEQUENCE

Incorrect representation of individual's status

TIPS & BEST PRACTICES FOR IMPROVING DATA VALIDITY



-  **Encourage Individuals to Regularly Validate their Data**
Educate and encourage individuals to provide accurate and detailed information during appointments, which can enhance the completeness and validity of their medical record
-  **Leverage the HIE**
Check the HIE for updated provider visit summaries for the most up-to-date information regarding medical appointments and treatments
-  **Develop and Utilize Workflow Documentation Tools**
Leverage checklists, quick reference guides, and tip sheets, to promote consistent and timely data entry

RELIABILITY

Records reflect integrity, dependability, and consistency of data over time





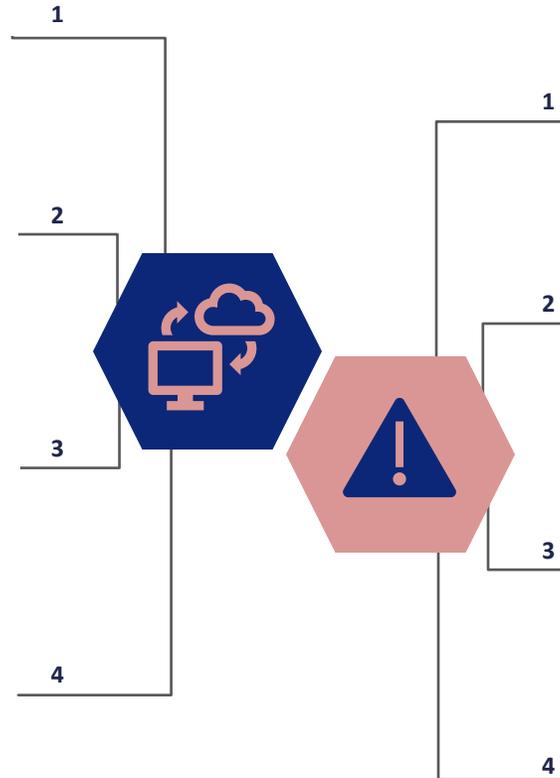
ACTION

Inconsistent tracking of an individual's recovery progress

Variable documentation of therapy outcomes across different sessions

Inability to consistently track health goals

Variable documentation of Individual Service Plan (ISP) outcomes across over time



CONSEQUENCE

Inability to properly assess and plan further treatment

Inability to properly assess and plan further treatment

Hinder the assessment of interventions and progress towards goals

Incorrect representation of individual's status

TIPS & BEST PRACTICES FOR IMPROVING DATA RELIABILITY

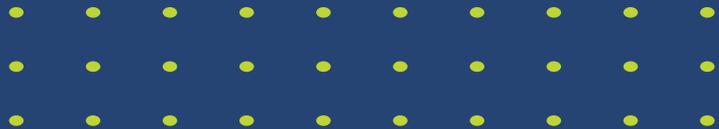


-  **Standardize Documentation Procedures**
Implement and enforce Standard Operating Procedures (SOPs) related to data entry and validation
-  **Cross-Check Your Data**
Encourage cross-verification of data by staff involved in patient care within your organization to help identify and rectify discrepancies
-  **Implement Data Quality Feedback Mechanisms**
Create channels for staff to provide feedback on data entry challenges and regularly collect input from users to identify areas for improvement and address concerns

- ★ **Establish a Data Governance Team**
Appoint a dedicated team or individual responsible for data quality and management (i.e., set standards, conduct audits, and be the go-to for any data-related issues)
- ★ **Implement Data Quality Feedback Mechanisms**
Create channels for staff to provide feedback on data entry challenges and regularly collect input from users to identify areas for improvement and address concerns
- ★ **Streamline Workflows**
Aim to reduce documentation burden in your workflow to enable more comprehensive and timely data capture
- ★ **Create Reports and Conduct Periodic Audits**
Conduct regular audits of records and employee tasks to identify and rectify gaps in data completeness
- ★ **Provide Ongoing Staff Training & Development**
Ensure that everyone involved in data entry or processing is adequately trained and understand the importance of data accuracy and completeness



PROMOTE MEANINGFUL DATA EXCHANGE





- Admission, Discharge, Transfer Messages (ADT)
 - Deemed the "go-to data source for care coordination efforts across states" by the Office of the National Coordinator for Health IT (ONC)*
 - Communicates that an individual's "state" (admitted, discharged, or transferred) has changed
 - Communicates demographic information (i.e. name, insurance, next of kin, attending doctor, etc.) has been updated

- Continuity of Care Document (CCD)
 - A summary of an individual's encounter information in electronic form
 - It gives providers a standard way to share a comprehensive and concise view of an individual's history and current condition
 - A valuable tool to advance research and public health

