



Efficient Clinical Workflows Enhance User Acceptance and Other EHR Benefits

Chuck DeBusk, VP, Performance and Process Improvement

Jessica Hensler, MBA, Management Engineer

Universal Health Services, Inc.

About Universal Health Services, Inc. (UHS)

Among the largest hospital management companies in the nation

- Founded in 1978
- Fortune 500 company
- Annual revenues exceeding \$7.5 billion

Facilities in 36 states with more than 65,000 employees

- 24 acute care hospitals
- 187 behavioral health facilities
- 6 ambulatory surgery centers

In this presentation, we will discuss:

- Benefits of meaningfully using a certified Electronic Health Record (EHR)
- Meaningful Use (MU) stages and CMS standards for eligible hospitals
- Structure, processes, and resources to achieve MU
- EHR workflows

Selection of the EHR Vendor

Five finalists were chosen using industry status and ratings

Initial evaluation to signed contract was 12 months

Selection criteria included:

- Company Long-Term Goals (including MU)
- Vendor Demonstration
- Industry Ratings
- RFQ Responses
- Pricing

EHR Modules

- Emergency Department
- Clinical Documentation/Critical Care Nursing
- Physician Order Entry/Order Management
- Radiology
- Pharmacy/Bar coded Medication Administration
- Laboratory
- Surgery/Operating Room/Anesthesia
- Scheduling
- Medical Records

Benefits of the EHR

- Improved health through the delivery of more effective care
- Smart systems that use decision support and safety checks
- Immediate interdisciplinary access to the patient record from anywhere at anytime
- Secure and easy transfer of patient information both inside and outside the hospital
- Standardized care supporting evidence-based practice and research

Benefits of Meaningful Use

- Enhance patient safety
- Improve clinical effectiveness and efficiencies
- Engage and support physicians
- Advance information exchange
- Imperative to quality

Program Resources

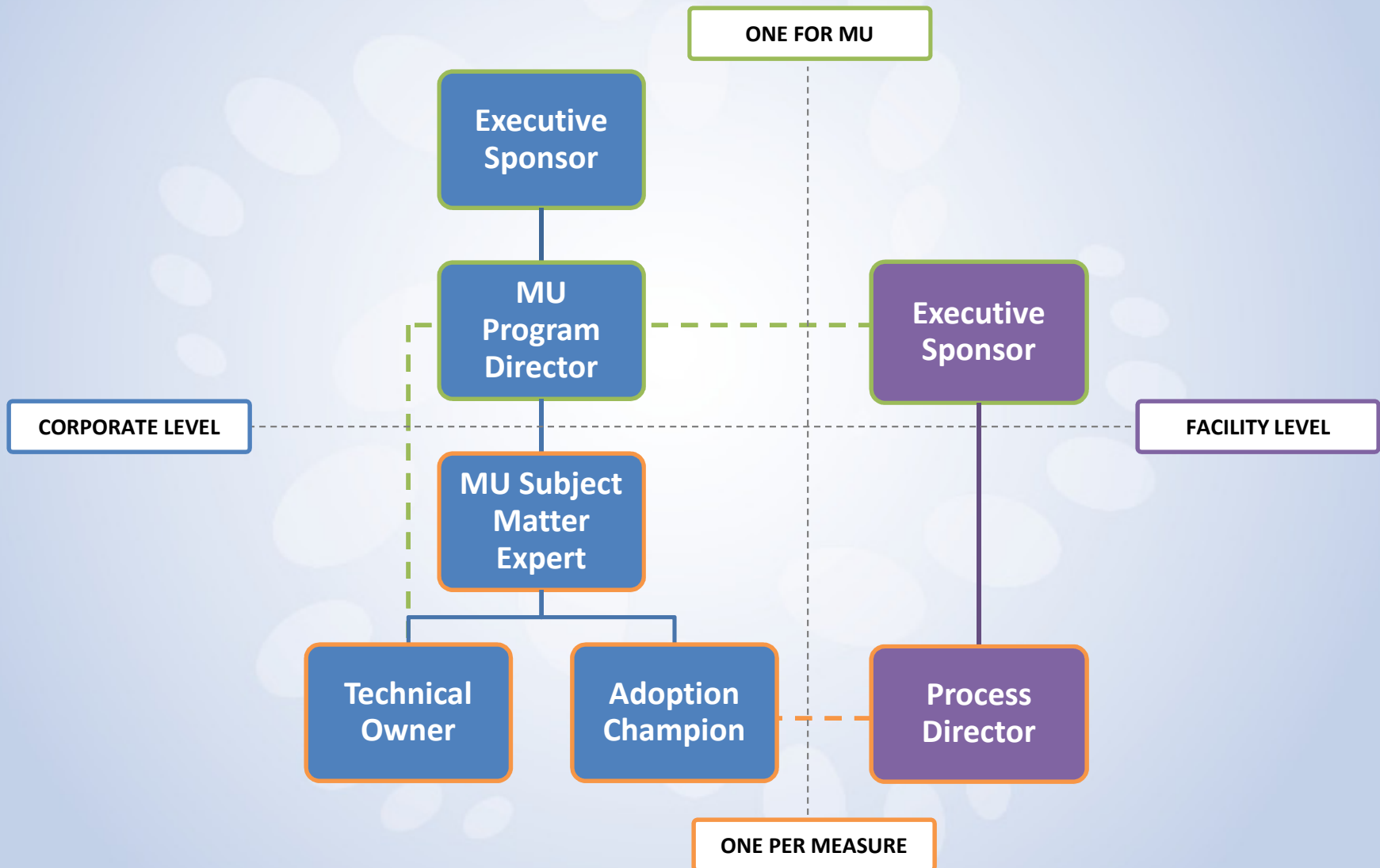
An MU Program Management Office was created to:

- Direct documentation of requirements to meet MU objectives
- Monitor the national program for updates
- Facilitate communication and education required to promote the changes and systems necessary to support MU
- Coordinate with other departments to ensure alignment with other UHS initiatives
 - Corporate and Facility Quality and Nursing
 - Corporate and Facility IT
 - Facility Administration
 - Facility Departmental Leadership

Uniqueness of the Project

- Management engineering department played a non-traditional role in leading a multi-million dollar, highly visible project
- Involvement in the project increased regard for PPI department at both a corporate and facility level
- Management engineers should not hesitate to assume new and prominent roles

MU Program Management



Program Structure

Templates

- Master EHR/MU Calendar
- Report Package
- Attestation Worksheet

Dashboards

- Threshold Measure Dashboard
- CQM Dashboard
- Hospital Readiness Dashboard

Processes

- Data Monitoring and Collection
- Attestation Process

Program Structure (Cont'd)

Branding

- Use of the EHR and MU to promote corporate initiative



Communication

- Quarterly Newsletter
- Monthly Corporate Executive Report
- 180-90-60-45-30 Day Email Blasts
- Intranet Site

Education

- Subject Matter Experts
- Adoption Champions/Technical Owners
- Facility Executive Team and Process Directors

MU Summary

Reportable Measures for Stage 1

- 14 Core Measures
- 5 out of 10 Menu Set Measures
- 15 Clinical Quality Measures

Current Status

- Nine facilities in Stage I, Year 2
- Five facilities in Stage I, Year 1
- Ten facilities entering into Stage I, Year 1 in 2013

MU Compliance Structure

Threshold Measures

- Goals higher than the CMS threshold were established
- Facilities were expected to maintain higher rates in preparation for Stage II

Objective	CMS Stage I Threshold	UHS Threshold
CPOE	>30%	>50%
Drug-Drug/Drug-Allergy Checks	Yes/No	Yes
Active Problem List	>80%	>90%
Active Medication List	>80%	>90%
Active Medication Allergy List	>80%	>90%
Record Demographics	>50%	>80%
Record Vital Signs	>50%	>80%

