Detecting Unreported Critical Incidents in Medicaid Claims

The CT DDS Journey to Improve Quality Through Technology





The Changing Landscape

Department of Health and Human Services
OFFICE OF
INSPECTOR GENERAL

A Resource Guide for Using
Diagnosis Codes in
Health Insurance Claims
To Help Identify
Unreported Abuse or Neglect

Inquiries about this report may be addressed to the Office of Public Affairs at
Public Affairs@oig.hhs.gov.



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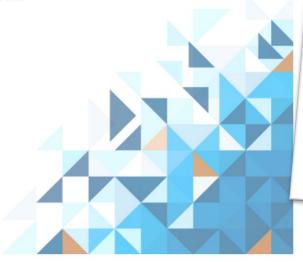




U.S. Department of Health and Human Services Office of Inspector General, Administration for Community Living, and Office for Civil Rights

Ensuring Beneficiary Health and Safety in Group Homes Through State Implementation of Comprehensive Compliance Oversight

January 2018



NASDDDS

National Association of State Directors of Developmental Disability Services

Health and Welfare Review: Report and Self-Assessment

Incident Management Systems and Mortality Reporting in Select State
Intellectual/Developmental Disability Systems

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National Association of State Directors of Developmental Disabilities Services

November 2017

This report includes two sections. Part I describes the review process undertaken by NASDDDS during the spring and early summer of 2017 for twelve state Intellectual/Developmental Disability Management systems, and the results and recommendations subsequent to the review. Part II is a self-assessment tool, available to assist states to review and management systems.

PART I: THE REVIEW

Purpose of the Review

State Intellectual and Developmental Disability (I/DD) agencies take very seriously the obligation to assure the health and well-being of citizens with I/DD who reside in their state. To meet this obligation, states use multiple approaches to track, measure, and analyze the status of individual and collective health and well-being. More than a compliance exercise, states have dedicated resources, designed procedures, and taken additional approaches towards protecting, and developmental disabilities. In the spring of 2017, NASDDDS undertook a review of state I/DD agency incident learning. The insight and understanding gained proved useful in identifying promising practices and developmental disabilities for shared assessment tool for use by state agencies. The resulting observations and self-assessment state agencies. The resulting observations and self-assessment tool provide comparisons through which states can appraise existing structures. The self-assessment tool is useful for states to assess the responding to critical incidents within the publicly funded service systems.





Presentation Overview









Expanding Capabilities



What's Next





Background

- ► OIG Audits
- ► Joint Report
- ► Health and Welfare Review
- ► Technical Assistance
- Medicaid Waiver Assurances







Responding to Change

DDS took immediate steps to shore up systems that protect individuals

Abuse is wrong. Say NO to Abuse.

There are lots of different types of abuse:



NASDDDS Organizational Self Assessment



Do people know what to report, when to report, and who to report it to?

- Provided in the property of th
- How do we trend and analyze incidents?
- How do we identify improvement efforts?
- How do we engage partners and stakeholders?
 - How do we manage Mortality Review?





