HILLMAN REFERENCE SERVICES OVERVIEW: REPORT TO HEAD OF HILLMAN PUBLIC SERVICES

EXECUTIVE SUMMARY

Reference services have traditionally been a core part of an academic library's function. They evolved over time to reflect the new information landscape shaped by digital access to information and changing roles of academic librarians. At ULS (as in other ARL libraries), we noted a steady decrease in recorded reference interactions.[1] Due to the changing character of reference interactions, resulting in more directional/policy and explanatory questions, liaisons are encouraged to develop more consultation interactions.

A Project Team worked over Fall 2018 to review the current practice, identify weaknesses of the current process, and suggest improvements. This report is a result of the team's efforts. The team adopted a process mapping method[2] to achieve its goals.

Their activities included:

- Iterative interviews with librarians and desk staff to develop the reference activity workflows (These workflows can be found in Appendix A and Appendix B.)
- Analysis of the workflows and relevant statistics to identify inefficiencies, redundancies, and bottlenecks
- Review of Fall 2017 and Spring 2018 on-call statistics and overall FY18 (July 2017-June 2018) reference statistics
- Development of recommendations

As the result of the above activities the project team identified a number of areas requiring further attention. These included:

- Decreases in service usage, especially in evening and weekends hours
- Cost of on-call service, per question answered: each shift staffed by librarians scheduled to be on-call is costing an average of $152[3] with an average of two questions answered per shift. Using recorded times for transactions multiplied by the number of transactions, we determine that 13% of shift time is spent handling on-call reference.
- Inconsistencies in recording reference statistics (in Ref Analytics)
- Inconsistencies in following established processes and procedures
- Absence of quality control mechanisms (i.e. how well are we answering the questions?)
- Inconsistencies in (lack of effective) administrative supervision

Our key recommendations are:

1. Create and implement a comprehensive set of reference service procedures
2. Implement triage reference model
3. Improve implementation of referrals to librarians for exploratory and explanatory questions
4. Coordinate reference service across all ULS locations for better resource allocation
5. Adopt agile scheduling that addresses service peaks and lulls
6. Provide robust training (initial and on-going)
7. Investigate options for providing better access to directional/policy information (website, way finders, other signage)
8. Managers hold their teams accountable for adhering to these procedures
9. Rebrand and communicate team-supported reference to Pitt Community.

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[1] See ARL Service Trends in ARL Libraries 1991-2015 (https://www.arl.org/storage/documents/service-trends.pdf)

[2] The process mapping approach uses process maps (visual representations of process workflows) to provide insight into the process, help brainstorm ideas for process improvement, increase communication, and provide process documentation.

[3] This is calculated based on HR data on average annual salary + fringes of librarians involved in on-call service during the time analyzed.

BACKGROUND

The ULS service model has continuously evolved. In 2012, a liaison librarian model was implemented and the Hillman Reference & Information and Circulation & Access Service desks were merged. Other changes implemented since then include:

- Implementation of a liaison model that resulted in specialized disciplinary support and more reference consultations.
- Formation of the Reference Track to address the needs for new reference workflow and procedures (since abandoned).
- Introduction of new tools for reference interactions and tracking (LibAnswers/LibChat for reference questions processing and ticketing and RefAnalytics for capturing reference transaction statistics).
- As service was maturing, changes were being made based on feedback, experience, and statistics, resulting, in the summer of 2016, with Hillman moving from the model of a librarian present at the Service Desk to an on-call model, with a librarian available via chat/on call to support basic reference on weekdays and Sunday, removing Saturday hours from the liaison. Liaisons were encouraged to use LibCal's MyScheduler to facilitate scheduling consultations.
- Introduction of new services (along functional lines) exposed more colleagues to reference (consultation) work.
- Cuts in available personnel and reduced statistics for evening and Sunday hours resulted in changing hours for on-call service in Fall 2018. This model resulted in no Sunday hours and ending the evening hours at 7pm instead of 8pm.

