

ERUT Data Capture and Analysis

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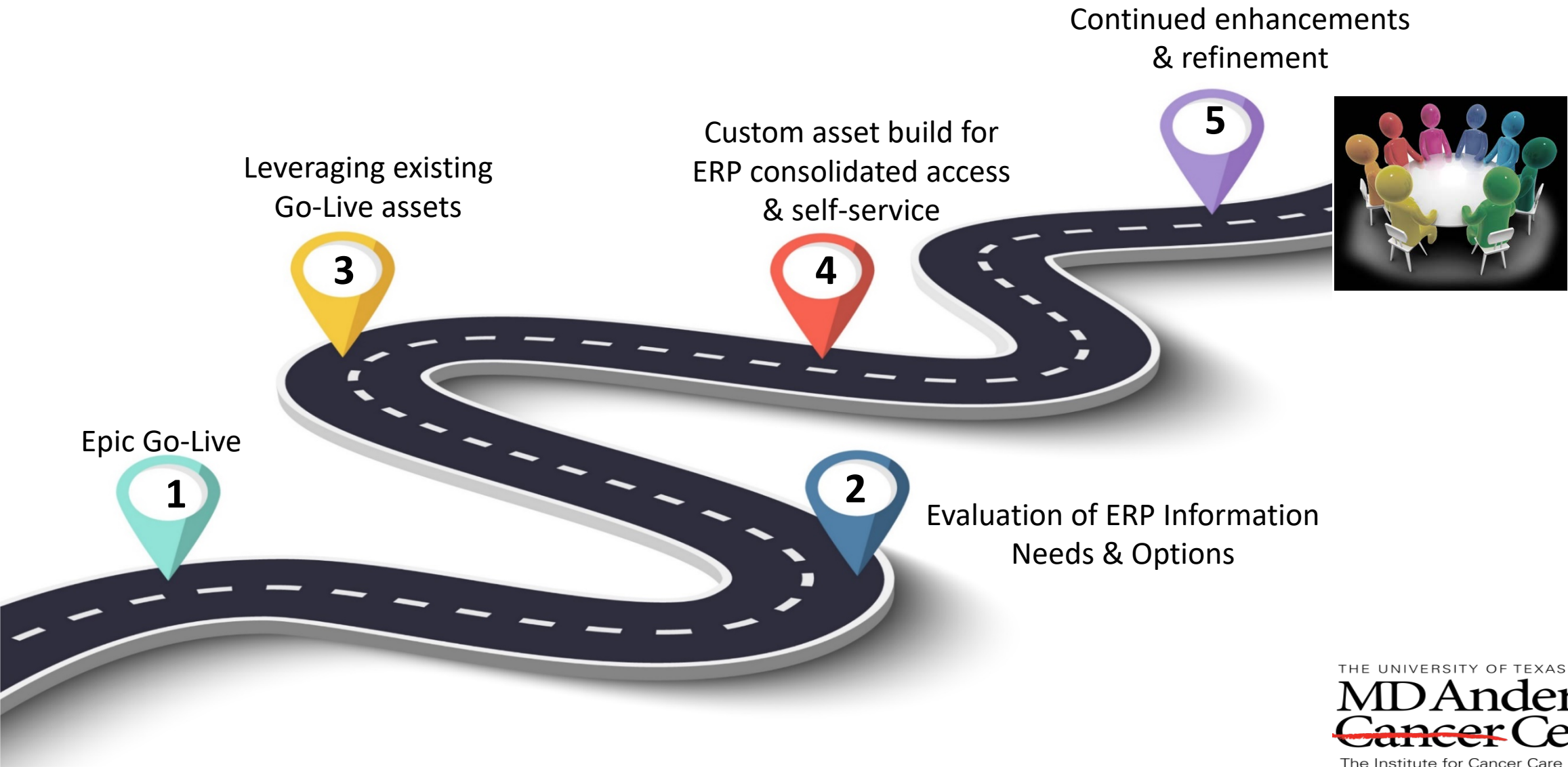
THE UNIVERSITY OF TEXAS