MU Compliance Structure

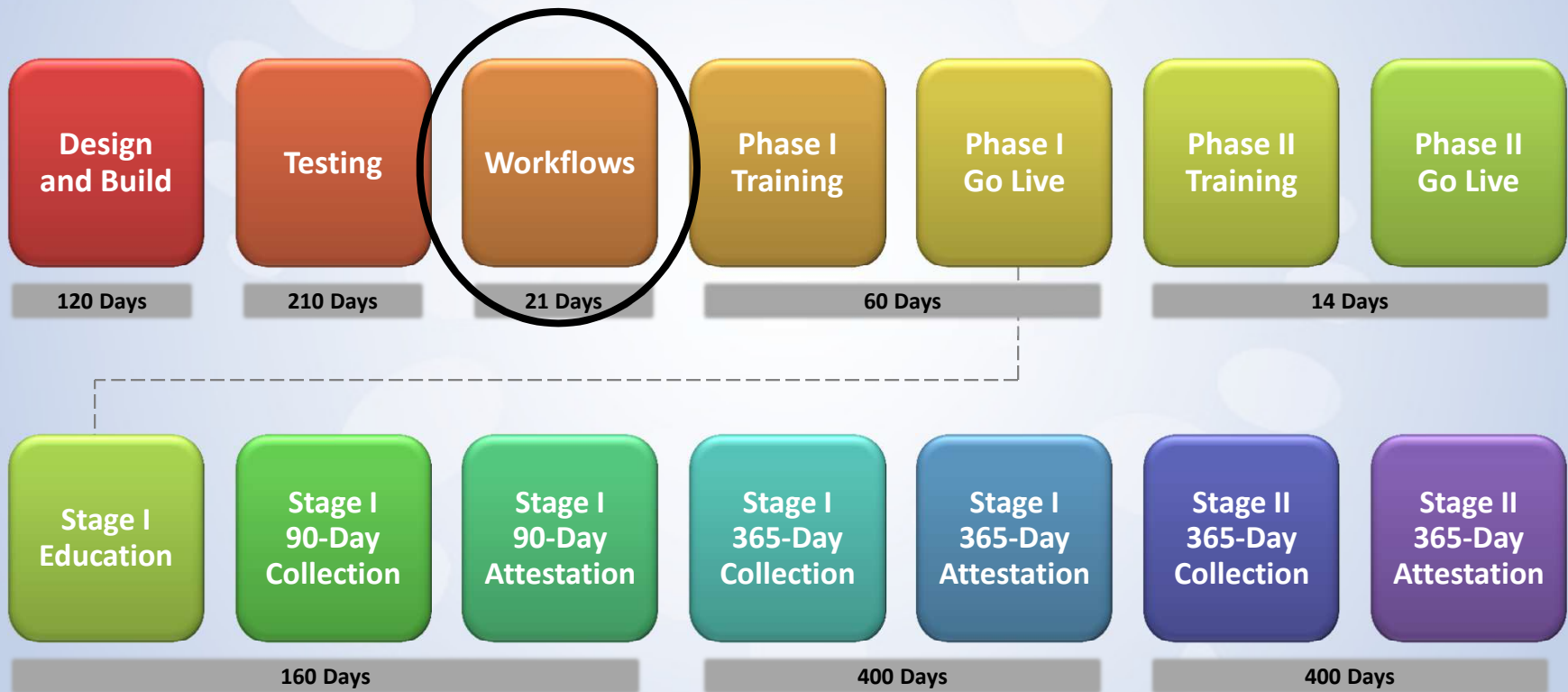
Yes/No Measures

- Exchange measures accomplished by partnering with a fellow hospital management company
- Submission measures were selected by facility or excepted
- Clinical Decision Support rule was standardized across all facilities
- Security audit created through compliance department

Clinical Quality Measures

- Quality leaders at each facility led compliance

EHR/MU Major Milestones



Workflow Development

- Clearly define the steps required to describe a process
- Outline a new process and its benefit to the patient, staff, and facility
- Identify major necessary changes and their organizational impact on roles, policies, and procedures
- Determine educational and training requirements