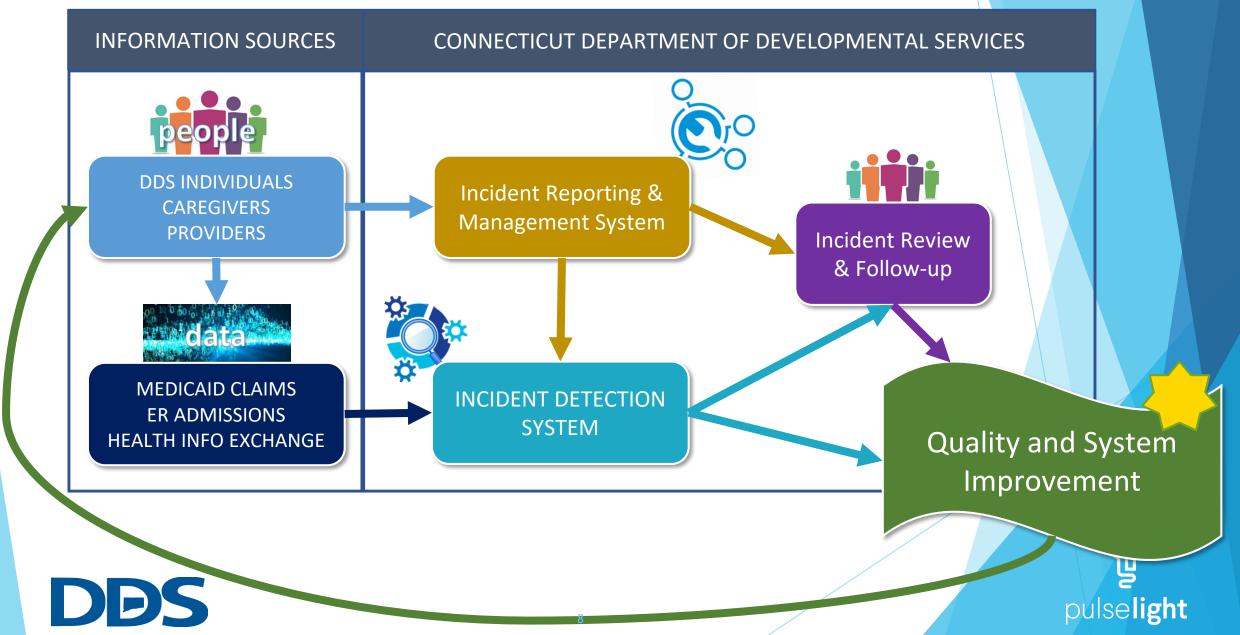
We Were Only Seeing Part of the Picture



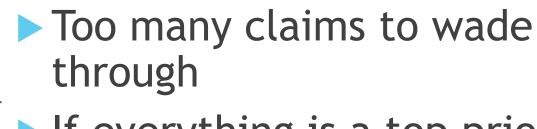




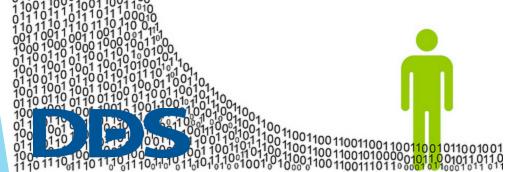
Quality & System Improvement Ecosystem



Using Claims to Identify Potential Critical Incidents



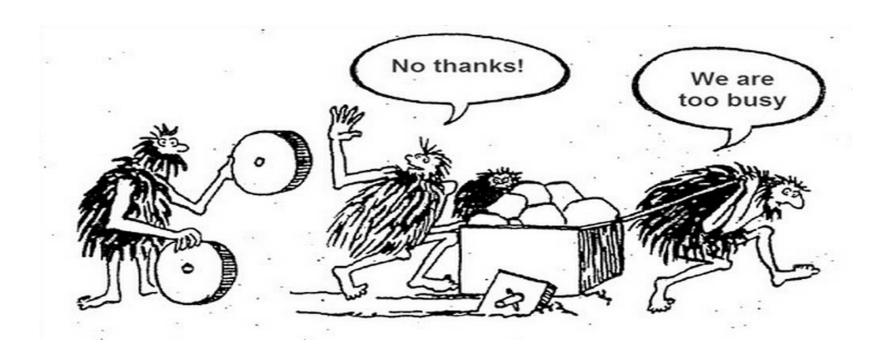
- If everything is a top priority, nothing is
 - Need to use Resources efficiently





Problem: We lacked technical expertise to use raw claims data

Solution: Let's leverage an existing resource







The Pulselight Story



- ➤ The Pulselight software was built as a general-purpose analytic platform and application that was designed to address multiple and varied healthcare challenges.
- We already had years worth of Medicaid claims and 3rd-party data in our data stores
- CT DDS turned to us to see if we could help





Incident Detection System

An analytic solution that:

- Utilizes Medicaid claims and data from reported incidents
- Detects critical incidents in claims data using state definitions & categorizations
- Shows medical history and context around individuals with detected incidents
- Matches detected critical incidents with reported critical incidents
- Prioritizes incidents for better resource allocation
- Analyzes volumes and trends of incidents by individual, residence or provider