*Source: <https://www.healthit.gov/buzz-blog/state-hie/hie-bright-spots-adt-messages-support-care-coordination-part-ii>

**Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3483927/>



Good

Individual is associated with your organization in the HIE



Better

Comprehensive encounter information (admit reason, services provided, etc.) is shared with the HIE



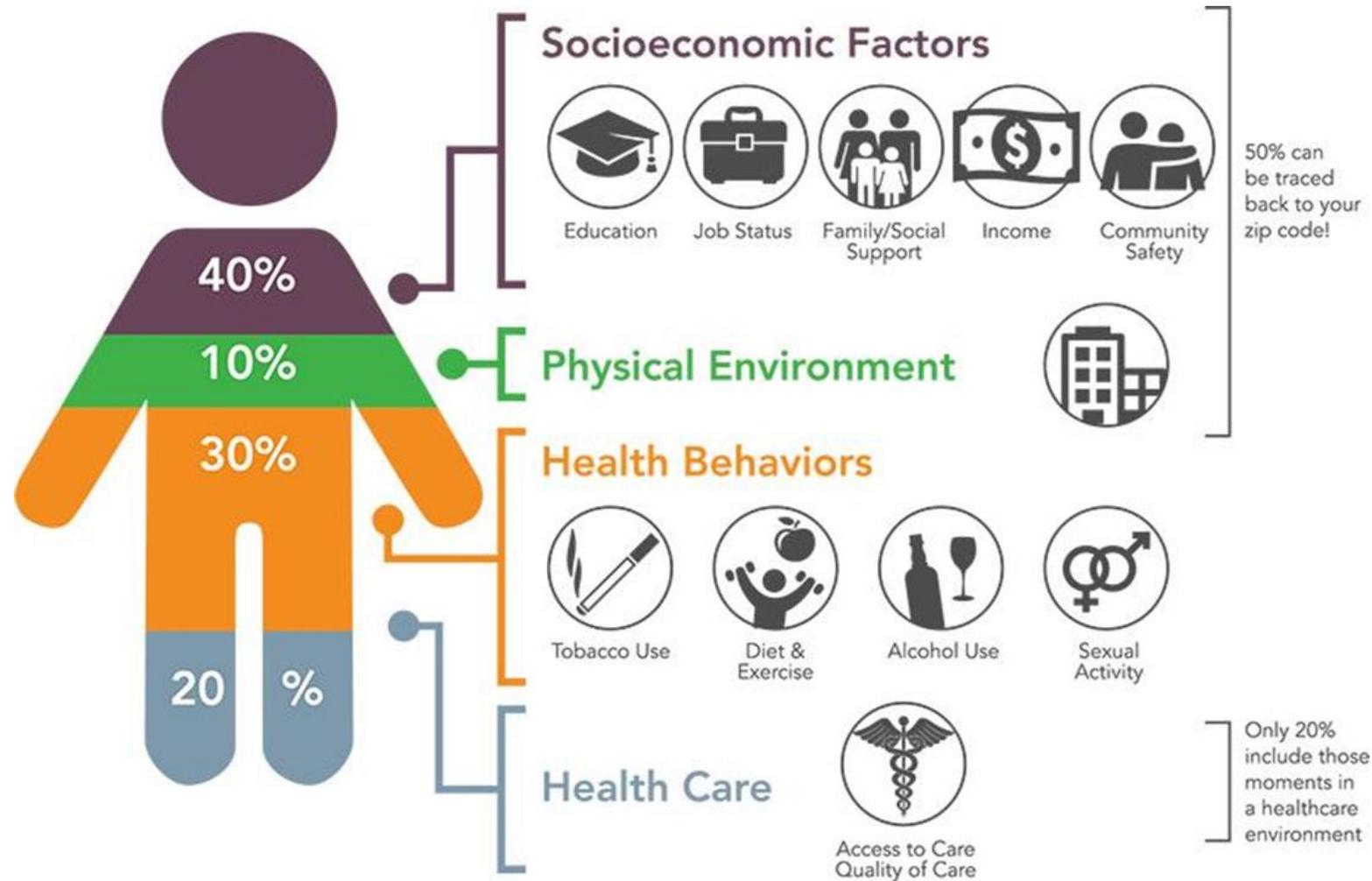
Best

Additional context such as race, ethnicity, and other socioeconomic factors are shared with the HIE

“Good, better, best, don't let it rest until the good is better and the better is best!”

