



Clinical Safety & Effectiveness Cohort # 8

Overdue Results at Westover Hills



Educating for Quality Improvement & Patient Safety

FINANCIAL DISCLOSURE

Stella Koretsky, MD has no relevant financial relationships with commercial interests to disclose.

Jeanette Jimenez-Hernandez's financial relationships with commercial interests will be disclosed prior to her presentation.

John Cange's, BS, BA financial relationships with commercial interests will be disclosed prior to her presentation.

Valerie J. Works-Gomez's, BS, RHIA financial relationships with commercial interests will be disclosed prior to her presentation.

Team Makeup

CSE Participants

- ❖ Stella Koretsky, MD, Medical Director - Westover Hills
- ❖ Jeanette Hernandez, Clinic Manager - Westover Hills
- ❖ Valerie Works-Gomez - Director, HIM - UT Medicine
- ❖ John Cange - Director, EpicCare - UT Medicine

Extended Team:

- ❖ Glen Lam, Reporting Analyst - UT Medicine
- ❖ Jarrod Power, EpicCare - UT Medicine
- ❖ Tim Davis, HIM Mgr. - UT Medicine
- ❖ Eli Mendiola, HIM Supv. - UT Medicine
- ❖ Cindy Escalera, MA - Westover Hills
- ❖ Efrain Esqueda, LVN - Westover Hills
- ❖ Roxanne Gonzales, MA - Westover Hills



AIM Statement

Reduce Overdue Results at Westover
Hills Family Medicine clinic by 80%
by September 30th, 2011



Problem Definition

- Overdue Results (ODR) occur when expected date for an ancillary result is exceeded by:
 - 7 days for a “Future” orders
 - 0 days for Clinic-performed “Normal” procedures
- ODR messages are delivered to clinical staff’s Epic (EMR) In Baskets. With nearly 1,900 messages to ‘manage’, staff is overwhelmed. Not a priority.
- ODR negatively impact timeliness of care and potential loss of revenue from cancelled appointments.

Patient Impact

1. National Committee for Quality Assurance (NCQA)

Track and Coordinate Care Standard (#5)

“Practice has documented process for and demonstrates:

