

Reducing Documentation Burden Using CCC

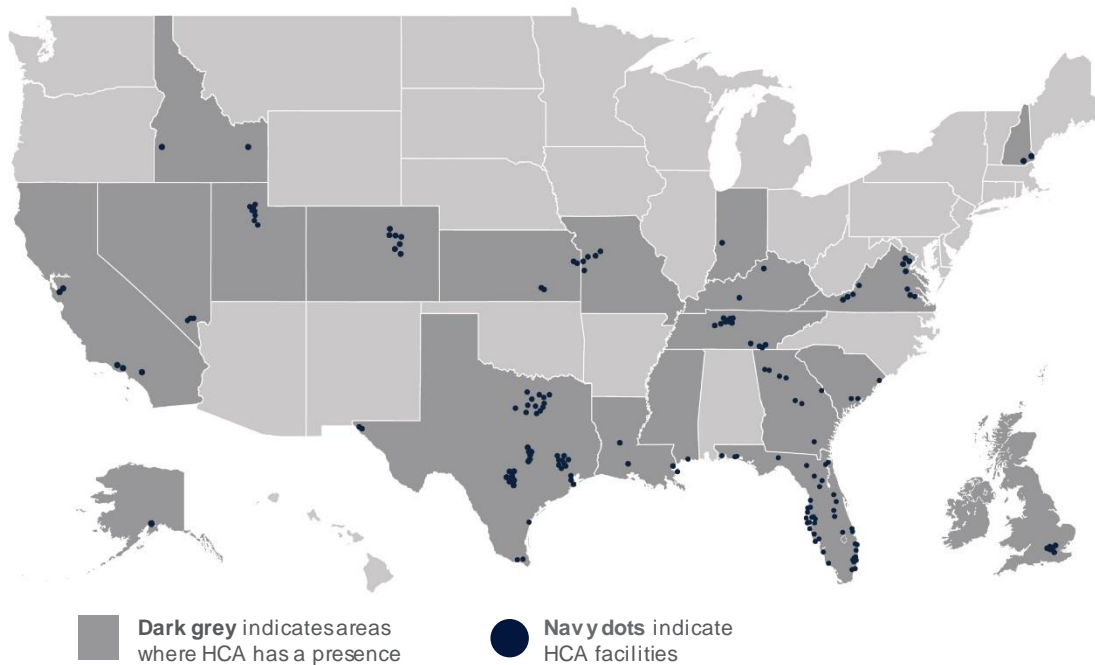
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Outline

- Developing EBCD
- Application of a standard, coded nursing taxonomy
- Using the “data exhaust” of clinical documentation

HCA Healthcare

186 hospitals and **132** surgery centers located in **20** states and the United Kingdom



Clinical Data Warehouse:

- 40 Million unique patients
- 140 Million patient encounters

“Above all else, we are committed to the care and improvement of human life.”

Evidence Based Clinical Documentation (EBCD)

VISION:

Create a patient-centric record that guides and informs the provision of safe, effective and efficient care by the interdisciplinary team and produces data to evaluate care of individual and populations of patients

The Business Case:

- Reduce RN time spent on documentation
- Respond to major RN dissatisfaction with documentation burden
- Return RN time to caregiving, improving patient outcomes and RN retention

