

ABSTRACT: 2016 ELAM Institutional Action Project Symposium

Project Title: Integration of Anatomic Pathology Clinical Service Between Hospital of the University of Pennsylvania and Pennsylvania Hospital

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Background, Challenge or Opportunity:

Penn Medicine currently consists of five hospitals: Hospital of the University of Pennsylvania (HUP) Pennsylvania Hospital (PAH), Penn-Presbyterian, Chester County and Lancaster General. An alliance with Virtua Health system has been announced. Although Penn Medicine continues to expand, Anatomic Pathology (AP) clinical services remain unintegrated. HUP practices by subspecialty and pathologists are part of multidisciplinary teams. PAH pathologists are generalists and cover multiple subspecialties. While integration of the Departments is in the Chair's strategic plan, an opportunity to expedite integration arose when some faculty attrition occurred at PAH.

Purpose/Objectives:

The objective of this project is to integrate the HUP and PAH AP clinical activities, and apply lessons learned to future integration with other Penn Medicine hospitals. Integration would be beneficial because: 1. Penn Medicine pathology should provide uniform diagnostic services, 2. Integration should promote increased efficiency and cost savings, 3. Standardization of policies, specimen handling, and reporting should reduce errors/miscommunication.

Methods/Approach:

Pathology leadership at both institutions met for a series of discussions regarding the importance of integration. The first task was to implement sub-specialization at PAH. When the opportunity arose to recruit faculty to PAH, subspecialty faculty were recruited. The search/appointment process was led by HUP and included input from HUP and PAH faculty. The committee also developed a system by which HUP could assist PAH with clinical work during recruitment. Second, a task force consisting of HUP and PAH AP administration developed a plan through which the HUP QA officer and the laboratory supervisor could improve gross room practices at PAH. Implementation was expedited by the need to recruit a new PAH AP Supervisor. Third, a physician and information technology group worked on developing similar reporting and diagnostic practices for both institutions.

Outcomes and Evaluation Strategy:

1. Three subspecialists were recruited (Cytopathology, gyn, breast and ENT (high volume PAH subspecialties)). Conferencing between institutions and candidate talks were done by video conferencing.
2. The committee implemented sign-out of non-teaching PAH cases by HUP pathologists; HUP pathologists covered night call at PAH periodically.
3. HUP will perform PAH cytopathology until new faculty arrive. Uniform written reports were developed. Similar reporting/consensus diagnoses are still under development for subspecialties.
4. With the ability to implement new practices in the PAH gross room, reported errors rates were reduced after three months (however, improvement still needed).
5. A pathologist assistant from HUP was appointed PAH AP supervisor allowing better communication for technical aspects of the division.
6. Telepathology has allowed remote coverage of frozen sections between institutions.
7. Future assessment parameters will include: physician (pathologists/clinicians) satisfaction with sub-specialization, monitoring of turnaround time, and changes in safety net reporting.

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Background/Opportunity

Penn Medicine currently consists of five hospitals: Hospital of the University of Pennsylvania (HUP) Pennsylvania Hospital (PAH), Penn-Presbyterian, Chester County and Lancaster General. An alliance with Virtua Health system has been announced. Penn Medicine continues to expand but Anatomic Pathology (AP) clinical services remain unintegrated. HUP practices by subspecialty and pathologists are part of multidisciplinary teams. PAH pathologists are generalists and cover multiple subspecialties. While integration of the Departments is in the Chair's strategic plan, an opportunity to expedite integration arose when some faculty attrition occurred at PAH.

Purpose/Objectives

To integrate HUP and PAH AP clinical activities and apply lessons learned to future integration with other Penn Medicine hospitals. Benefits of integration include:

1. Uniformity of diagnostic services
2. Increased efficiency and cost savings
3. Standardization of policies, specimen handling, and reporting
4. Reduction in errors/miscommunication.

Methods/Approach

1. Since May 2015, Departmental leadership met regularly to discuss integration, particularly subspecialization at PAH. The opportunity arose to recruit faculty to PAH, and the search and appointment process was led by HUP and included input from both HUP and PAH faculty.
2. The leadership developed a means by which HUP could assist PAH with clinical work during faculty shortage and recruitment phase.
3. A task force consisting of HUP and PAH AP administration developed a plan such that the HUP QA officer and laboratory supervisor could help reduce PAH gross room errors. Implementation was expedited by the need to recruit a PAH AP supervisor (internal promotion of prior supervisor).
4. A physician and information technology group worked on developing similar reporting and diagnostic practices for both institutions.
5. HUP Pathology leadership also discussed integration logistics with the HUP Radiology Chair who had recently integrated with PAH Radiology.