- ***Tracks** lab tests and flags and **follows-up** on **overdue results**.”*

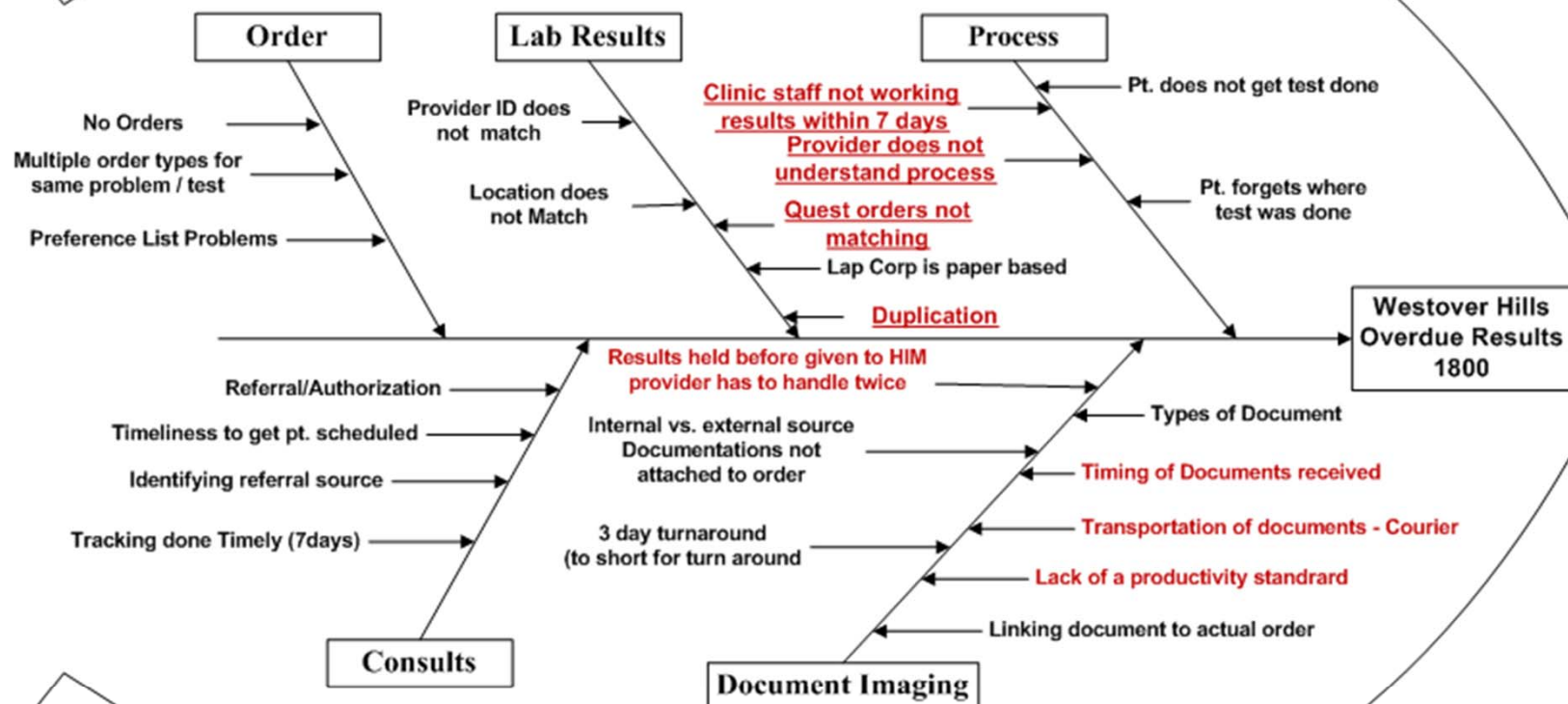
2. JCAHO

*“The JCAHO requires health care organizations to **track and improve** the timeliness of reporting and **receipt of critical test results** by the responsible licensed caregiver.”*

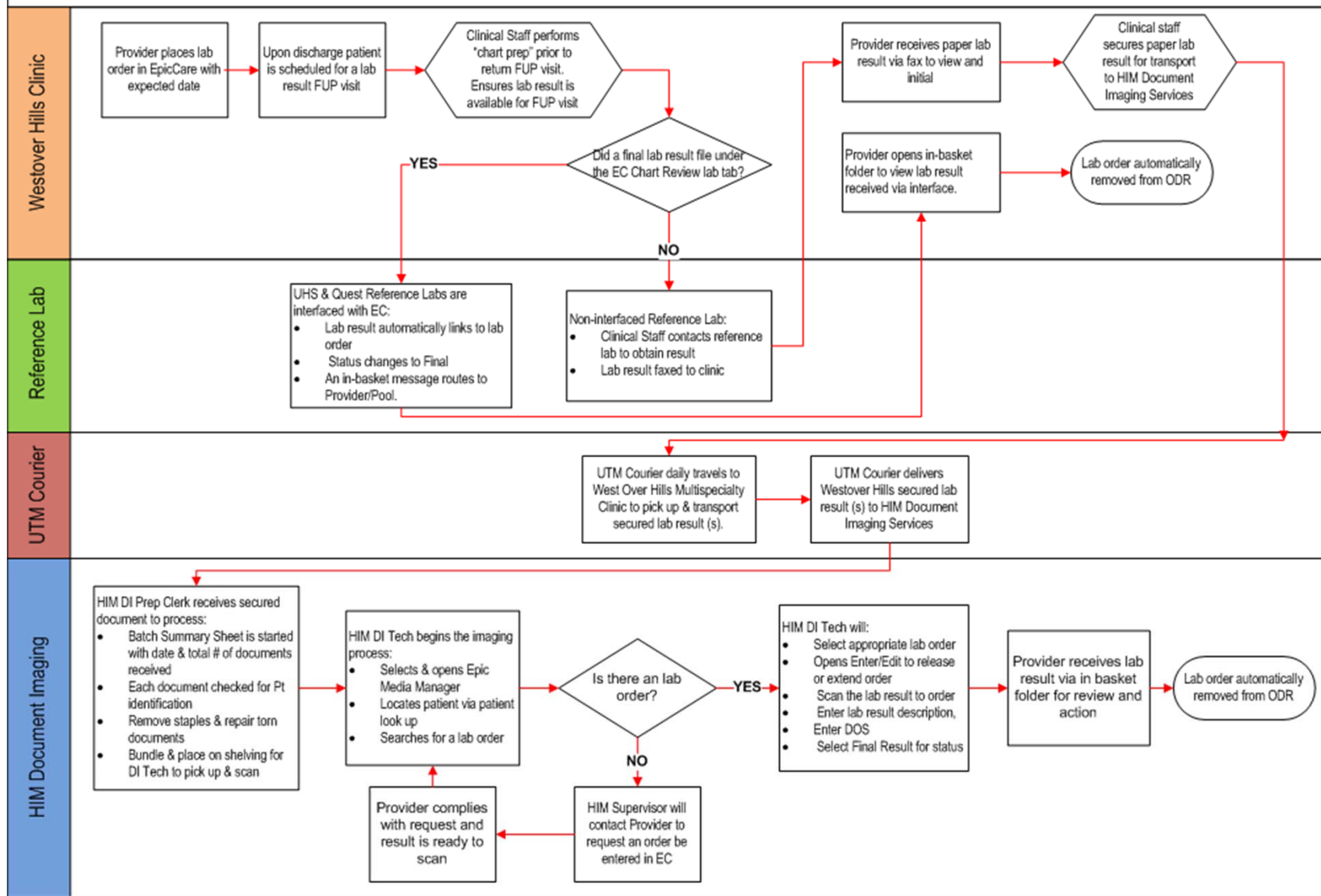
Analysis of Laboratory Critical Value Reporting at a Large Academic Medical Center. Anand S. Dighe, MD, PhD,¹ Arjun Rao, MBBS, MBA,² Amanda B. Coakley, RN, PhD,³ and Kent B. Lewandrowski, MD¹ Am J Clin Pathol 2006;125:758-764