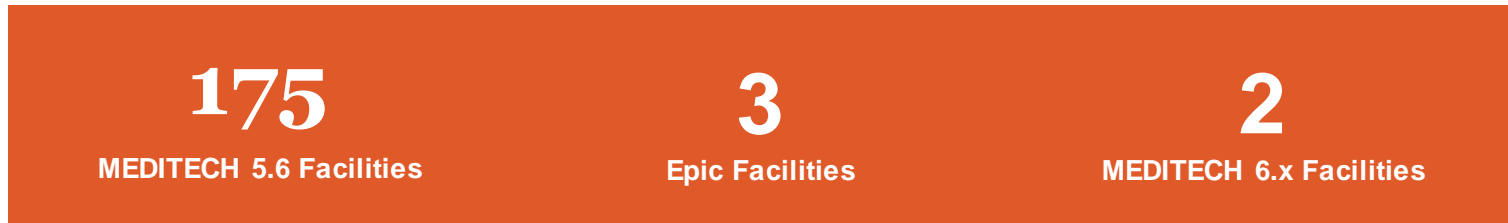
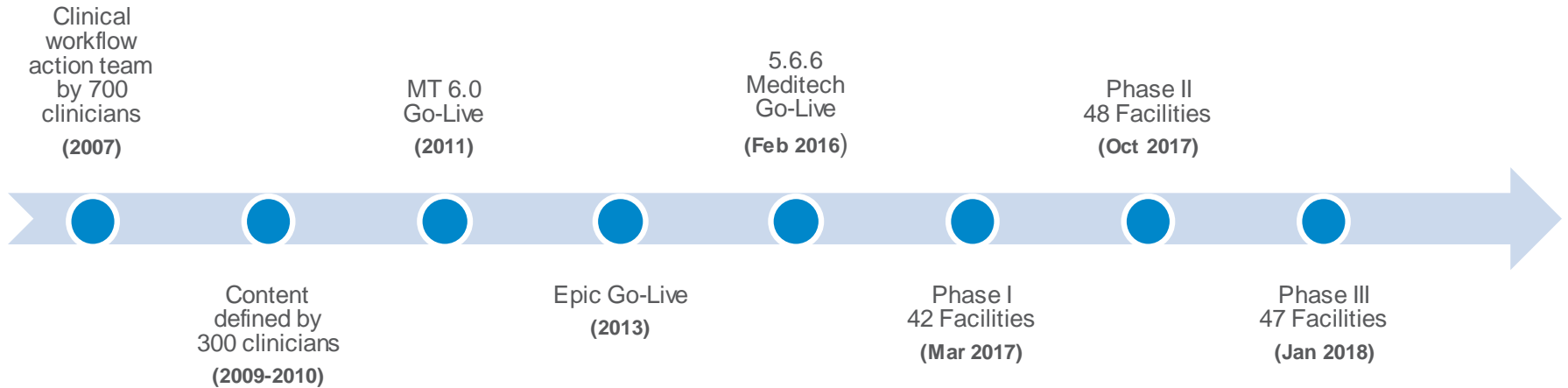
SCOPE:

Inpatient Surgical Services Emergency Services
Pediatrics Behavioral Health Respiratory Therapy

FOUNDATION FOR HCA NURSING PRACTICE:

Pain Assessment Wound Assessment & Staging Safety & Risk Assessment
Tube/Line/Catheter Management Plan of Care
Hygiene Care Ventilator Management