CURRENT REFERENCE MODEL AT HILLMAN

Under the current model, a patron can initiate a reference transaction through a variety of paths:

- In person at Service Desk (desk staff and student workers only)
- By phone to Service Desk or Liaison or Functional Librarian
- On-line: by chat, by filling in an on-line form (which creates a ticket in Ask Us queue)
- By direct email or LibCal appointment to Liaison or Functional Librarian

No matter the path for the reference transaction, when it is concluded, statistics relating to that transaction should be entered in RefAnalytics. All transactions are classified using the Warner Model (URL: https://pitt.libguides.com/refinfo/training). Some information captured includes:

- function of the person answering the question (desk, on-call, liaison/specialist)
- duration of transaction (0-2, 2-5, 5-10, 10-30 and 30+ minutes)
- physical location of the person answering the question (e.g., Hillman, Johnstown, Frick, etc.)
- format of the question (in person, telephone, email, chat, etc.)
- free text for question, answer, and notes

Table 1, below, shows the distribution of FY18 reference transactions captured in RefAnalytics by transaction type, status and format for Hillman. We note that 62% of all recorded transactions were directional/policy, while only just under 5% were classed as extensive reference. In all of FY18 there were 495 consultations[4] and 992 referrals recorded (this is a drop of some 10% from FY17).

NOTE: Numerous blank fields in responses make a complete analysis of query content difficult.

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[4] Definition of a consultation as defined by ACRL is a scheduled interaction.

Table 1: Reference Transactions at Hillman for FY2018

Reference transactions by question type, status, and format

Year of ..	Status	Question Type	In Person	Telephone	Email	Chat / IM	SMS/Text	Other	blank	Grand To..
FY 2018	Desk	Directional/Policy	8,344	1,463	31	117	2	7	15	9,979
		Explanatory Ref	2,416	308	17	104			10	2,855
		Exploratory Ref	260	38	2	8		1	2	311
		Extensive Ref	111			8				119
		blank	14			2				16
	Liaison/Sp..	Directional/Policy	309	42	402	50	6	2	9	820
		Explanatory Ref	242	48	791	83	2	85	1	1,252
		Exploratory Ref	226	29	276	16	1	4	7	559
		Extensive Ref	380	22	267	3		4		676
		blank	2		4					6
	On Call	Directional/Policy	16	7	263	399	14		22	721
		Explanatory Ref	11	3	175	603	9		9	810
		Exploratory Ref	14	5	58	179	2	1	6	265
		Extensive Ref	16	5	12	29				62
		blank			1	2				3
	blank	Directional/Policy	60	13	9	12			7	101
		Explanatory Ref	9	10	2	11		3	5	40
		Exploratory Ref	6	1	8	3			5	23
		Extensive Ref	1	1	1					3
		blank			2	13			7	22
Grand Total			12,437	1,995	2,329	1,634	36	107	105	18,643

IN-PERSON AND PHONE QUERIES

In-person and phone queries are generally answered at the Information Desk (around 90% of all Hillman questions). If the question requires specialist support, the desk staff contacts the on-call librarian. After hours, the desk staff will help the patron create an Ask Us ticket to be answered during the next available on-call shift. When desk staff record this interaction in RefAnalytics, it is marked as a referral. See Appendix A: Workflow: Patron Has a Question and Appendix B: Workflow: Liaison Librarian on-call for detailed workflows.

Note that 76.4% (1,525 of 1,995 transactions) of phone calls and 70% (8,729 of 12,437 transactions) of in-person queries are in the directional policy areas. Implementing an automated phone direction system would provide quick answers to popular questions, such as library hours. Improved web design and directional markings throughout the building would assist patrons in locating library policy information or physical spaces. Chart 1 below shows an analysis of topics of directional questions answered at Hillman by frequency. The most frequent queries coded as "book" refers to both assistance with locations of materials and to polices relating to circulation and access).

DIRECT LIAISON CONTACT (EMAILS AND LIBCAL APPOINTMENTS)

Liaison or functional Librarians receive a number of reference questions directly via email or LibCal appointment requests. While all are required to record these queries in RefAnalytics, it is not clear that this happens consistently for all colleagues. If all email queries were moved to LibAnswers, the resulting correspondence would be recorded, which would assist other librarians in answering similar questions. In addition, moving all reference correspondence to LibAnswers would eliminate the problem that occurs when Ask Us queue tickets are answered outside the system and never recorded or closed within the system.