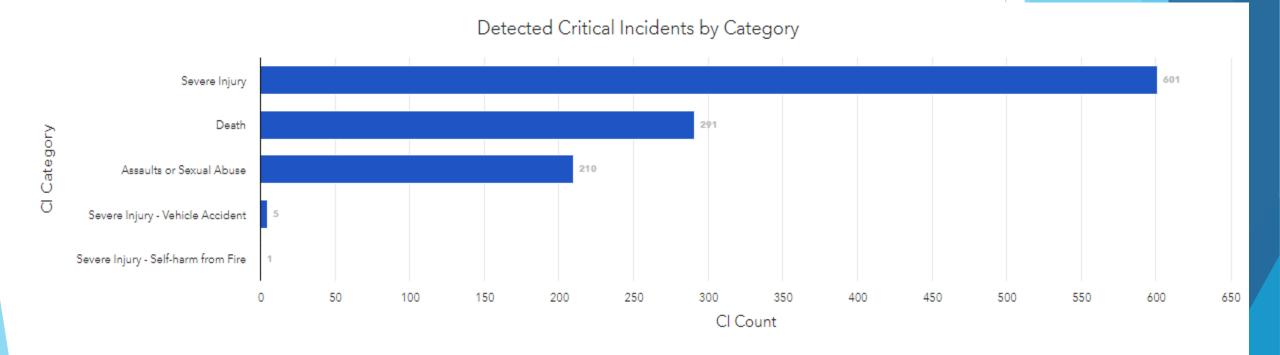








Expanding Capabilities



Distinct Providers **474**

Distinct Individuals **922** Detected Critical Incidents 1,108





The "Telescope Effect"

The telescope has always been an incredibly useful tool. It can show us things that are normally impossible to see.



One problem with a telescope, though, is that it can only show you one small piece of the whole picture at a time.



Take the soldier who looks out into the harbor with his telescope for signs of a pending attack.



The Story of Jane Doe and Provider Acme, Inc.

Jane Doe has one reported incident

In October 2015, while living at Acme (location A), she fell and broke her elbow







The Story of Jane Doe and Provider Acme, Inc.

Jane Doe: Reported Incident

Oct 2015: Acme (A), elbow fracture

Jane Doe: Detected Incidents

- Oct 2015: Acme (A), elbow fracture
- Sep 2017: Acme (A), femur fracture
- Apr 2018: Acme (B), aspiration pneumonia







The Story of Jane Doe and Provider Acme, Inc.

Acme, Inc. (50+ locations) 10/15 - forward

- 124 Detected Critical Incidents
- 35 Reported Incidents
- 94 Unreported Incidents
 - 65 Aspiration pneumonia
 - 9 Injury (fractures, contusions, etc.)
 - 8 Infection
 - ▶ 5 Complications w/ prosthetic devices, implants, grafts
 - > 3 Injury from Assault
 - 2 Choking (asphyxiation)
 - 1 Adverse effects of antipsychotics
 - ▶ 1 Suspected sexual abuse





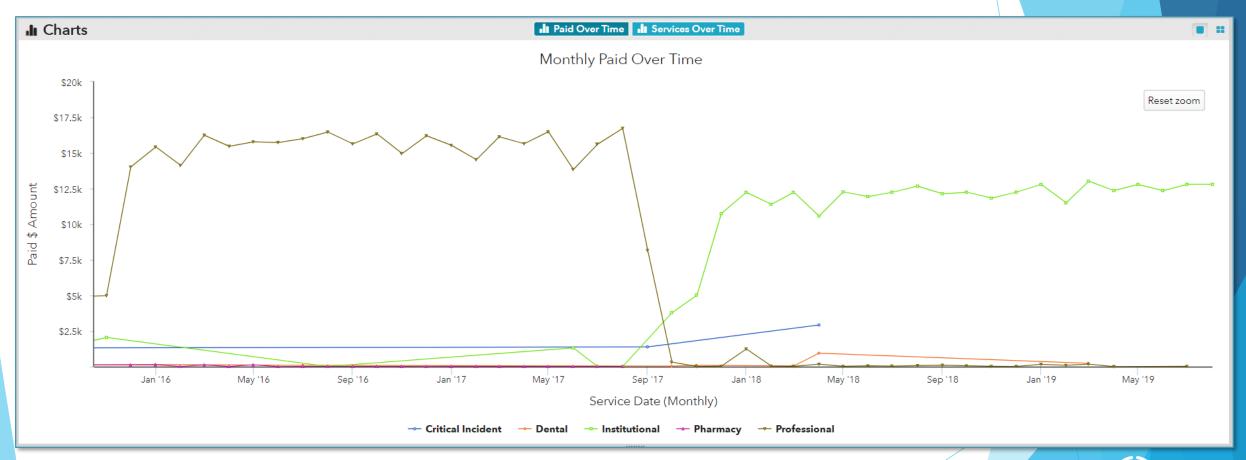
Full Context of an Incident ► Sep 2017: Acme (A), femur fracture

