# Charting Unknown Territory Digitizing Lab Notebooks

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A new service opportunity using the skill sets of the interlibrary loan staff in a new way arose when the Chief of the Division of Obstetric Anesthesiology, University of Maryland Medical Center approached the Health Sciences and Human Services Library (HSHSL) University of Maryland, Baltimore (UMB) with a request to photocopy 40 lab notebooks comprising over 30 years of patient treatment data. The goal was to have a backup copy of the information.

The HSHSL Resource Sharing Department (RS) recommended digitization for long term preservation and automated data analysis. After a feasibility assessment of client requirements, hardcopy conditions, number of volumes, and resources required, the client was provided with an estimated timeframe and cost for the service. The client requested that RS move forward with the project once an agreement was reached.

Method

### • Business agreement

A HIPAA Business Associate Agreement (BAA) needed to be negotiated and signed since the data involved protected patient information. Additionally, the data was owned by the University of Maryland Faculty Physicians, Inc. (FPI), not UMB. This required the involvement of UMB and FPI lawyers agreeing to terms. The details of the project, supplied by the HS/HSL were added to the standard FPI BAA. Additional modifications were made by UMB counsel and the agreement was signed.

### Security measures

Since the HSHSL local network is not HIPAA compliant, the files were first scanned on a local PC and then transferred to an encrypted thumb drive. A log file was kept to document the details of each item, digitization time, as well as the staff time associated with retrieval, digitization and return. This was used for billing purposes. The books were guarded by staff at all times and locked away if an overnight stay was necessary. The copy on the PC was erased after the project was completed.

Method (cont'd)

## • Staff allocation

To ensure both RS operations and the project proceeded in parallel, one staff member was assigned to perform the digitization. Workload was evaluated on a daily basis and staff allocated accordingly. Several RS scanners were tested to select the best one for the project.

# · Quality assurance and control

A workflow was developed which included scanner configuration according to the requirements. Each step in the process beginning with book retrieval to its completion was documented. Sample scans were reviewed and approved by FPI prior to production. Each book scan was followed by a page-by-page check to ensure legibility and completeness. A redundant copy was made for backup.

Results

- 40 lab notebooks from 1986-2016 were scanned in 600dpi/full color in PDF.
- A thumb drive with 56 GB of encrypted data as well as a redundant copy were provided to the client.
- Library recovered \$2,922.75 for the service based on hours and cost of thumb drives.
- No negative impact on RS turnaround time due to flexible staff allocation during this period.
- A process was established to continue the digitization service.

Lessons Learned

- The Business Associate Agreement process takes time requiring thorough review and negotiation.

  Leave room for the contingency. Communication is important since multiple people are involved in the process.
- Involve clients in early production stages to ensure requirements are being met so processes can be adjusted in time.
- Involve staff in the process from the beginning of feasibility studies through evaluation. Seek their expert opinions. Make sure there is understanding of the project and its requirements. This instills a sense of ownership in staff and prepares them for the task.
- Acquiring a higher grade scanner improves quality and productivity.
- There is always room to do more and try new things. New knowledge and skill sets will be built through working in uncharted territory.

