ERUT Data Capture and Analysis

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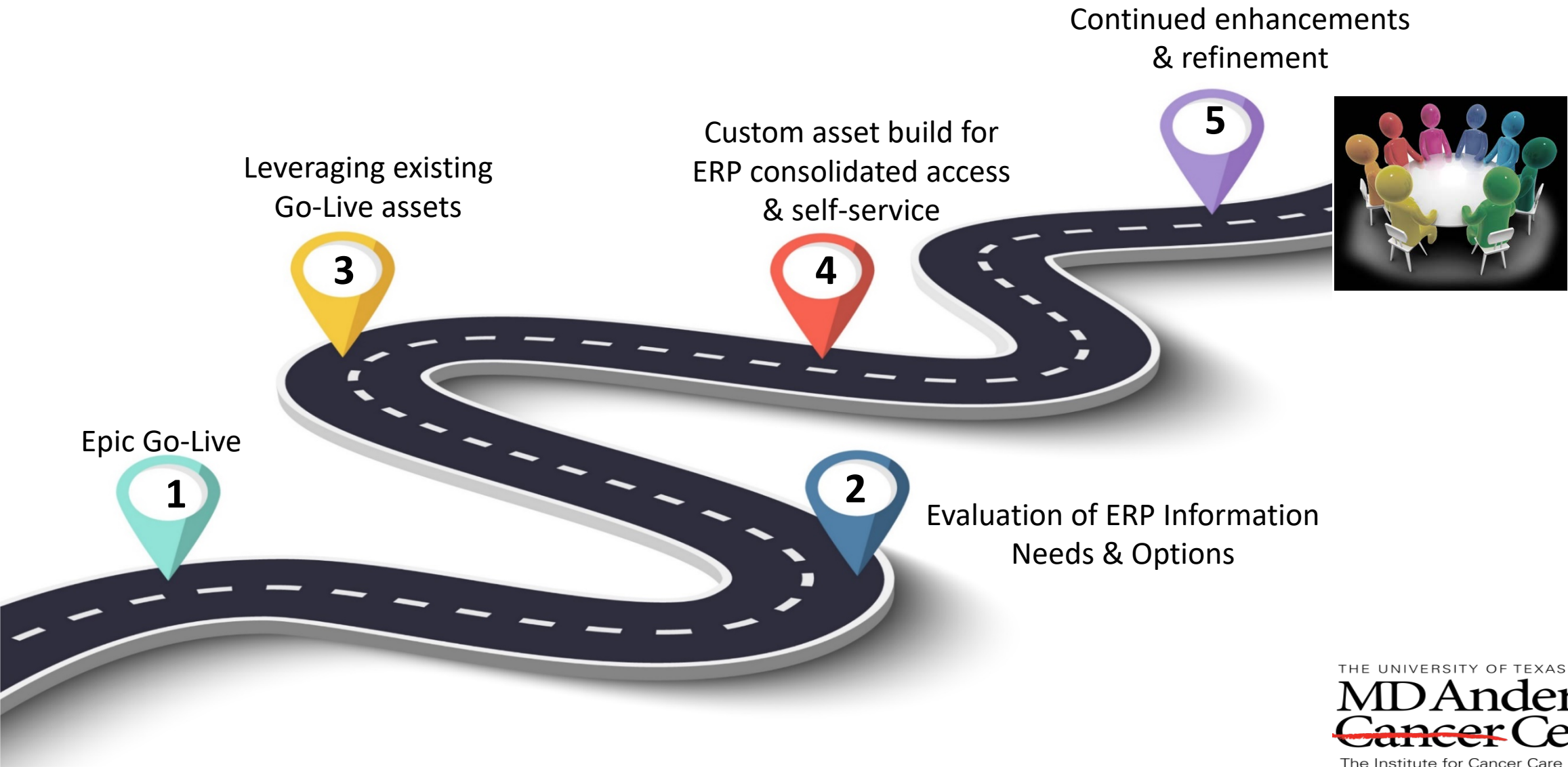
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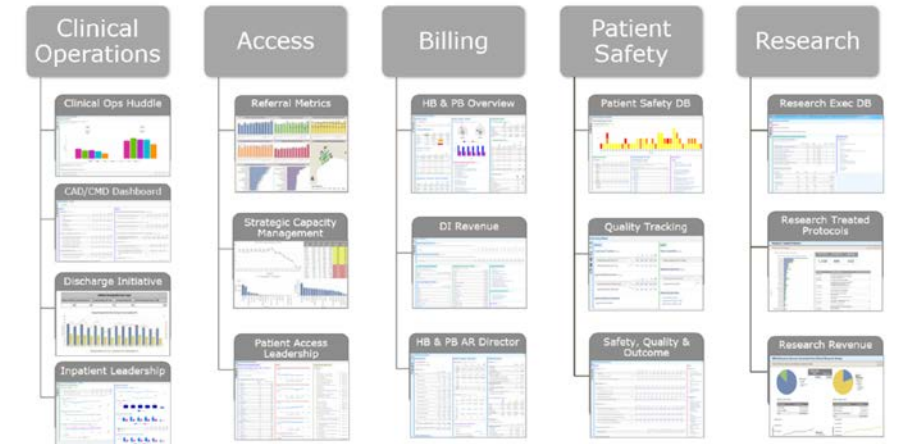MD Anderson Cancer Center

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The Walk of Analytic Maturity

Continued enhancements & refinement

5

Custom asset build for ERP consolidated access & self-service

4

Leveraging existing Go-Live assets

3

Epic Go-Live

1

2

Evaluation of ERP Information Needs & Options

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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

www.mdanderson.org/innovation/cancercarevalue

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
Surgical Baseline	Date of Surgery	Date	Op Note
	Approach	Name	Op Note
	Primary Procedure	Name	Op Note
	Ostomy	Yes/No	Op Note
Preoperative	Non-Narcotic Analgesia	Yes/No	MAR, Anesth Record
	Entereg (Alvimopan)	Yes/No	MAR , Anesth Record
Intraoperative	Type of Anesthesia	TIVA/Volatile	Anesth Record
	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
Postoperative	Non-Narcotic Analgesia	Yes/No	MAR, Anesth Record
Outcomes	Total Inpatient Morphine Equivalent Dose (MEDD)	mg	MAR with Calculator
	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

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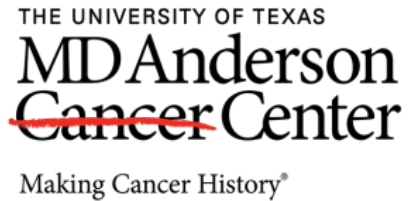The Institute for Cancer Care Innovation

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

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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

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Thank You!