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Detected CI Start Date ↓	Detected CI End Date	Cl Trigger Dx Code	Service Start	Service End	Revenue Code	Procedure Code	Modifier:
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 16, 2017		99285 - Emergency dept visit	
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0440 - Speech Therap		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0370 - Anesthesia, Ge		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 17, 2017	Sep 17, 2017		27506 - Treatment of thigh fracture	AS
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0480 - Cardiology, Ge		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0360 - Operating Roo		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0300 - Laboratory, Ge		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0121 - Room and Boa		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0351 - CT Scan, Head		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0391 - Administration,		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0710 - Recovery Roo		
Sep 16, 2017	Sep 19, 2017	S72141A - Displaced intertrochanteric fracture of right femur,	Sep 16, 2017	Sep 19, 2017	0250 - Pharmacy, Gen		





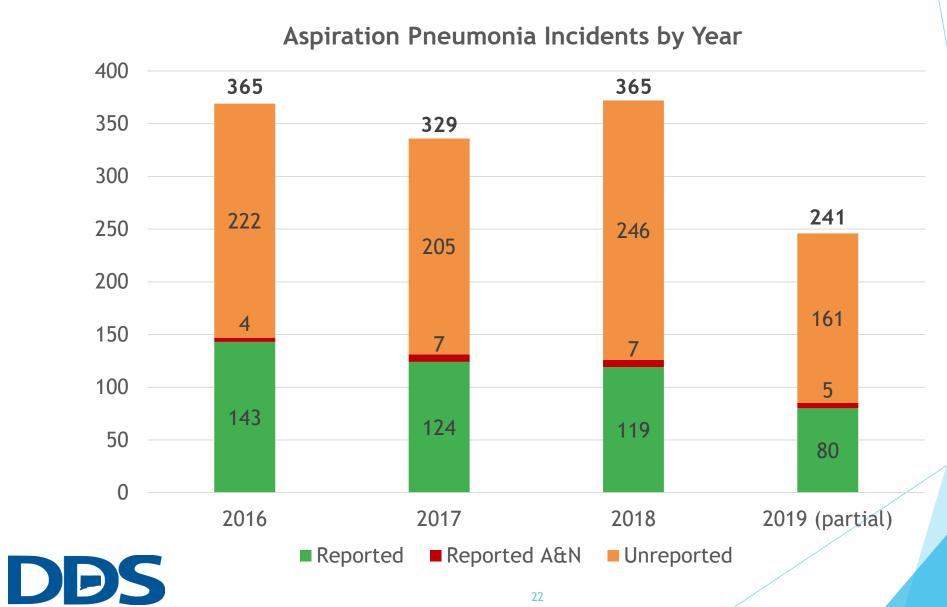
Full Context of an Individual - Jane Doe







Is This Just More Work?





Prioritization

(Separate the "Wheat from the Chaff")

- Pulselight prioritizes incidents based on risk of abuse or neglect using machine learning algorithms
- Model "features" include metrics from the incident, the individual, the provider and the residential placements







Single-Incident Reviews to System-wide Discoveries (The Chaff is still Important!)

Every identified incident does not have to lead to a personal review and follow-up

- System Intelligence
 - Ex. "Aspiration Pneumonia is occurring more than we thought."
- Technical Insight
 - Ex. "Maybe we need to adjust our critical incident definitions."
- Population Health Improvement
 - Update Safe Swallowing Guidelines
 - ▶ Update Training & "Train the Trainer" Programs