LibCal appointment requests fall in the category of scheduled consultations. Since the communication is held in-person, the liaison is responsible for recording the transaction in RefAnalytics. To centralize the email and LibCal appointment requests, a tool such as LibCRM would be useful. LibCRM is currently in beta-stage, but it is something worth further investigation and use.
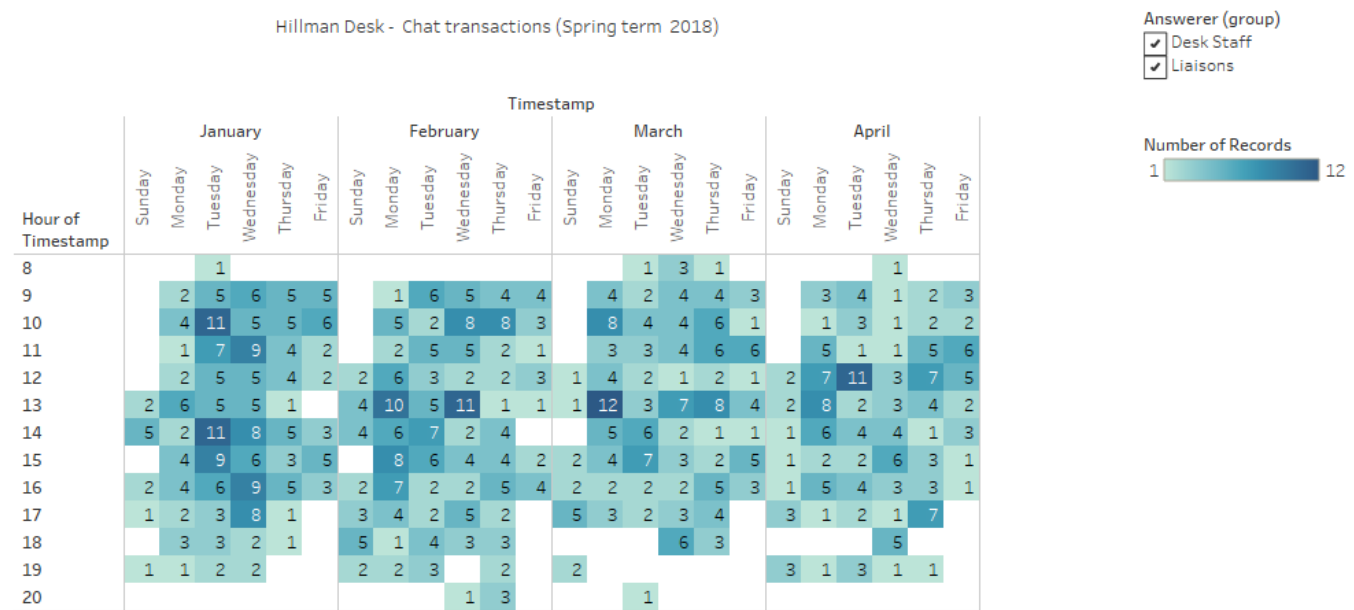
ON-CALL COVERAGE (CHAT AND ASK US QUEUE)

Staffing for on-call is split between liaison librarians and desk staff (i.e. at any given time where service is available there is one liaison and one desk staff person answering chats; only liaisons are responsible for monitoring Ask Us queue). Liaison librarians (13 in Fall 2017 and Spring 2018, and 10 in Fall 2018 are scheduled for four-hour on-call shifts. Starting in Fall 2018, on-call hours were scheduled for Monday through Thursday 9:00 AM to 7:00 PM and Friday from 9:00 AM to 5:00 PM. When not actively answering on-call reference questions, the liaison librarians use the on-call time to handle other duties which can be accomplished from their desks. Based on the recorded chat transactions and on-call statistics, we estimate, that librarians answer 0.5 questions per each hour on call.

Twenty-four desk staff are scheduled for one-hour on-call shifts at their desks. As staff wait for chats, they will work on assigned tasks that can be completed at their desks. While on call, desk staff handle an average of 1.2 chats per hour.

Table 2 below shows the distribution of chats by month, weekday and time of day for Spring 2018.