3. Lit. Review: no relevant ODR, patient safety studies found in moderate scan of the literature (PubMed, NEJM, Google).

OVERDUE RESULTS Fishbone



UT Medicine Westover Hills – Lab Result Workflow



Quantify the Problem: UT Medicine vs. Westover Hills

Annual # Orders – UT Medicine: 454,984 (projected)

Overdue Results – UT Medicine: 22,528 (projected)

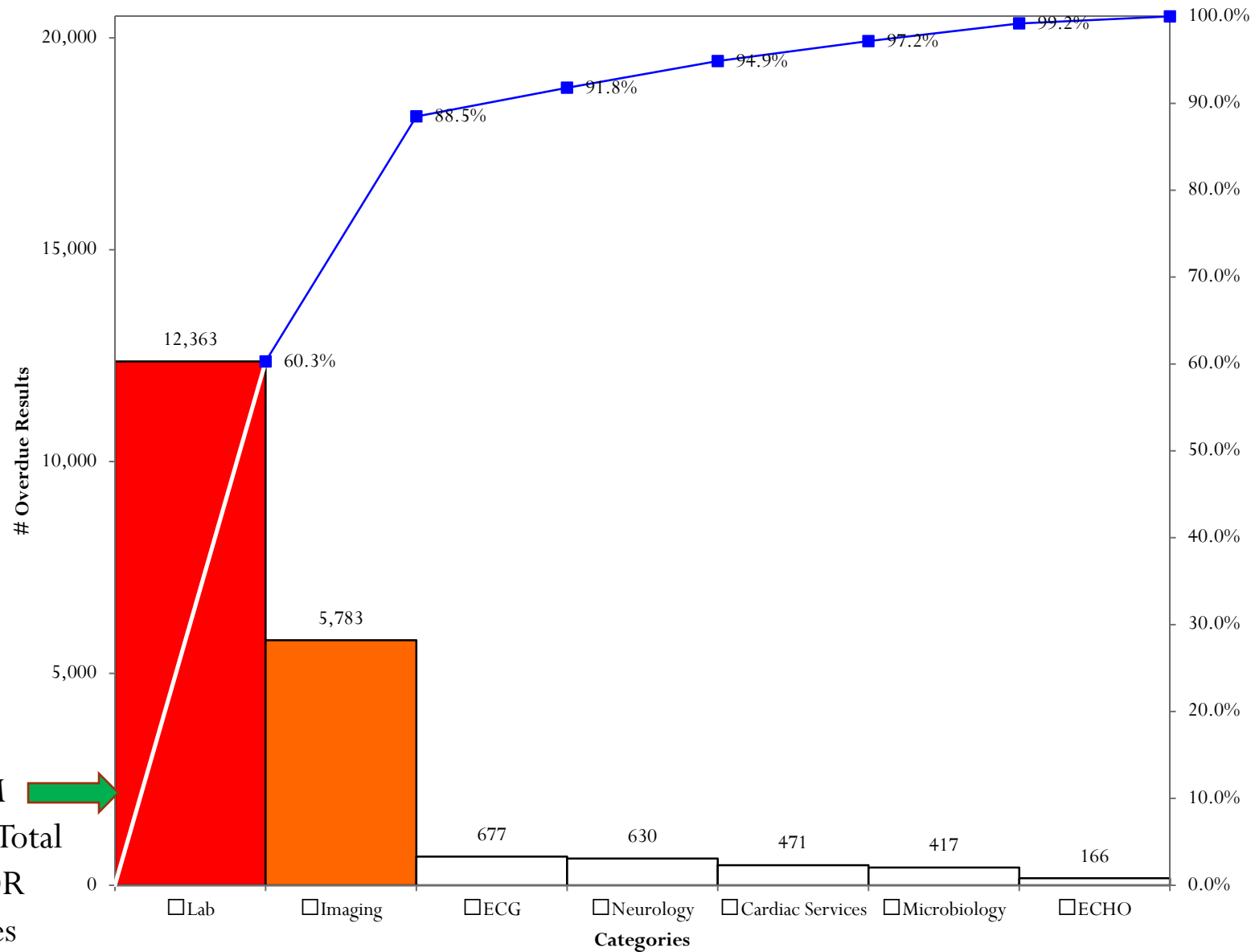
= 4.9% OVERDUE (ALL UT Medicine)