Workflows Mapped

- Patient Access and Flow
- Communications and Patient Assignment
- Orders Management
- Clinical Documentation
- Integrated Medication Administration
- Discharge

The Intersection

People

- Use of data to improve patient care
- More comprehensive and intelligible patient information

Process

- Streamlined and more accurate patient care
- Standardized data entry

Technology

- Enhanced data capture and immediate availability
- Reporting, sharing, and analysis

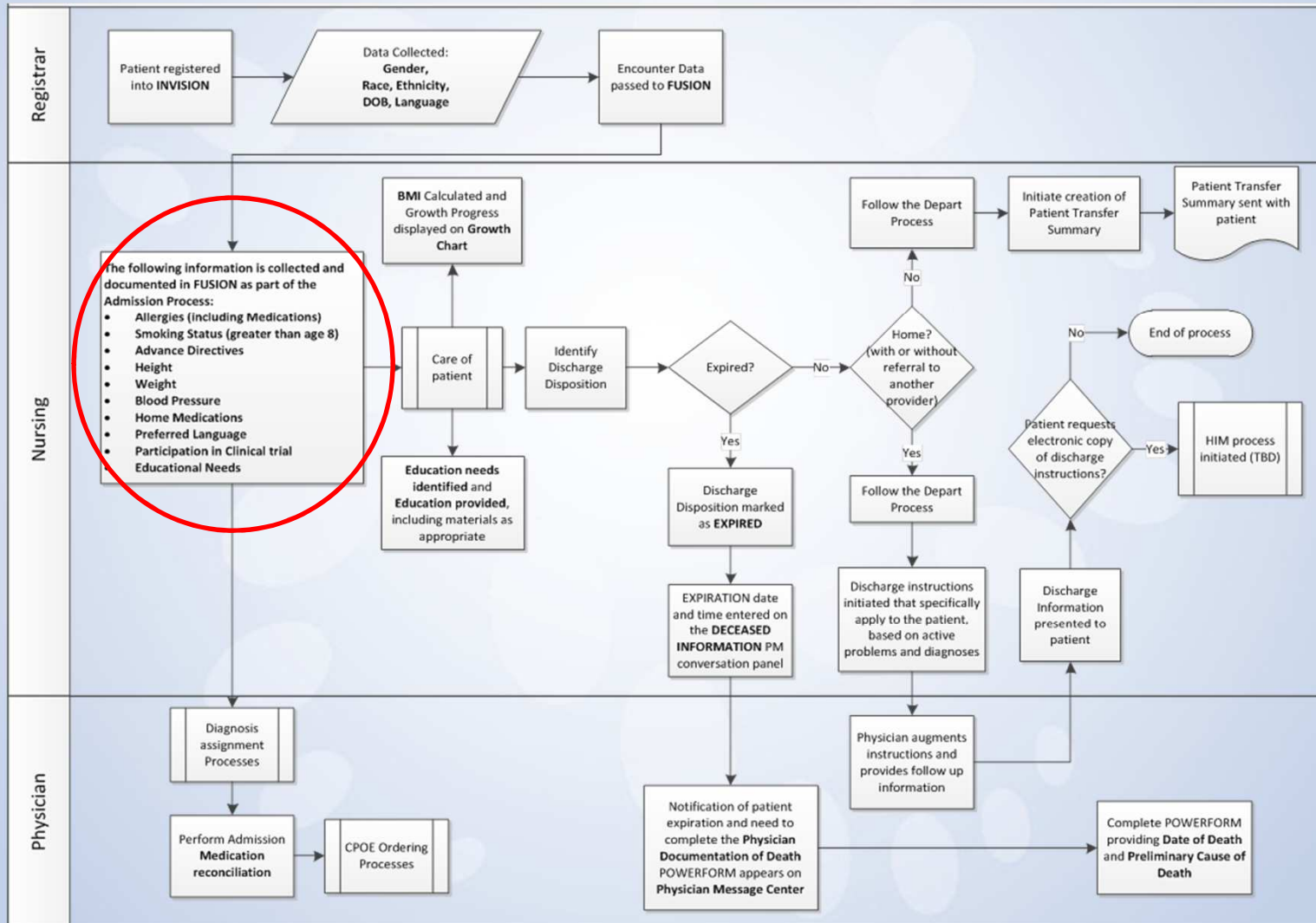


Example: Record Vital Signs

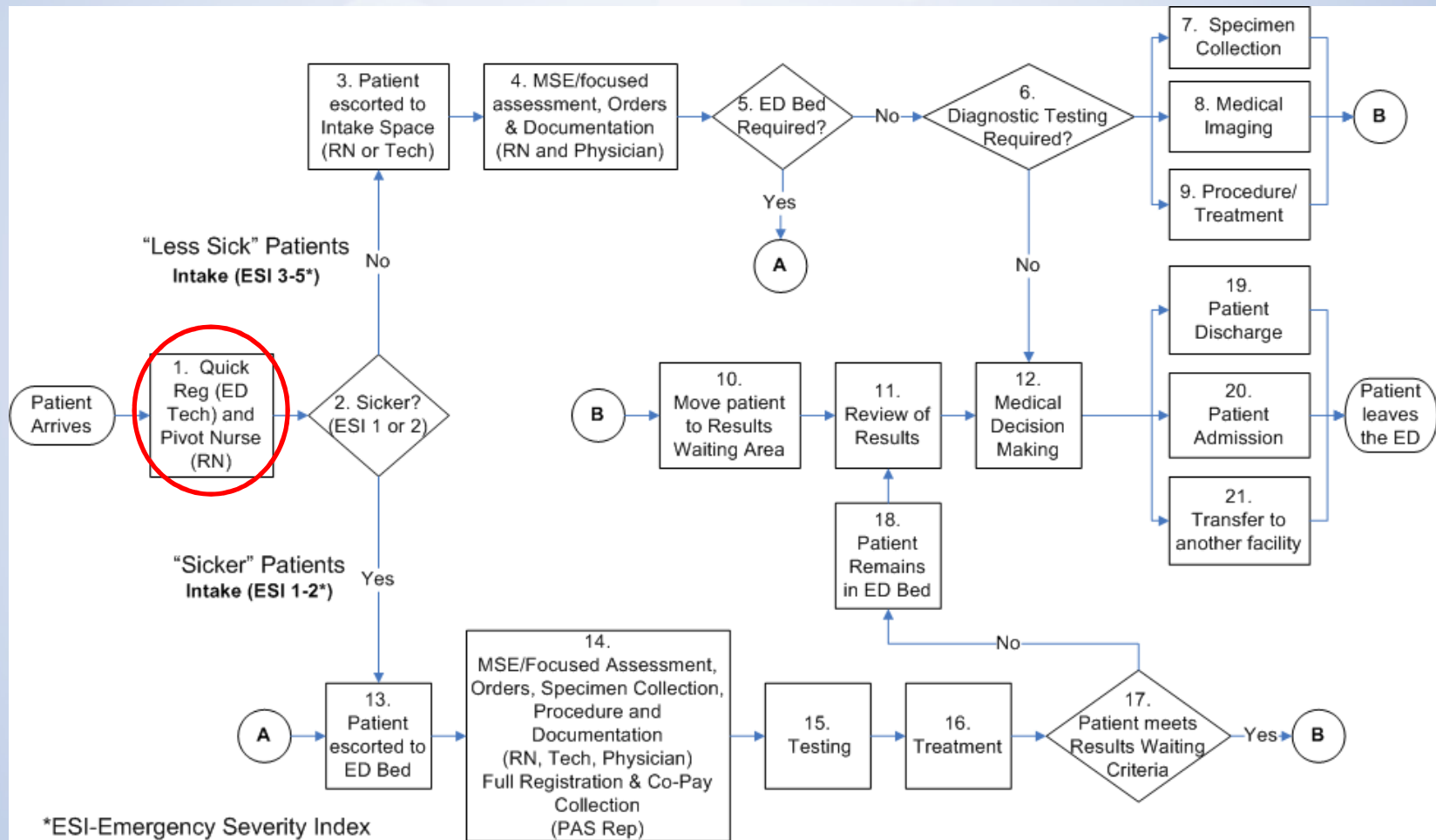
Record and chart changes in the following vital signs:

- Height
- Weight
- Blood pressure
- Calculate and display body mass index (BMI)
- Plot and display growth charts for children 2-20 years, including BMI

Technology: Future State Workflow Sessions



Process: Best Practice ED Front End Flow



People: Performance Improvement

Projects initiated within each emergency department with focus on the standardization of the ED front end process



Vital signs incorporated into the standard process:

- Specific person responsible for initial entry
- Specific electronic form utilized for entry
- Specific step in the patient encounter

Results

Objective	CPOE	Structured Lab Res	Med Allergy List	Active Med List	Up to Date Problem List	HIM eHealth Info Req	HIM eDischarge Instr Req	Patient Education	Record Advance Directive	Record Vital Signs	Demo-graphics	Smoking Status	Dashboard Date Range
MU Threshold	31%	41%	81%	81%	81%	51%	51%	11%	51%	51%	51%	51%	
UHS Goal	51%	91%	91%	91%	91%	61%	81%	21%	81%	91%	81%	81%	
Cent Hills	80.3%	98.3%	99.7%	97.0%	98.6%	E	E	83.1%	97.0%	99.4%	98.7%	86.4%	10/1 - 12/7
Desert Springs	78.3%	see note	99.4%	97.7%	99.3%	E	E	88.3%	97.3%	99.5%	97.1%	99.3%	10/1 - 12/7
Spring Valley	72.9%	95.8%	99.8%	96.4%	99.0%	E	E	89.7%	96.8%	99.5%	96.9%	90.4%	10/1 - 12/7
Summerlin	66.1%	94.8%	99.7%	93.1%	98.6%	E	E	78.8%	98.3%	99.4%	97.9%	98.4%	10/1 - 12/7
Valley	70.2%	94.5%	99.5%	94.9%	97.2%	E	E	90.7%	98.3%	99.2%	96.9%	93.5%	10/1 - 12/7
GWUH	63.6%	98.5%	99.9%	94.6%	98.9%	E	E	79.3%	97.0%	99.4%	97.8%	88.2%	10/1 - 12/7
Lakewood	89.7%	98.5%	100.0%	99.3%	99.7%	E	E	95.6%	98.8%	100.0%	99.3%	99.9%	10/1 - 12/7
Manatee	83.9%	97.8%	99.9%	97.4%	96.9%	E	E	83.4%	97.5%	97.7%	94.8%	91.4%	10/1 - 12/7
Wellington	70.8%	98.4%	99.8%	95.8%	95.3%	E	E	71.2%	94.0%	99.7%	97.7%	87.1%	10/1 - 12/7
MU Threshold	31%	41%	81%	81%	81%	51%	51%	11%	51%	51%	51%	51%	
UHS Goal	51%	91%	91%	91%	91%	61%	81%	21%	81%	91%	81%	81%	
Southwest	64.0%	98.2%	99.5%	98.5%	96.8%	E	E	83.7%	98.7%	97.0%	86.1%	86.1%	10/1 - 12/7
N. Nevada	66.3%	97.2%	100.0%	96.7%	100.0%	E	E	92.2%	100.0%	100.0%	97.8%	100.0%	12/1 - 12/7
Palmdale	76.4%	98.2%	99.4%	98.3%	98.6%	E	E	89.7%	91.4%	98.9%	96.6%	97.8%	12/1 - 12/7
Aiken	60.2%	97.1%	99.7%	98.8%	99.1%			93.8%	98.0%	99.5%	96.6%	90.0%	Test 11/8 - 12/7
St. Mary													
S Texas													
Northwest Tx													
Laredo													
Fort Duncan													
Corona													
Texoma													
Temecula													

Lessons Learned

- (Being added)



Questions?

Jessica Hensler, MBA, Management Engineer
jessica.hensler@uhsinc.com