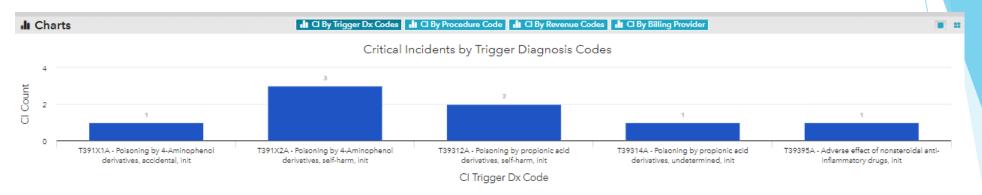








Medication Errors

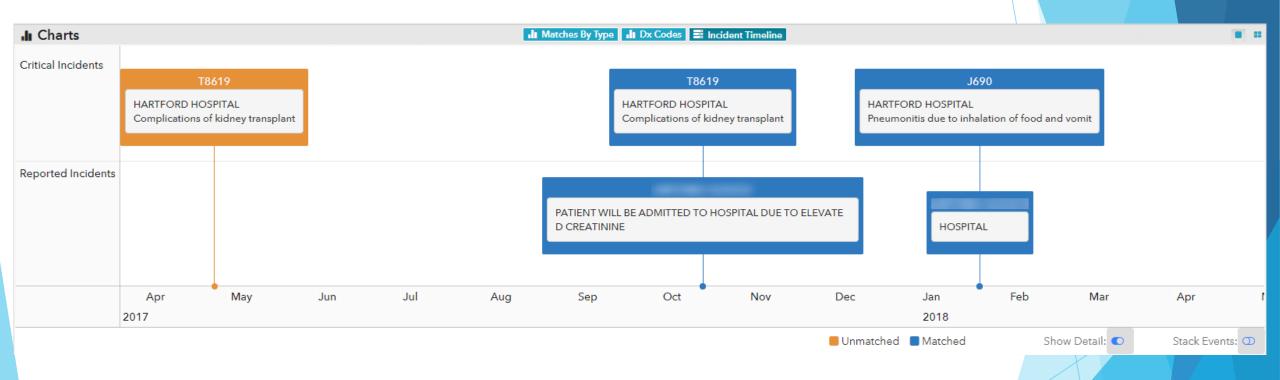


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Detected CI Category	Detected CI Start Date	Detected CI End Date	CI Trigger Dx Code	Procedure Code	Revenue Code	Modi
Severe Injury	Aug 31, 2017	Sep 18, 2017	T39314A - Poisoning by propionic scid derivatives, undeter	97535 - Self care mngment training		
Severe Injury	Aug 31, 2017	Sep 18, 2017	T39314A - Poisoning by propionic scid derivatives, undeter	9780Z -		
Severe Injury	Jun 1, 2019	Jun 5, 2019	T39312A - Poisoning by propionic acid derivatives, self-harm		0120 - Room and Board Semiprivate (two bed	
Severe Injury	Jun 1, 2019	Jun 5, 2019	T39312A - Poisoning by propionic acid derivatives, self-harm		0200 - Intensive Care Unit, General	
Severe Injury	Jun 1, 2019	Jun 5, 2019	T39312A - Poisoning by propionic acid derivatives, self-harm	99251 - Inpatient consultation		
Severe Injury	Jun 1, 2019	Jun 5, 2019	T39312A - Poisoning by propionic acid derivatives, self-harm	99223 - Initial hospital care		Al
Severe Injury	Sep 18, 2017	Sep 29, 2017	T391X2A - Poisoning by 4-Aminophenol derivatives, self-har	A0425 - Ground mileage		PH
Severe Injury	Sep 18, 2017	Sep 29, 2017	T391X2A - Poisoning by 4-Aminophenol derivatives, self-har	99291 - Critical care first hour		
Severe Injury	Sep 18, 2017	Sep 29, 2017	T391X2A - Poisoning by 4-Aminophenol derivatives, self-har	A0425 - Ground mileage		нн
Severe Injury	Sep 18, 2017	Sep 29, 2017	T391X2A - Poisoning by 4-Aminophenol derivatives, self-har		0121 - Room and Board Semiprivate (two bed	
Severe Injury	Sep 18, 2017	Sep 29, 2017	T391X2A - Poisoning by 4-Aminophenol derivatives, self-har	A0428 - Bls		нн





Mortality







What's Next?

- Work together to share "lessons learned"
- Adopt standard "Critical Incident" definitions and claim set
- ► Ensure access to Medicare claims for dual-eligible individuals
- Use data to help people live healthier, safer and more empowered lives









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