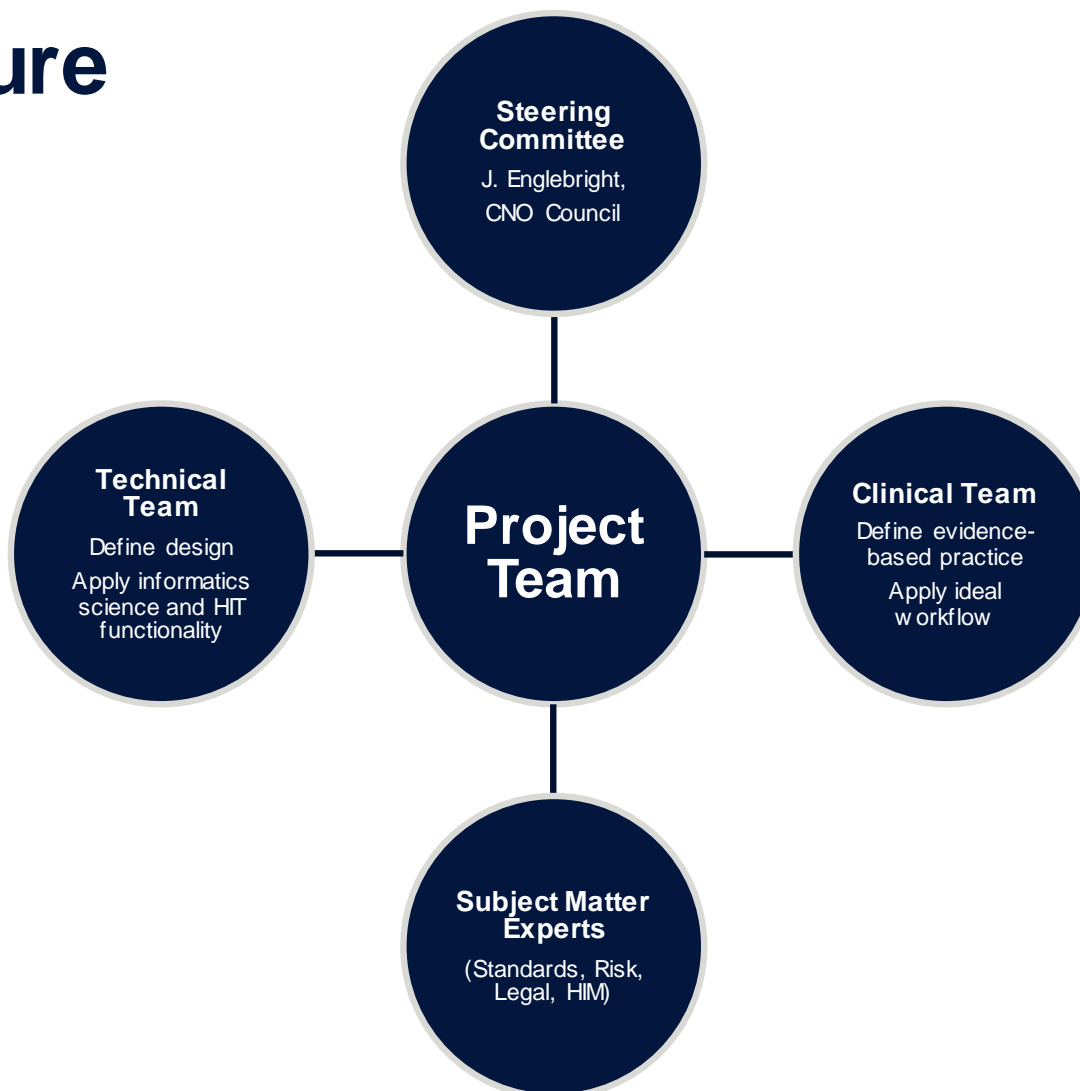
The Timeline: 2007 to 2018



Project Structure

Roles & Responsibilities:

- Clearly defined
- No overlap
- Mutual respect



Guiding Principles: EBCD Development Process



- Evidence-based vs. consensus-based decision-making
- Small design team, large review group
- Practicing clinicians define content
- Regulatory experts evaluate content for compliance
- Standard taxonomy to allow data re-use

Guiding Principles: EBCD Design

- Focus on the ethical, competent clinician
- Support ideal workflow
- Automate data entry whenever possible
- Share content between clinicians and care areas whenever possible
- Incorporate decision-support
- Use software as designed
- Strict adherence to Style Guide

Critical Decisions for Decreasing Documentation Time



Focused plan of care



Sharing content among care areas



Limiting documentation for others



Six consistent screen designs



Removing non-value added content



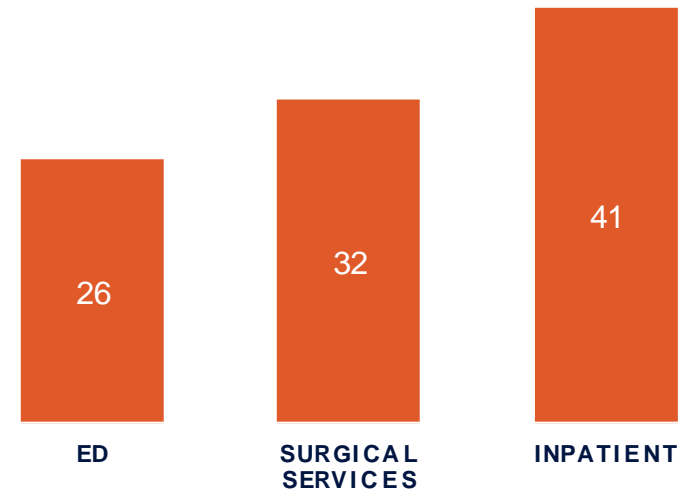
Interoperability to eliminate manual data entry

Efficiency Benefits of EBCD

Change in documentation time measured on five routines

- Shift Assessment
- Fall Risk Assessment
- Hygiene Care
- Skin Risk Assessment
- Inventory of Belongings

MINUTES SAVED PER 12 HOUR SHIFT BY CARE AREA TYPE



Results from first 11 hospitals

Nursing Feedback



“Thank you so much for making my shift much more productive”

“I feel a big weight off my shoulders stressing about data collections, mid day and end of shift notes.”

“I feel like a nurse again, treated like a professional. I am more able to chart real time, doing the little things that before I forgot or just didn’t get to, and that makes me want to go the extra mile.”

“This has truly transformed the way we deliver care”

“I really like how the information flows from unit to unit”

“I am continuing to receive ALL overwhelmingly positive feedback. Even the novice nurses say that EBCD helps them have more time at the bedside and less time in front of a computer, to the point there are sometimes no nurses at the station because they are all in the patient rooms. This has truly transformed the way we deliver care and is the most direct way I have seen HCA support our mission, “Above all else...”

Holding the Gains

Structure



Process

Does current process match the ideal process?