Table 2: Chat Transactions Activity for Spring 2018

Hillman Desk - Chat transactions (Spring term 2018)

Timestamp

Hour of Timestamp	Jan Sun	Jan Mon	Jan Tue	Jan Wed	Jan Thu	Jan Fri	Feb Sun	Feb Mon	Feb Tue	Feb Wed	Feb Thu	Feb Fri	Mar Sun	Mar Mon	Mar Tue	Mar Wed	Mar Thu	Mar Fri	Apr Sun	Apr Mon	Apr Tue	Apr Wed	Apr Thu	Apr Fri
8			1										1	3	1							1		
9		2	5	6	5	5		1	6	5	4	4	4	2	4	4	3		3	4	1	2	3	
10		4	11	5	5	6		5	2	8	8	3	8	4	4	6	1		1	3	1	2	2	
11		1	7	9	4	2		2	5	5	2	1	3	3	4	6	6		5	1	1		5	6
12		2	5	5	4	2	2	6	3	2	2	3	1	4	2	1	2	1	2	7	11	3	7	5
13	2	6	5	5	1		4	10	5	11	1	1	1	12	3	7	8	4	2	8	2	3	4	2
14	5	2	11	8	5	3	4	6	7	2	4			5	6	2	1	1	1	6	4	4	1	3
15		4	9	6	3	5		8	6	4	4	2	2	4	7	3	2	5	1	2	2	6	3	1
16	2	4	6	9	5	3	2	7	2	2	5	4	2	2	2	2	5	3	1	5	4	3	3	1
17	1	2	3	8	1		3	4	2	5	2		5	3	2	3	4		3	1	2	1	7	
18		3	3	2	1		5	1	4	3	3					6	3						5	
19	1	1	2	2			2	2	3		2		2						3	1	3	1	1	
20							1	3						1										

LibChat and Ask Us tickets automatically record all interactions. Separately, these interactions should be recorded to RefAnalytics. As can be seen in Table 1, 82% of all on-call (1,531 of 1,861 transactions) and 84% of chat (1,379 of 1,634 transactions) fall in the directional/explanatory category.

Based on the total number of transactions recorded for a term divided by the total number of on-call hours, we estimate an average liaison shift of four hours, at cost of $152, results in approximately 2.08 transactions. A change to a triage model, where staff monitor reference and make referrals as needed, would free the liaison from scheduled on-call shifts to interact with departments and other reference partners.

An analysis of transactions show, 77% of chat only transactions were completed in under 10 minutes (Table 3), while 80% of all on-call (includes chat and Ask Us) were completed in under 10 minutes (Table 4). By multiplying the times by the number of transactions, we determined that the average duration per transaction for liaison librarians is 14.32 minutes.

Table 3: Transaction Durations for Chat (FY2018)

Duration

Value	Count	%
No Data	30	2%
0-2 minutes	281	16%
2-5 minutes	541	31%
5-10 minutes	521	30%
10-30 minutes	313	18%
30+ minutes	42	2%

Table 4: Transaction Durations for On-Call (FY2018)

Duration

Value	Count	%
No Data	14	1%
0-2 minutes	645	27%
2-5 minutes	628	26%
5-10 minutes	665	28%
10-30 minutes	382	16%
30+ minutes	68	3%

COLLECTING FEEDBACK

Overall, customer feedback on the service has been positive. Starting at the end of August 2018, the Assessment team implemented a customer survey to gauge user satisfaction with the service. With only a few exceptions, feedback has been positive. The few responses that were negative were discussed by project team members to determine how the faculty or desk staff could have better handled the request.

AREAS REQUIRING ATTENTION

ACCOUNTABILITY

- Quality review is non-existent. Misinformation can be communicated to a patron with no review of chat transcripts or tickets to address the issue.
- Keeping reference statistics is not mandatory for performance reviews.
- Liaisons can ignore the Ask Us queue with no oversight.

SERVICE USAGE

- Numbers of recorded reference transactions across ULS are declining: from over 43k in FY 2015, to just over 34k in FY 2018. As can be seen from the ARL Service Trends in ARL Libraries 1991-2015 chart (https://www.arl.org/storage/documents/service-trends.pdf), reference transactions at ARL libraries have been in a steady decline for the past 20 years.
- Over 60% of all recorded transactions are directional/policy or explanatory.
- In Fall 2017 and Spring 2018, on-call liaisons answered, on average, 0.5 questions per hour (based on recorded transactions). In the same periods, desk staff recorded on average 1.2 reference transactions per hour for chat.
- Clear patterns of activity recorded across academic terms, weekdays and times of day show increased activity at the start of both Fall and Spring terms. Daily reference activity is higher between 11am and 4pm.