Social Determinants of Health (SDOH) Integration







COMMON CATEGORIES:



Z55 - Problems related to education and literacy

Z56 - Problems related to employment and unemployment

Z57- Occupational exposure to risk factors

Z58- Problems related to physical environment

Z59- Problems related to housing and economic circumstances

Z60- Problems related to social environment

Z62- Problems related to upbringing

Z63- Other problems related to primary support group, including family circumstances

Z64- Problems related to certain psychosocial circumstances

Z65- Problems related to other psychosocial circumstances

The screenshot shows a patient form with a 'Weaknesses' section. Four items are highlighted with red boxes and mapped to Z codes:

- Financial Problems** is mapped to **Z59.86**.
- History of Noncompliance With Treatment** is mapped to **Z91.1**.
- Limited Support System** is mapped to **Z63**.
- Unable to Live Independently** is mapped to **Z59**.

The screenshot displays the QUALIFACTS credible interface for a patient named John Testing. The main content area is titled "Problem List (DSM 5 / ICD10)". A "New" problem entry is being created, with the text "z55" entered into the ICD-10 code field. A dropdown menu is open, listing various ICD-10 codes under the heading "ICD10":

- (z55.4) Educational maladjustment and discord with teachers and classmates
- (z55.2) Failed school examinations
- (z55.0) Illiteracy and low-level literacy
- (z55.5) Less than a high school diploma
- (z55.8) Other problems related to education and literacy
- (z55.9) Problems related to education and literacy, unspecified
- (z55.6) Problems related to health literacy
- (z55.1) Schooling unavailable and unattainable
- (z55.3) Underachievement in school

Other visible fields include "Effective Date: 01/17/2024 06:25 PM", "Date Created: 1/17/2024", "Resolved:" with a calendar icon, and "Onset Date:" with a calendar icon. At the bottom, there are fields for "SNOMED Description: ---Select---", "RO:" with a checkbox, "Use 42CFR:" with a checkbox, and "Provisional:" with a checkbox. The bottom summary bar includes "WHODAS 2.0 General Disability", "Raw Score:", "Avg Score:", and "Assessment Date:".

Run Clinical DX report

Reports > Clinical > enter search criteria

Report - Clinical

Admit Date From : 2023-11-01 12:21:00 To : 2023-12-20 12:21:00

Patient: First,Last(PID/HRN)

Admit Facility : Select

Problem DX : ICD10:Z55.0 [clear](#)

Gender : ALL

Gender Identity : ALL

Sexual Orientation: ALL

Drug :

Race : ALL

Ethnicity : ALL

Lab Result:

Communication: ALL

Immunization:

Option : ALL

Details

Age Range: From To

Sort By : Patient Name Age Diagnosis Title Drug NDC Number Lab Results

[Search](#)

Run Patient DX Report

Reports > Patient Diagnosis Report > enter range criteria > print or export

The screenshot shows the 'Report - Patient Diagnosis Report' interface. At the top, there is a navigation bar with icons for In Take, Schedule, Patients, Practice, Billing, Reports, Administration, Inbox, and Settings. The left sidebar contains a list of menu items: Immunizations, Clinical, Service Report, Patient Diagnosis Report, Immunization Registry, List, Prior Authorization Usage Report, and Patient Admit History. The main content area includes several filter fields: Encounter Facility (dropdown), Payer (dropdown), Encounters From (calendar), Encounters To (calendar), Age From (text), Age To (text), Ethnicity (dropdown), and Gender (dropdown). Below these is a 'Diagnosis Code' field with a search icon, a 'clear' button, and a '...' button. Further down are 'Search', 'Print', and 'Export' buttons. The 'Summary' section shows a table with columns 'Facility' and 'Quantity'. The 'Details' section includes a sorting instruction and a table with columns: Facility, Date of Service, Encounter, Patient Name, Pld, Gender, Ethnicity, Age, Service Code, Diagnosis Code 1, Diagnosis Code 2, Diagnosis Code 3, Diagnosis Code 4, and Payer. At the bottom, it shows '0 - 0 of 0' and a page number '1'.

Credible Advanced Search

Home **Consumer** Staff Schedule Service Inpatient Admin Billing Reports Forms

Filter Consumer Name/ID --- Program --- --- Team --- --- Payer --- --- Payer Type --- --- Primary ---

Export ALL ACTIVE Insurance ID SSN Phonetic Name Multiple rows per consumer Do not repeat headers

DIAGNOSIS: Add Any All Primary Only

COUNTS: Period Start Period End --- Bill / NB --- --- Service Type --- Word Wrap All Episodes

SORT BY: --- Sort By --- Descending --- Sort By 2nd--- Descending Grp Total Grp Total Only