Does content align with guiding principles and key decisions?



Clinical Care Classification System (CCC)

- Building framework
- Education framework
- Management framework

CCC in the EBCD Build



4 Healthcare Patterns

21 Care Components

176 Diagnoses
3 Outcomes Classes

804 Interventions
4 Action Types

- Healthcare Patterns: Organizing framework for plan of care and teaching documentation screens
- Care Components & Diagnoses: content for nursing diagnoses/problems dictionaries, elements of plan of care and teaching documentation screens
- Outcomes: Content for goals and outcomes dictionaries, elements of plan of care
- Interventions & Action Types: Content for intervention dictionary, queries for screens

CCC in the Education Framework

	Physiologic	Psychosocial	Functional	Health Behavior
Assess				
Perform				
Teach				
Manage				

The four domains of the CCC model, combined with the four action types, create a matrix for identifying RN competency requirements for defined patient populations or sites of care.

ICU Example

	Physiologic	Psychosocial	Functional	Health Behavior
Assess	Indepth assessment, Invasive monitoring	Basic assessment	Basic assessment, Swallowing assessment	Basic assessment
Perform	Vasoactive drip administration IABP	Anxiety relief Delirium prevention	Assist self-care	None
Teach	Disease process Medication Family-focus	Family-focus	Family-focus	Disease process
Manage	Physician notification Therapy collaboration IDT	Identify need for psych referral	Identify need for therapy referral	Identify need for case management referral

Rehabilitation Example

	Physiologic	Psychosocial	Functional	Health Behavior
Assess	Indepth assessment: musculoskeletal, GI, GU and skin	Moderate assessment	Indepth assessment	Indepth assesement
Perform	Bowel & bladder retraining	Cognitive care	Use of assistive devices	NA
Teach	Patient & family signs of infection, blood clots	Patient & family recognize depression	Patient & family bowel & bladder management	Patient & family medications, skin checks
Manage	Interdisciplinary team conferences	Referrals for psychiatric care	NA	NA

CCC in the Management Framework

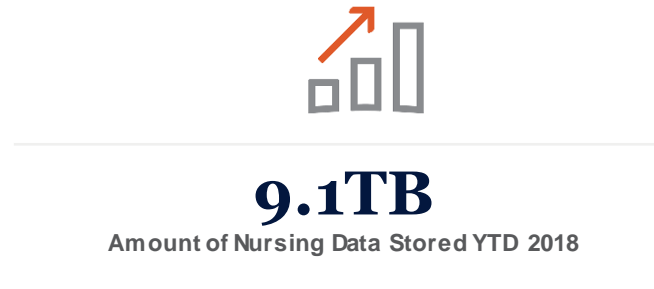
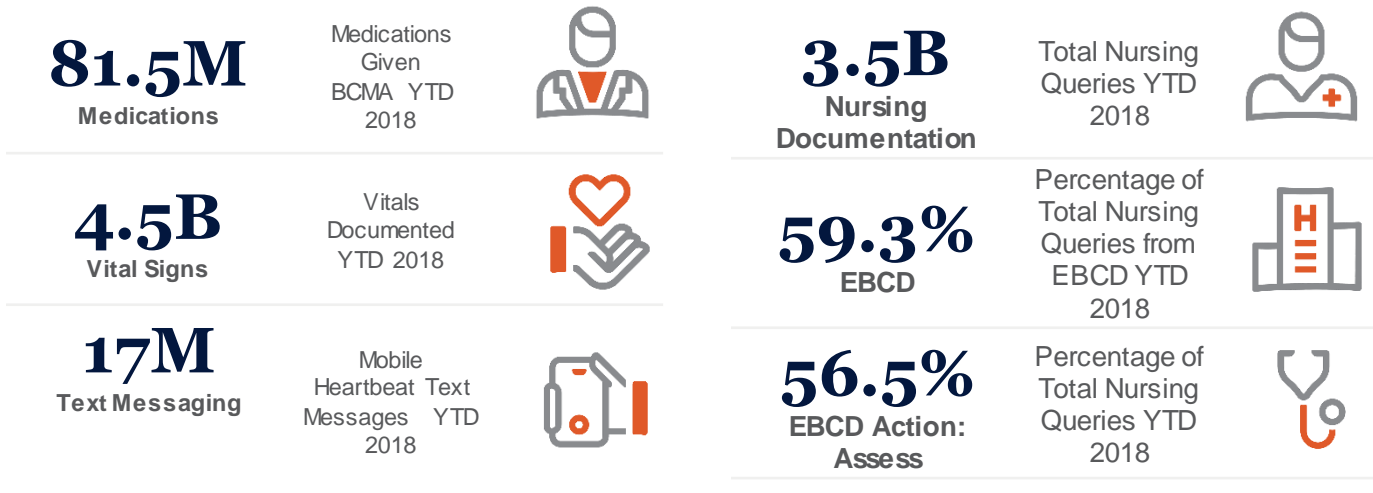
	Patient Outcomes	Nurse Effectiveness	Nurse Efficiency	Nurse Engagement	Financial Performance
Assess					
Perform					
Teach					
Manage					

