Virtual(ly) Overnight: Providing Resources and Services in the era of COVID-19

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Abstract: In response to the COVID-19 pandemic, on Monday March 16th, 2020 at 4:00pm the Health Sciences Library at the Northern Ontario School Medicine (NOSM) closed their physical spaces until further notice - becoming an exclusively virtual library overnight. It was imperative for the library to provide continuity of services to users - many of them preparing for the spread of COVID-19 to the resource limited North. The library operated virtually in many aspects prior to COVID-19. It regularly supports NOSM members at the school's two campuses, but also learners, faculty and staff spread over 843,853 square kilometers of Northern Ontario Canada. With the closure of the library spaces however, the library was required to suspend physically dependent programming and reconsider operations and service delivery with all staff working from home. This case study will outline library operations prior to COVID-19 that have supported this transformation; the imperative component of messaging continuity of services to library users; the transition to staff working remotely; and the implementation of new tools and guides to support users virtually during the era of COVID-19.
Keywords: academic library, COVID-19, tools, resources, pandemic, health & wellness,

1. Introduction

On March 10th, the first COVID-19 case in the region was confirmed. It also happened to be a staff member at the Laurentian campus. This meant the Northern Ontario School of Medicine's (NOSM) response and actions were a little ahead of many other institutions in Ontario. The day after the Health Sciences Library resolved to operate virtually (March 16th), the premier of Ontario declared a state of emergency, and the next day all NOSM members were advised to work from home. Within a week all non-essential access to campus was prohibited at the Laurentian campus and access was supervisor-approval dependent at the Lakehead campus. This direction came from NOSM's host universities. To provide some context NOSM is co-located at Lakehead University in Thunder Bay and Laurentian University in Sudbury. The Health

Sciences Library primarily serves undergraduate medical students, dietetic interns, medical residents, faculty and staff. The majority of NOSM's clinical faculty are doctors, nurses and allied health professionals working throughout Northern Ontario - as are the medical students on clerkship and residents completing the final years of their medical education. The library also supports the user communities of their host institutions. A small physical collection is maintained compared to virtual holdings. Each library location staffs two librarians and one library technician. The Lakehead campus staffs a library coordinator, and the Laurentian campus an administrative assistant and library director. During this period one librarian was on an academic sabbatical and away from regular duties. Although the library team is split between two campuses nearly 1000 kilometers apart they have long operated as one, with librarians and staff overseeing resources and services at both locations.

2.   Library Operations Prior to COVID-19

Typically, during the academic year the Health Sciences Library is open evenings and weekends. In the summer the library maintains only weekday daytime hours. The library's information desks are staffed by librarians, support staff and student assistants. Those working the information desk at the library's Laurentian campus are also responsible for supervising the library's instant and SMS text messaging service through LibChat. In response to COVID-19 evening and weekend hours were discontinued and a single instant messaging schedule was created with all staff contributing. Access to physically dependent services and resources were temporarily discontinued due to the pandemic. This includes access to the hardcopy collection, including high demand course reserves and hardcopy interlibrary loan material; borrowing of equipment such as laptops, tablets and projectors; the library's spaces; and in-person reference services.

Beyond these particular resources and services, the Health Sciences Library, since its inception in 2005, has operated virtually in many ways. Internally, it helps to understand a bit more about the lead librarian's responsibilities. There are four main lead areas - public services, education services, access services and research & scholarly communications. Each lead area is overseen by one of the four librarians regardless of their location. This means that the public services librarian for example oversees both campus library spaces; related services, resources and initiatives; and public services support staff duties in Thunder Bay and Sudbury. The public services team typically works together virtually through email and Cisco video phone. Library staff meetings are held by video conference. Normally, the only time the entire library team works together in-person is at the annual face-to-face. With a strong structure for working together at a distance in place, transitioning to working from home, detailed further below, was straightforward operationally.

In addition to instant messaging the library also maintains a general email address where questions and requests are answered by the library coordinator or

triaged to the appropriate library staff member. This general email also receives the majority of the electronic forms available on the library website. This includes the Book a Librarian form which allows users to book an appointment with a librarian for research consultations, knowledge synthesis projects, and instructional needs. This form has always permitted users the option to meet with a librarian online. The librarians at the Health Sciences Library are well versed in providing research consultations and in-depth reference support through virtual modalities. Another form available on the library's website is the Literature Search Request form which allows users to submit a literature request online. This form includes the necessary fields librarian's need to complete a literature search facilitating clear communication with the requestor. Literature search requests are divided up amongst the librarians on a rotational basis.

In 2018 the library redesigned their website when the school moved to a new content management system. The timing of this upgrade could not have come soon enough in light of COVID-19 - it provided the time for testing, launch and refinement over the past two years. A significant addition during this redesign included a Summon discovery layer which allows users to search the library's various collections from one search box. An additional self-serve feature added to the library website during the redesign included the library's frequently asked questions (FAQ) page powered by LibAnswers. This page consolidated all frequently asked questions formerly dispersed throughout the library website, as well as those received via the library's various points of contact. Users can comment on specific FAQ's and submit their own questions to the library. Additionally, the platform allows the library to track when questions and answers were last updated by staff and how often they are viewed.