Past Successes for Departmental Integration

1. 1997 – Penn Medicine acquires PAH
2. 2004 – HUP Pathology Chair oversees PAH
3. 2011 – Development of Policy Committee to make policies similar between institutions. Members from all Penn Medicine hospitals.
4. 2012 - Integration of technical operations (histology, immunohistochemistry, and flow cytometry) at centralized lab (3020 Market Street). Cytology not yet integrated
5. 2014 – Penn Medicine Laboratory Services System Integration Team- a collaborative group which discusses technical aspects of system-wide integration with the HUP COO.

Outcomes/Evaluation Strategy

1. AP Clinical services:
 - a. Three subspecialists were recruited (Cytopathology/GYN, Cytopathology/ENT and Breast (high volume PAH subspecialties) for practice at PAH (and partly at HUP). All will be credentialed at HUP and PAH
 - b. Non-teaching cases from PAH handled by HUP subspecialists until new faculty arrive
 - c. HUP pathologists cover night call at PAH periodically (incentivised)
 - d. PAH Cytopathology cases handled by HUP until new faculty arrive. Uniform written reports were developed.
 - e. Provided PAH faculty Academic Clinician faculty appointments at UPENN (conversion from Health System Clinicians)
2. Gross Room Oversight
 - a. HUP AP QA manager and AP technical supervisor investigated high error rate in PAH gross room. Implemented new practices and saw immediate reduction in errors, (Table). Still need for improvement)
 - b. Senior HUP Pathologist Assistant appointed as PAH AP/Gross room supervisor allowing better communication for technical aspects of the division.
3. Telepathology/High Definition video camera
 - a. Allowed remote coverage of frozen sections from PAH at HUP (particularly for neuropathology as PAH does not have board-certified neuropathologists).
 - b. Current and future meetings, talks, didactics done by video conferencing. (Figure)

Discussion

Initial (and Continuing) Challenges

1. Miscommunication– “It’s integration not consolidation/takeover”
2. Concern of PAH faculty for “loss of identity” – “If you take these specimens away what will be left for me”?
3. PAH faculty wanting to maintain “generalist” model
4. HUP faculty not completely open to PAH faculty in their subspecialty
5. Continuation of re-review of pathology from HUP at PAH at request of PAH clinicians (adds extra non-reimbursed work for pathologists)
6. Fear from PAH clinicians that HUP will actually provide a slower turnaround time
7. Consideration of whether to merge residency programs

Keys to Success

1. Develop working groups consisting of faculty/staff from each institution: Cooperation, Planning, Communication
2. Start with “low hanging fruit” to start the integration process – processes that can lead to discussion/agreement – policies, processes, reports
3. Never state that the subspecialty “experts” are better ; they may just have more experience with certain types of cases
4. Allow the “acquired” institution to be engaged in the process and provide input
5. Expect the “unexpected” (faculty/staff may not believe in the mission and may leave) – plan that faculty/staff may leave the institution
6. Avoid a “my way or the highway attitude” – there is nothing to say that one policy/process is the best way – keep an open mind; while maintaining the mission of the institution
7. Expect a “one size does not fit all” approach – what works for one institution may not work for another

The Future

1. Develop common reporting for subspecialists in surgical pathology (ongoing; expected completion 2018)
2. Implement further PAH gross room error reduction by adding HUP-trained, PAH gross room supervisor (Summer, 2016)
3. Visit other academic, integrated pathology departments to evaluate their challenges/successes (Long Island Jewish, Montefiore, etc), (Summer, 2016)
4. Move non-gyn cytology processing to centralized laboratory (Summer/Fall 2016)
5. Utilize lessons learned to integrate other hospitals in Penn Medicine (Starting with Presbyterian Hospital, Summer/Fall 2016)
6. Require that only pathologists board certified in boarded subspecialties (derm, heme, neuro, cyto) handle those specimen types (Winter/Spring, 2017)
7. Develop subspecialty signout at PAH based on model implemented at HUP in 2007 (Summer, 2017) and develop rotations at HUP for PAH pathologists to integrate with their subspecialty (Winter/Spring, 2017)
8. Evaluate changes in report turnaround time and clinician satisfaction (Summer, 2017; ongoing)
9. Determine pathologist job satisfaction (Summer, 2017; ongoing)

Monthly Gross Room Error Rates at PAH and HUP

	Jan-Nov 2015		Dec 2015-Feb 2016	
	Avg # Specimens/month	Reported Errors/month	Avg # Specimens/month	Reported Errors/month
PAH	1,206	11 (range 4-22)	1,231	7 (range 5-9)
HUP	3,126	2.6 (range 0-7)	3,232	1.3 (range 1-2)

Interactive videoconference makes discussion between the institutions feasible and “real”