The four domains of the CCC model, combined with the domains of performance for a nursing service, create a matrix for identifying management interventions to improve performance.

CAUTI Example

	Patient Outcome: CAUTI rate on unit 1.2 SIR
Assess	Assess adherence to Key Performance Indicators for each staff member
Perform	Implement new foley protocol
Teach	Provide remedial education to staff not meeting key performance indicators
Manage	Consult Infection Preventionist to assist with education and audits

Using the Data Exhaust of EBCD



Leveraging Standardized Data: Describing the cognitive work of nursing

781 Million

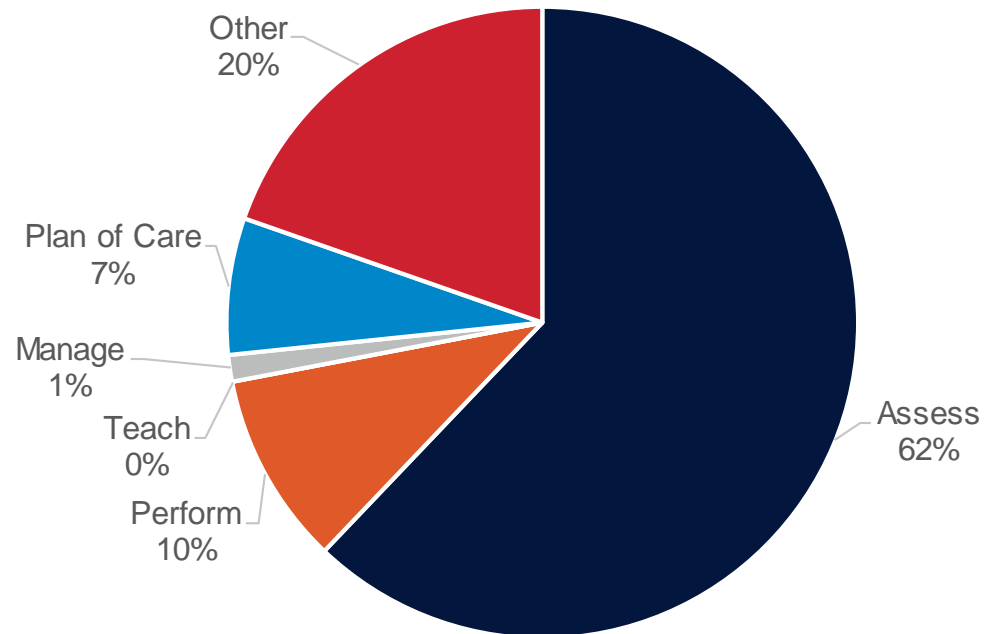
“Action Type” data points

Cognitive work of nursing clearly articulated

- Plan of Care
- Teach
- Manage
- Assess

71% of documentation

Action Types



Leveraging Standardized Data: Patient problems by Unit Type

Most frequent nursing diagnoses varies by type of unit.

Med/ Surg	Surgery	Pediatrics	ICU	OB/GYN
18% Physical Regulation	15% Injury	15% Respiration	20% Fluid	38% Physical Regulation
13% Neurological	13% Physical Regulation	15% Fluid	20% Respiration	9% Respiration
13% Respiration	11% Skin	13% Physical Regulation	14% Neurological	9% Life Cycle
10% Skin	10% Respiration	12% Skin	13% Physical Regulation	6% Skin
9% Fluid	10% Fluid	10% Neurological	8% Skin	5% Urinary