MD Anderson
~~Cancer Center~~

The Institute for Cancer Care Innovation

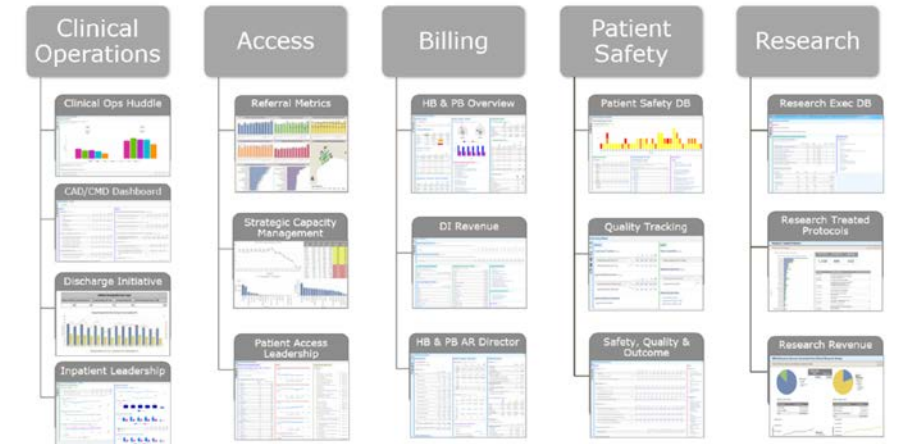
ERUT

The Walk of Analytic Maturity



Our Enhanced Recovery Data Journey

- Defining Valuable Metrics
- Data Collection and Extraction
- Data Analysis and Reporting
- Interactive, real-time analysis
- Analyze information across service lines



The REDCap Consortium

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The REDCap Consortium

- Secure open source web application for building and managing online surveys and databases
- Specifically geared to support online or offline data capture for research studies and operations.
- Composed of thousands of active institutional partners in over one hundred countries who utilize and support REDCap in various ways.



ERUT REDCap

REDCap

Logged in as maself | Log out

My Projects

Project Home or Project Setup

REDCap Messenger

Project status: **Production**

Data Collection / **Edit Instruments**

Manage Survey Participants

Get a public survey link or build a participant list for inviting respondents

Record Status Dashboard

View data collection status of all records

Add / Edit Records

Create new records or edit/view existing ones

Hide data collection instruments

Demographics

Medical Baseline

Surgical Baseline

Preoperative

Intraoperative

Postoperative

Outcomes (30 Days)

Applications

Calendar

ERUT

Add / Edit Records

You may view an existing record/response by selecting it from the drop-down lists below. To create a new record/response, click the button below.

Total records: 5

Choose an existing Record ID

-- select record --

Add new record

Data Search

Choose a field to search (excludes multiple choice fields)

All fields

Search query

Begin typing to search the project data, then click an item in the list to navigate to that record.

CLICK THE "ADD/EDIT RECORDS" LINK

CLICK ON "ADD NEW RECORD"

REDCap

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Project status: **Production**

Data Collection / **Edit Instruments**

Manage Survey Participants

Get a public survey link or build a participant list for inviting respondents

Record Status Dashboard

View data collection status of all records

Add / Edit Records

Create new records or edit/view existing ones

Record ID 6 [Select other record](#)

Demographics

Medical Baseline

Surgical Baseline

Preoperative

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Record Home Page

Record "6" is a new Record ID. To create the record and begin entering data for it, click any gray status icon below.

The grid below displays the form-by-form progress of data entered for the currently selected record. You may click on the colored status icons to access that form/vent.