WORKFLOW QUALITY

- Liaisons should review the Ask Us queue for unassigned tickets, but not all do that.
- Liaisons and staff have inconsistent understanding of who should pick up chat questions.
- Due to lack of positive handoff or lack of out of office application, tickets are assigned to people who are on vacation or extended leave.
- No robust practice is in place guaranteeing the recording of reference queries received via private email.
- No process for reviewing chat transcripts and tickets for quality currently exists.

PROCEDURES AND TRAINING

- Procedures were developed by the Reference Track in the summer of 2016, but never consistently applied. (https://pitt.libguides.com/refinfo)
- Training is done on an ad hoc basis (usually only at the start of employment).
- Opportunities for 'refresher" training are sporadic and not required.
- Communication of changes in existing services, new policies or services is inconsistent across the organization.

- Transactions recorded for chat in RefAnalytics do not equal the number of chat transcripts for the same period.
- Question types incorrectly applied with directional questions recorded as explanatory or exploratory and vice versa.
- Consultations recorded at 2 minutes. Because consultations are defined by ARL[5] as one-on-one or group appointments, a time of 0-2 minute would most likely be incorrect.
- Fields left blank.
- Poor recording of question/answer content. Because some transactions are recorded from tickets, more robust answers are supplied with those transactions as opposed to the quick fill of a manually added transaction.

RECOMMENDATIONS

ACCOUNTABILITY

Supervisors throughout ULS have to hold their staff accountable for adhering to work policies and procedures. Higher-level managers have to hold the supervisors accountable to perform these actions.

- Review annual performance procedures to include evaluation of reference performance, as approved by ULS HR.
- Implement on-going quality reviews (by monitoring statistics and transcripts).

SERVICE USAGE

Coverage should be adjusted based on service need and usage.

- Adopt agile scheduling by determining high demand chat hours based on analysis of workflow over the day and the term. We should be responsive to high demand times and aware that low demand leaves staffing resources unable to perform other necessary tasks. Table 4 illustrates flow of chat transactions during Spring 2018.
- Change the reference model from liaison librarian and staff to a triage team model with referrals of exploratory and extensive questions to the appropriate functional or subject specialist.
- Coordinate reference services across all ULS locations for better resource allocation. This would increase the pool of people available to support high demand reference hours.

WORKFLOW QUALITY

We should be providing quality service to our patrons. This can be accomplished by addressing the following points:

- Perform a qualitative analysis of the ticket and chat responses following RUSA guidelines (http://www.ala.org/rusa/guidelines/guidelines-by-topic).
- Schedule regular meetings with all reference staff to discuss procedures, problems, and knowledge.
- Provide centralized, ongoing training on databases and other resources and services both at hiring and on-going.
- Revisit the specialist liaison groupings. In 2016, the Reference Track recommended the formation of three liaison groups: humanities, social sciences, and science. This would provide a pool of people to answer questions when a subject specialist is not available. These groups were created, but they are seldom used.
- Encourage referrals to functional or subject specialists for exploratory and explanatory questions.

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[5] From: https://acrl.countingopinions.com/docs/acrl/2017Instructions_12_07_17.pdf

PROCEDURES

A comprehensive general reference policy should be established and communicated to all ULS employees. In particular, the following should be addressed:

- Develop procedures on ticket response time and open tickets.
- Establish a positive handoff procedure. We should not transfer phone calls without making sure that the phone is answered on the other end.
- Require the use of out of office in both LibAnswers and Outlook.

STATISTICS

All reference staff are required to enter statistics appropriately. This can be accomplished by:

- Adding items to the predefined list in RefAnalytics to facilitate quick entry.
- Providing centralized, on-demand training and documentation on how to enter reference transactions.
- Reviewing statistics on a regular basis by supervisors.
- Re-consider usefulness of weekly reminder emails to colleagues.

COMMUNICATIONS

Communication within the group providing reference and ULS, as a whole should be improved.

- Communicate changes in existing services through an online bulletin board and regularly scheduled reference meetings. LibAnswers provides an announcement area in the Dashboard.
- Changes to the reference system should be communicated to the University of Pittsburgh community to ensure expectations are appropriately set. Although the first line supporters of a triage system will be able to handle the majority of queries, patrons may need to schedule an appointment with a specialist for more advanced queries. First line supporters can provided as much assistance as possible before assisting the patron in connecting to the specialist.