Physical Regulation, Respiration, and Skin are common to all unit types

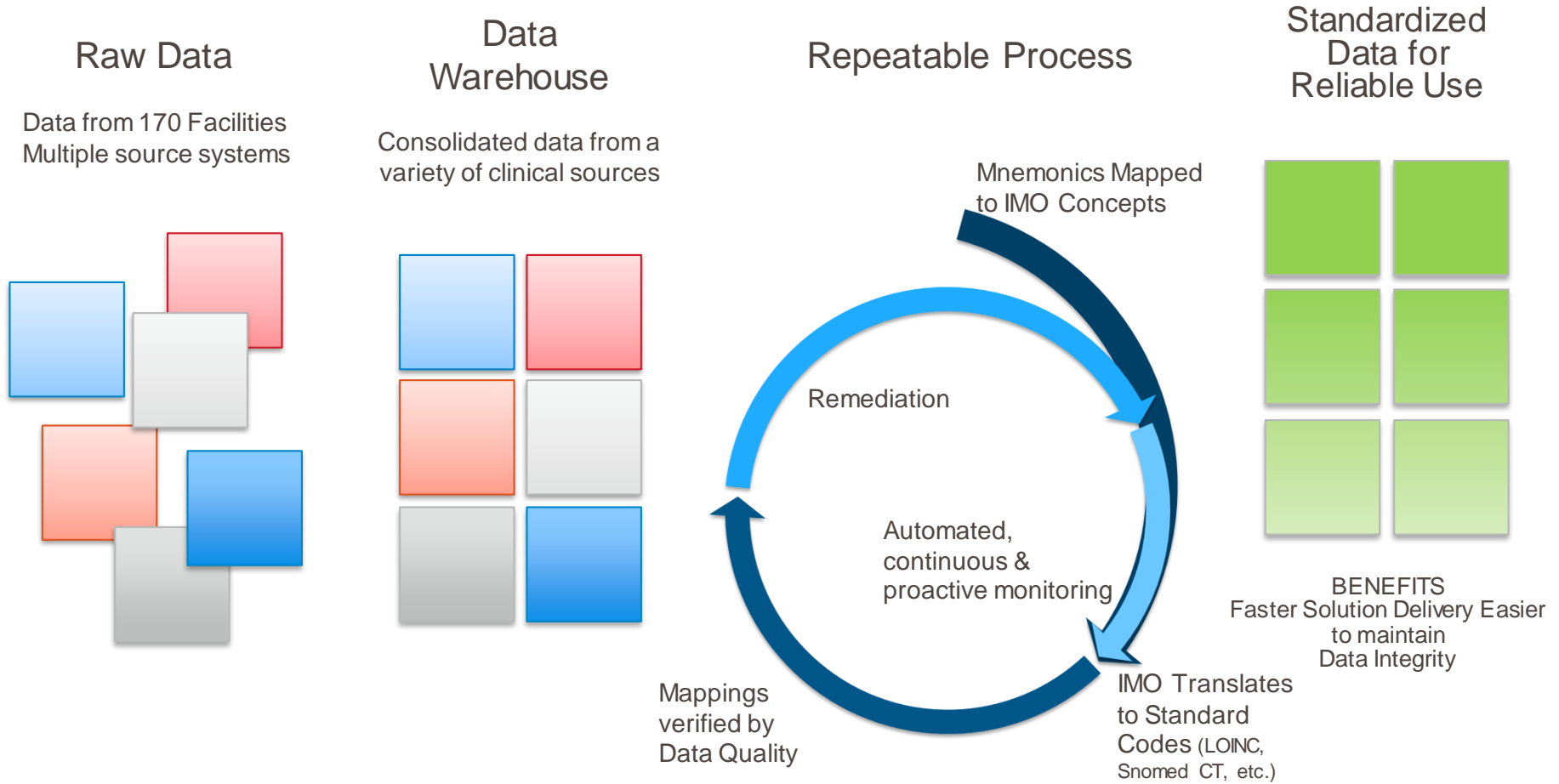
A Framework for Data Management

6 Key Integrated Categories:

- Data Strategy
- Data Governance
- Data Quality
- Data Operations
- Platform and Architecture
- Measure, Management, and Analytics