Legend for status icons:

- Incomplete
- Incomplete (no data saved)
- Unverified
- Partial Survey Response
- Complete
- Completed Survey Response

NEW Record ID 6

Data Collection Instrument	Status
Demographics	
Medical Baseline	
Surgical Baseline	
Preoperative	
Intraoperative	
Postoperative	
Outcomes (30 Days)	

DATA COLLECTION INSTRUMENTS (FORMS)

CLICK THE "DEMOGRAPHICS" FORM BUTTON

ERUT Data Elements-Audit

Phase of Care	Element	Measure	Source
Preoperative	Patient Education	Yes/No	Survey Plus Audit
	Clear Liquids 2 Hours	Yes	Survey Plus Audit
	Carbohydrate Loading	Yes/No	Survey Plus Audit
	Antibiotic Bowel Prep	Yes/No	Survey Plus Audit
	Mechanical Bowel Prep	Yes/No	Survey Plus Audit
	Preoperative Outpatient Patient Reported Outcome (PRO)	Yes/No	Survey Plus Audit
Postoperative	Nasal Gastric Tube Placement	Yes/No	Survey
	Clear Liquids Ordered POD #0	Yes/No	Order Set
	Regular Diet Ordered POD #1	Yes/No	Order Set
	Mobilization Ordered POD #0, 1, 2	Yes/No	Order Set
	Foley Removal Ordered On/Before POD #1	Yes/No	Order Set
Outcomes	Postoperative Outpatient Patient Reported Outcome (PRO)	Yes/No	Survey Plus Audit

ERUT Data Elements-Per Patient

Phase of Care	Element	Measure	Source
Demographic	Age	Number	EHR
	Sex	Male/Female	EHR
Medical Baseline	Primary Diagnosis	Name	EHR, Op Note
	Urgency (Emergency Case)	Emergent	Op Note, Anesth Record (ASA Classification)
	Elective Surgery	Elective	Op Note, Anesth Record (ASA Classification)
	Diabetes (Diabetes Mellitus)	Yes/No	EHR, H&P
	Date of Surgery	Date	Op Note
Surgical Baseline	Approach	Name	Op Note
	Primary Procedure	Name	Op Note
	Ostomy	Yes/No	Op Note
	Non-Narcotic Analgesia	Yes/No	MAR, Anesth Record
Preoperative	Entereg (Alvimopan)	Yes/No	MAR , Anesth Record
	Type of Anesthesia	TIVA/Volatile	Anesth Record
Intraoperative	Block	Yes/No	Op Note, Anesth Record
	Intraop Morphine Equivalent Daily Dose (MEDD)	mg	Anesth Record
	Total IVF Volume (Crystalloids & Colloids)	CC	Op Note, Anesth Record
	Post-Op Nausea Vomiting Prophylaxis	Yes/No	Anesth Record
	Abdominal Drain	Yes/No	Op Note
	Non-Narcotic Analgesia	Yes/No	MAR, Anesth Record
Postoperative	Total Inpatient Morphine Equivalent Dose (MEDD)	mg	MAR with Calculator
Outcomes	Length of Stay (LOS)		Discharge Summary
	Readmission Within 30 Days (same hospital, any cause)	Yes/No	EHR
	Wound Infection Requiring Bedside Interventions (superficial site infection) within 30 days	Yes/No	Discharge Summary, Postop Clinic Cote
	IR Re-intervention for Abscess/Leak/Collection (NSQIP=OSI)	Yes/No	IR Procedure Note
	Reoperation	Yes/No	Op Note
	Death within 30 Days (any cause)	Yes/No	Death/Discharge Summary

Building for the Future

- Review current data systems and structure
- Identify system optimization opportunities
- Have focused deliverables to support institutional initiatives
- Think globally, act locally
- PARTNER WITH INFORMATION SYSTEMS & TECHNOLOGY TEAMS

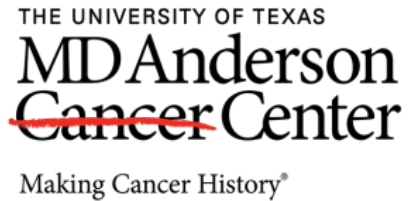
Building for the Future

- Foundation for future analytics
 - Data Standardization – all areas pull same info from same location (i.e.-weight)
 - Simplification of data access
 - Generate simplified queries to enhance query performance
 - Capture meaningful data with focus on patient's whole hospital stay
 - Not strictly encounter based or focusing on different subject areas

Building for the Future

- Customized data reporting platforms
- Transform complex data models into organized data elements with business-friendly terminology
- Build with self-service reporting and analysis

Thank You!



TASQ

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www.mdanderson.org/innovation/cancercarevalue