Annual # Orders – Westover Hills: 14,063 (projected)

Overdue Results – Westover Hills: 1,895 (6/24/11 snapshot)

= 13.4% OVERDUE (All Westover Hills)

Categories of Overdue Results - UT Medicine



WH FM
15% of Total
Lab ODR
Messages

Quantify the Problem: Westover Hills

Westover Hills makes a good “pilot site” for UT Medicine-wide rollout. WH ODR is nearly 3 times the average for all UT Medicine. Also:

6.54% of “Normal” orders overdue

49.55% of “Future” orders overdue

Re-Scope: Focus on Future Lab Orders!



DISCOVERIES – June to September, 2011



- H&H vs. CBC issue
- BUN vs. Chem confusion
- Duplicate tests/results: Quest error, provider error
- Physicians not changing Expected Date default ('today')
- “Result Notes” column header is not about Results – creates confusion
- Clinic staff not always resulting same-day POC tests/procedures (causes ODR for same-day tests)
- Clinic staff not ‘working’ ODR messages
- Postponing ODR messages only delays awareness of scope of problems

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Duplicate Orders

Chart Review Last refresh: 3:46:20 P ?

Filters Refresh Select All Deselect All Review Selected Lab Flowsheet Route

ORT Encounters Notes Meds Labs Imaging ECG Procedures Cons/Refs Other Orders Letters Episodes Media Misc

9 records match filters, all records loaded ☒ Hide Canceled Orders Clear All

Filtered: Hide Canceled Orders

Date/Time	Resulted	Test	Result	Status
02/25/2011 1701		CULTURE, URINE, SPECIAL		Future
02/25/2011 1500		CULTURE, URINE, SPECIAL		Future
02/25/2011 0000	02/28/2011 11:03 AM	CULTURE, URINE, SPECIAL	Abnormal	Final result
02/01/2011 1218	02/01/2011 7:54 PM	ACTIVATED PTT		Edited
02/01/2011 1218	02/01/2011 7:54 PM	PROTIME-INR		Edited
02/01/2011 1218	02/01/2011 7:54 PM	BASIC METABOLIC PANEL	Abnormal	Edited
02/01/2011 1218	02/01/2011 7:54 PM	CBC	Abnormal	Edited
02/01/2011 1218	02/01/2011 7:54 PM	URINALYSIS, COMPLETE (CHEM/DIPSTICK & MICRO)	Abnormal	Edited
06/24/2010 1233	06/26/2010 12:38 AM	URINE CULTURE		Final result

Duplicated orders

Duplicate order that clinical staff needs to cancel

Interventions

Imaging / HIM Interventions: 6/25/11

1. Establish Productivity Standards for HIM Document Imaging Services
 - Scan TAT of 72 hours or less -- 400 clinical documents / 8 hr. day to meet required
2. Improve document delivery: WH Clinics to UT Med HIM via UTM Courier
3. Reduce Provider-to-HIM handoffs so Provider handles one result via in-basket

EpicCare Applications: 7 / 15 / 11

1. Increase reliability of ODR data and message delivery by correcting message delivery settings (releasing ~5,000 ODR 'held' in error to clinic pools)

Westover Hills Clinical Operations:

1. Establish 'cleanup' process by clinical staff to reduce # ODR. 6/24/11
2. Institutionalize process, maintain manageable levels of ODR: 9/1/11 →
3. Train physicians & staff to understand order types, expected dates. 9/1/11 →

Total Overdue Results at Westover Hills Family Medicine – During & Post-Interventions