<https://cmmiinstitute.com/dmm>, retrieved 5/13/2018

EBCD Standardization Process: MAP-IT, IMO v2.0

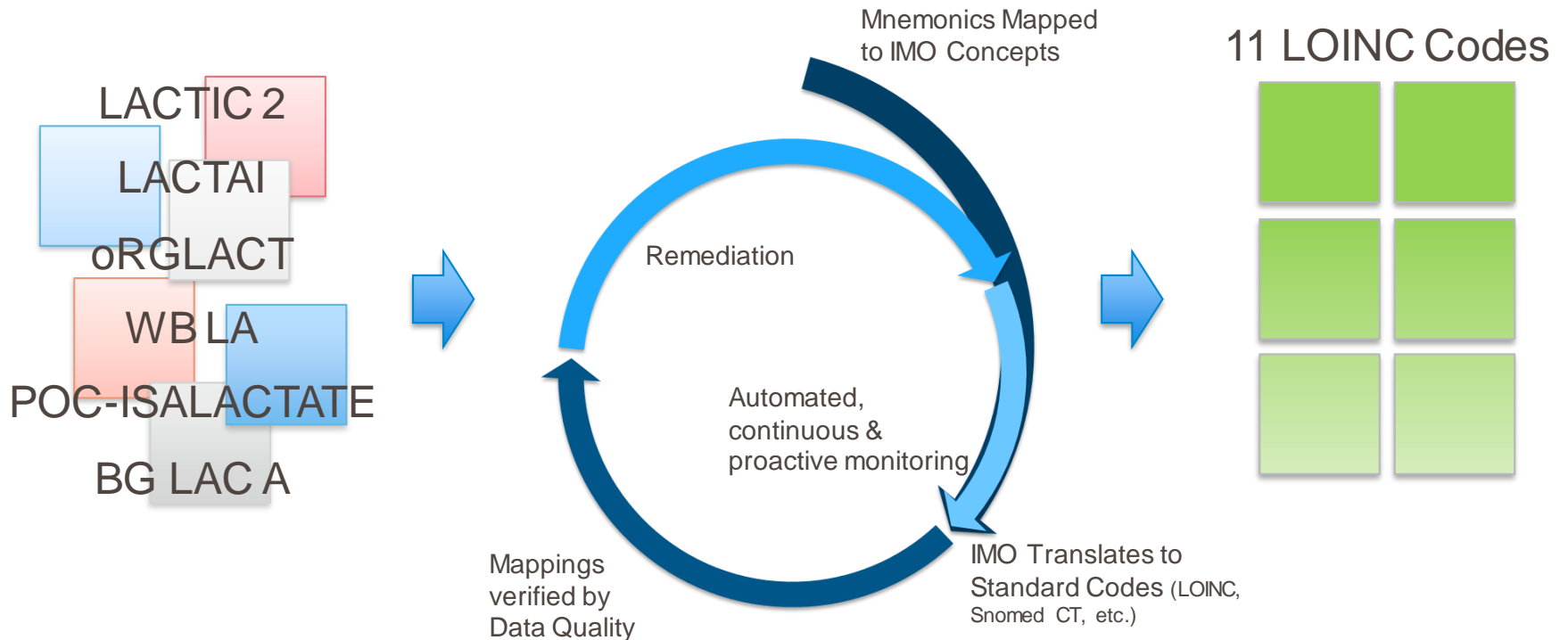


“Lactate” Documentation Example

706 Mnemonics for
170 Facilities

Repeatable Process

“Lactate” Value Set =



EBCD CAUTI Documentation Example

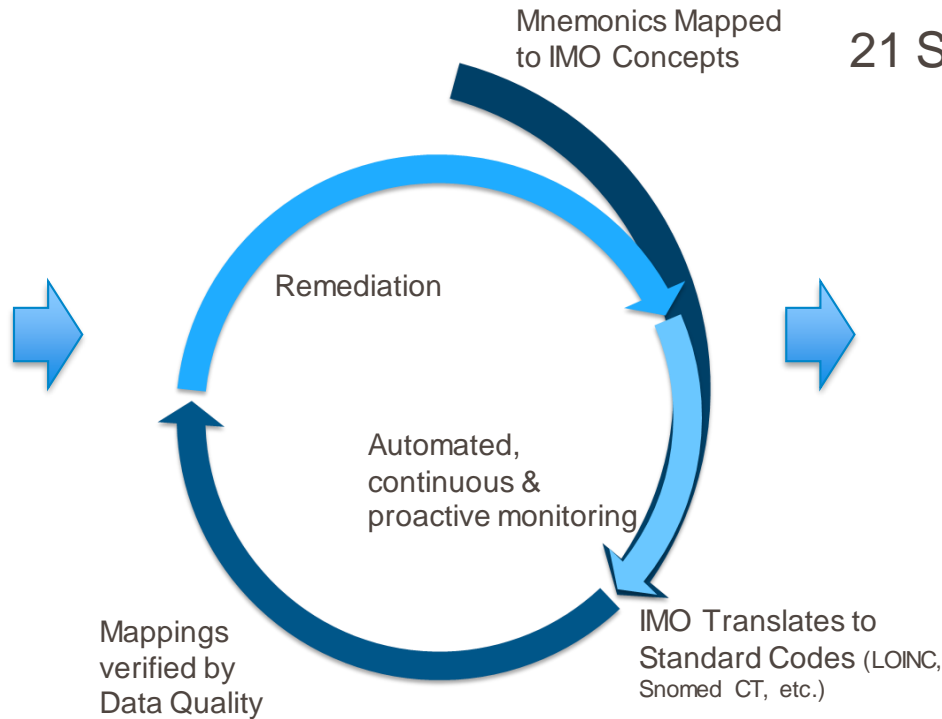
6 Mnemonics for CAUTI

Repeatable Process

EBCD Nursing Documentation Value Set =

Indication for Urinary Catheter
Urinary Catheter Status
Urinary Catheter Interventions
Urinary Catheter Type

