



2020 LEAD Capstone Poster Session

Beaker Dashboard: Pathology Navigation System

Jyoti Balani

Associate Professor

Pathology



Abstract

- Imagine driving a car without a fuel gauge, mirrors, destination, navigation system and an odometer!
- Extend that analogy to a day in a pathologist's life...
- I aim to create a pathologist dashboard (landing page) in EPIC electronic medical record to inform the pathologist's day and activities.
- This project optimizes information resources to centralize key information within our workspace,
- And aligns with UTSW strategic priorities – to transform clinical care and enhance practice experience



Objectives

- Utilize existing resources
 - Information resources: Epic Beaker LIS tools, Cogito RWB, Clarity database and BI reports, Radar Dashboards
 - LIS/EMR analysts, Epic technical specialists, informatics directors
 - Knowledge sharing and collaborative efforts
- Solicit feedback from pathologists and stakeholders (clinicians, leadership, pathologist assistants, lab technologists)
- Build/customize reports
- Present aggregated data in Pathologist dashboard to inform pathologist activities



Background Information

- Unfilled need to centralize knowledge that drives pathologists purposeful, goal-driven activity
- Switched to Epic Beaker integrated lab information system (LIS) in Jan 2019
- Beaker foundation system Pathologist Dashboard available
- Customized UTSW Epic Beaker Pathologist Dashboard can be used to synthesize and present that information as a startup activity within our existing workspace



Specific Aims

- Present aggregated, real-time, interactive, dynamic data in Pathologist dashboard related to:
 - **Workload/Responsibility**
 - ✦ Cases, priority, overdue, blocks, slides, special stains, immunohistochemical stains, linked orders, external consults
 - ✦ Worklists, flags, holds, follow-up tasks, internal consults, conference cases
 - **Quality and Productivity performance relative to goals**
 - ✦ Case turnaround times, corrected reports, addendum reports, report correlations (intraoperative vs. final, pre-op vs. post-op, cytology vs. biopsy)
 - **Communication and collaboration**
 - ✦ Broadcast message board, Inbasket message status, intra and internet links
- Self-check ability: data provided in comparison to subspecialty pathology group and overall pathology department



Sample Dashboard

Lab Pathologist Dashboard

My Dashboards Pathologist Dashboard - Personal

Workload

Daily OR Volume
Last Refresh: 09:51:09 PM
Report completed: Wed 1/30 09:48 PM

Unreceived Specimens from Procedural Areas
Report completed: Wed 1/30 09:51 PM

Location	Not received
EMH OR	4
Total count	4

My Cases & Reports

My Cases
Report completed: Wed 1/30 09:51 PM

Case Type	Total	Overdue
BONE MARROW	1	0
PAP TEST	0	0
SURGICAL PATHOLOGY	1	0

Pathologist Message Board
Last Refresh: 09:51:09 PM

Lunch and Learn Thursday
Join us for a Lunch and Learn on Thursday at noon in the main conference room
Wed 1/30 09:11 AM - Physician Pathology, MD

Recommended Reports
Last Refresh: 09:51:13 PM

Report Name	Results	Status
Reporting Workbench Reports		
All Cases Created- My Lab (Past 7 Days)		Ready to run
ASCUS and Positive HPV - All Labs (Past Month)		Ready to run
ASCUS/SIL Summary - All Labs (Past Month)		Ready to run
Case QA Review (Last Month)		Ready to run
Missing Containers - My Lab (More Than 5 Days)		Ready to run
Overdue Labs - Pathology/Cytology Orderables		Ready to run
Past Due Cases (Past 7 Days)		Ready to run
Epic-Crystal Reports		

Statistics

Department Frozen TAT EMH HOSPITAL LAB
Last Refresh: 07:28:17 PM

Average TAT EMH HOSPITAL LAB - AUTOPSY EXAM
Last Refresh: 07:28:17 PM
TEST RECORD: AUTOPSY EXAM

Cases Needing Charge Review
Report completed: Sun 4/28 07:23 PM

Case Type	Cases Needing Charge Review
SURGICAL PATHOLOGY	9

<https://datahandbook.epic.com/Reports/Details/3070091?rank=1&queryid=78199102&docid=68325>



Project Plan

- Determine core project team and resources
- Solicit feedback from stakeholders
- Determine Work and Quality metrics reports, criteria and display items
- Build aforementioned reports
- Iterative approach to finalize v1.0 Pathologist Dashboard
- Go-live with Feb 2021 Epic Beaker upgrade
- Monitor outcomes and survey 3 months post go-live
 - Expect improvements in TAT and task resolution rate
 - Increase in prospective quality assurance tasks; decrease in errors
 - Increase in Epic messaging and collaboration



Application of What You Learned at LEAD

- Our greatest opportunity for success lies in building on our natural talents to make them our strengths
 - Requires self-awareness and emotional intelligence
- Similarly, understanding what drives others and harnessing their strengths will maximize our potential together
- I will rely on my strengths (developer and responsibility) and will cater to the talents of my team members while managing my weakness (too goal-oriented at risk of losing sight of people) to achieve the goals of this project



Proposed Budget

- 40 analyst hours
- 10 Epic Technical consultant hours
- 20 project owner hours
- 10 collaboration/consultation hours
- 12-15 hourly meetings to keep on track
- 4 feedback sessions with stakeholders (30 mins each)
- Total approximately \$9000



Innovation and Significance

- Leverages resources from all 3 institutions
- Adaptable across all 3 Epic instances on campus
- An informed pathologist will improve performance, transform clinical practice and enhance practice environment



References

- College of American Pathologists (CAP) Accreditation Program: Anatomic Pathology Checklist
- https://rstudio-pubs-static.s3.amazonaws.com/381422_3c52317a8f644828bee1de2530b3314a.html
- https://improvement.nhs.uk/documents/6124/Pathology_quality_assurance_dashboard_PQAD.pdf