WHERE: --- Column --- = Value AND --- Column --- = Value

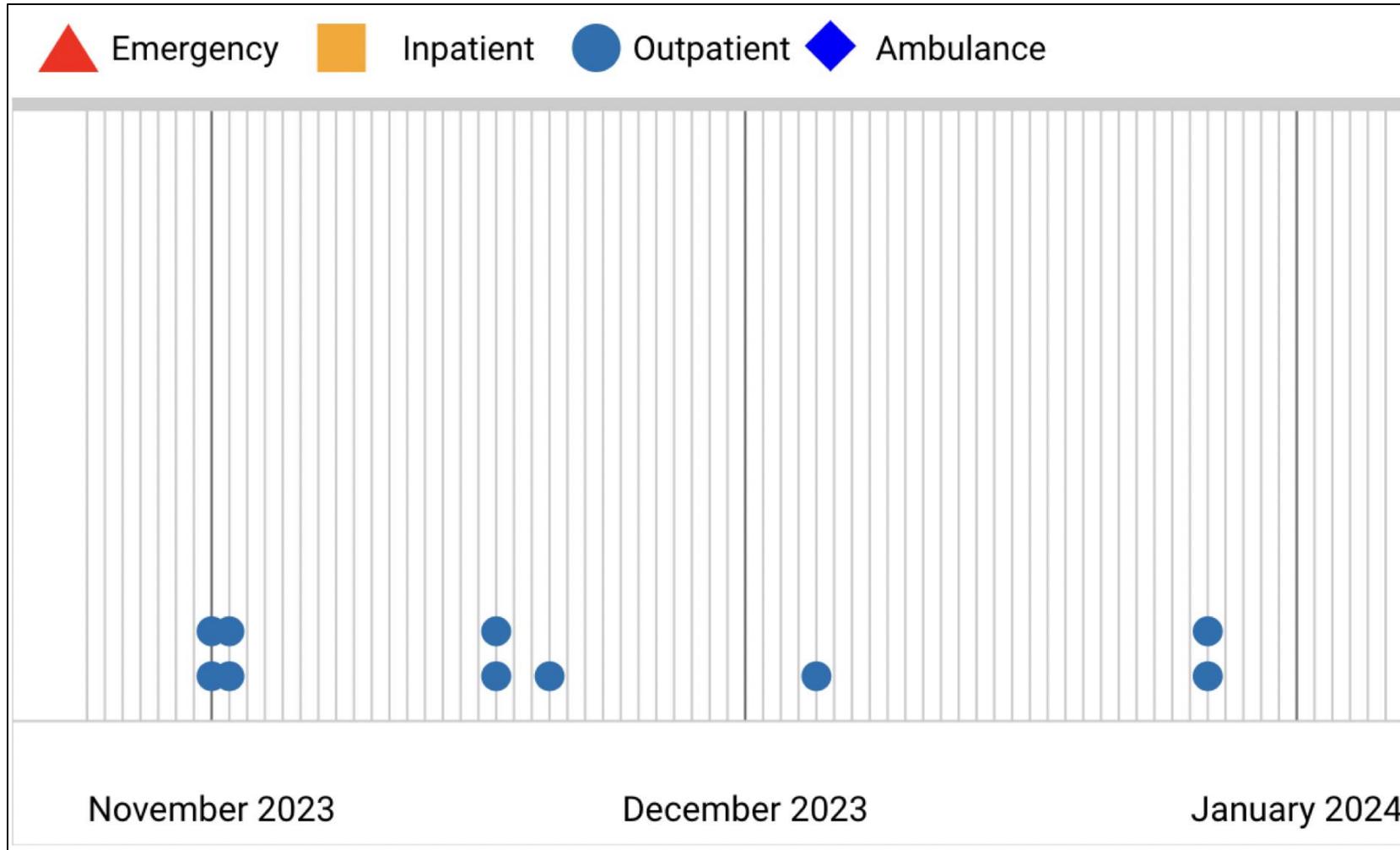
Saved Reports Custom Fields Multi Select Show Print Show Add Service



- **Improved Data Quality:**
 - ✓ ensures that decisions are based on accurate, reliable, and relevant information
 - ✓ leads to increased efficiency and productivity
 - ✓ helps maintain compliance
 - ✓ leads to improved service delivery
 - ✓ improves understanding of population health trends
 - ✓ enables precise billing, reducing errors and rejected claims



DC HIE Patient Snapshot



Questions?



Training	Date	Training Type
Best Practices for Improving EHR Data Quality	Tuesday, February 27, 2024	EHR
eHealth DC Learning Community	Thursday, February 29, 2024	EHR
Care Coordination	Tuesday, March 12, 2024	EHR
Security and Privacy	Friday, March 15, 2024	EHR
Best Practices for Improving HER Data Quality	Friday, March 22, 2024	EHR

Training	Date	Training Type
Social Needs Screening Tool	Wednesday, February 28, 2024	HIE
Advance Care Planning	Tuesday, March 5, 2024	HIE
Consent Tool	Thursday, March 7, 2024	HIE
I'm Connected to the HIE, Now What?	Wednesday, March 13, 2024	HIE
PopHealth/Analytics	Tuesday, March 19, 2024	HIE