Inserted by

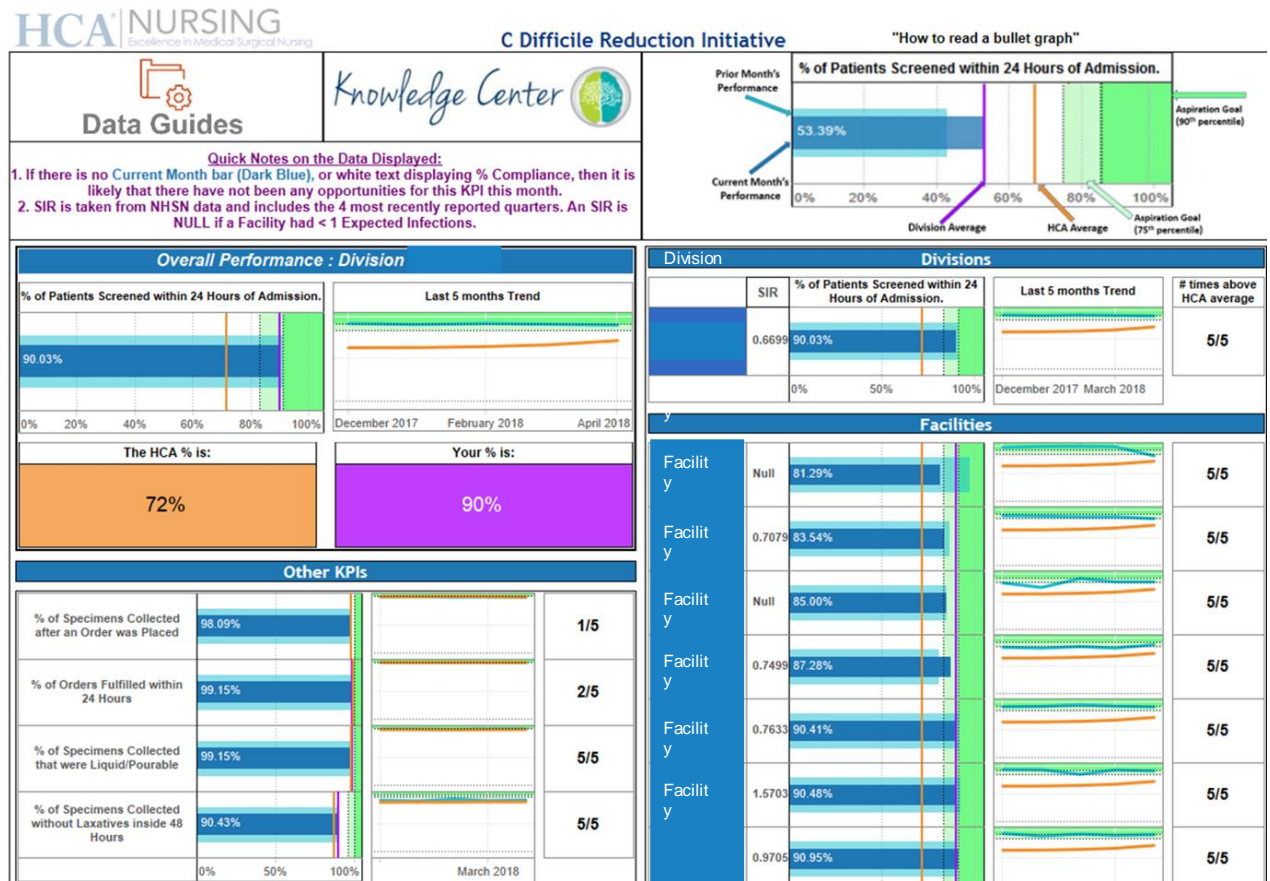


21 SNOMED-CT Codes



Leveraging Documentation Data for Performance Improvement

Key Process Indicators, based on EB nursing practices, data **updates daily** to support precision **targeted performance management**



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