CONCLUSION

With the arrival of a new Head of Hillman Public Services, we have an excellent opportunity to review our current state of reference and affect changes to improve the quality and accuracy of reference services. The suggestions in this report may assist in getting us closer to that desired end.

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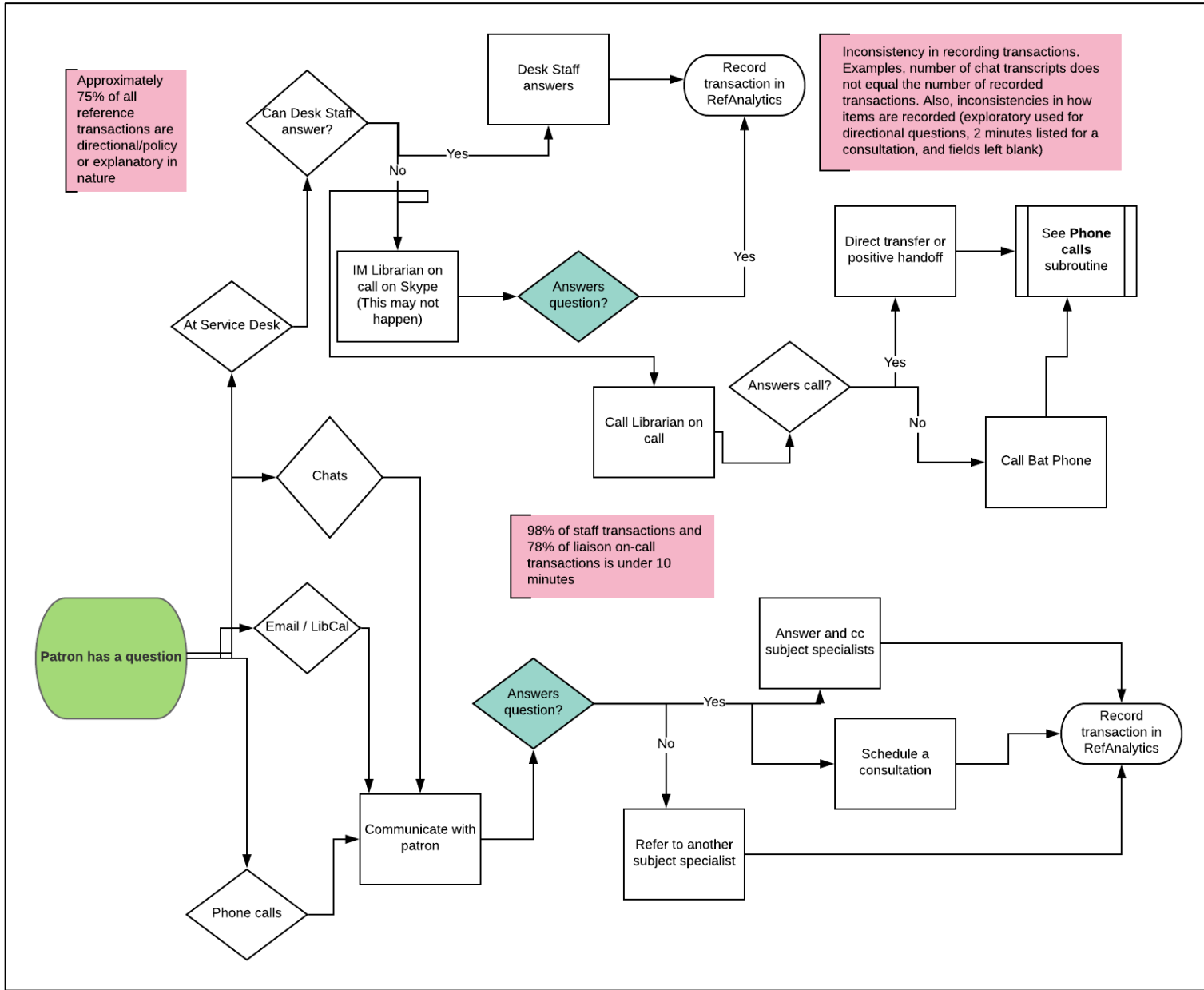
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