The transition to virtual teaching and learning was relatively uncomplicated from an education services standpoint. Because of NOSM's distributed education model, most library instruction and learning objects are already designed with asynchronous, self-directed learning in mind. Over time the library has invested in tools from Springshare (LibGuides) and TechSmith (Camtasia) to create tutorials, videos, and information guides that support NOSM's academic programs, information literacy, and critical thinking skills. No additional training or skill development was required to ensure that librarians could develop resources for an online environment.

The library promotes its online resources on social media platforms. Tutorials and guides can also be accessed directly from the library website, uploaded into NOSM's learning management system, and viewed on the NOSMLibrary YouTube channel. Recently, Twitter has also become a medium for library instruction. Twitter threads highlighting unique COVID-19 resources, searching the new PubMed interface, and creating citations using the APA Publication Manual, Seventh Edition, have been developed, with plans for more threads in the 2020-2021 academic year.

There have been a few challenges along the way. Some sessions usually taught or attended by librarians for the undergraduate and postgraduate medical learners were rescheduled or cancelled in light of COVID-19 concerns. The library was not involved in the decision to reschedule or cancel these curricular sessions. These sessions were either location-specific or taught simultaneously in-person and online, and suitable arrangements could not be made in time.

As mentioned, the library's collection priority has been electronic resources since the majority of users are based off campus. 76% of library resources are online (e-books, e-journals and databases). Similarly, 2019-2020 interlibrary loan statistics indicate that 94% of items borrowed by NOSM members were delivered electronically while 100% of resources loaned were. The availability of the library's digital resources has significantly eased the burden of its space closures. The primary concern, in relation to access to resources, has been the small hardcopy reserves collection. The greatest challenge for education services was to ensure that undergraduate medical students could access required curricular readings without access to the physical library. Fortunately, the vast majority of these readings are available from the library's electronic collection, or from other online resources. A small subset of resources are available only in print format, and from that subset, alternate access was arranged for selected readings deemed necessary for assessment. The library is advocating for accessible formats and other recommendations to mitigate this issue for the 2020-2021 academic year.

3. Messaging to Library Users

The library maintains an annual public relations plan with regular updates and standard messaging for closures, resource outages and maintenance. This information is communicated via a number of outlets including Twitter, Facebook, Instagram, the library's newsletter Off the Shelf, the NOSM Pulse (the school's weekly electronic newsletter), and student, resident and faculty departmental communiques. These established electronic methods of communicating with library users contributed greatly in the days immediately upon closing the library spaces and in maintaining communications as the library moved into month two and three of operating remotely.

Preemptively, the library began developing messaging to support users as it became clear that measures would be taken to help stop the spread of the virus in the community. This included the library's initial closure message (Figure 1) and promotion of existing video tutorials on accessing resources off-campus. The team was able to quickly identify what services would need to be suspended, or modified, although much continued seamlessly. This information was featured on the library's front page (Figure 2) and shared through the various outlets mentioned above (The Northern Ontario School of Medicine. Health Sciences Library, 2020a). The Library Advisory Group confirmed this seamless transition at a May meeting, with users providing supportive feedback about the library's COVID-19 response.
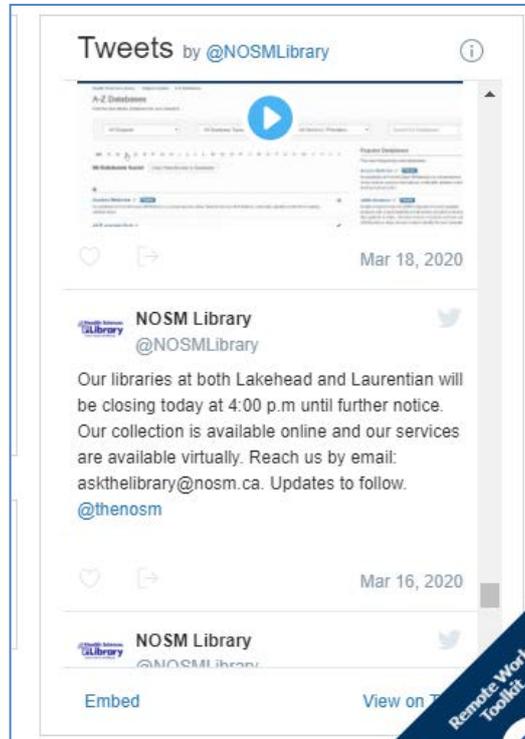
Figure 1 Initial closure message.

Figure 2. Library services during COVID-19

Additional messaging was required throughout the library's various points of contact including revising the voicemails at each campus as they were no longer being checked; posting signage; updating the library's automated email reply message which indicates hours of operations; as well as various library webpages. A system status management tool was implemented as a standard method for communicating resource, service and space disruptions. This tool is detailed in the section New Guides and Tools.

4. Working Remotely

One meaningful yet complicated step was moving the school's workforce to work from home. Initially, the intent was to maintain some of the library operations on site, with staggered shifts and relying on our student hourlies for coverage. However, the logistics proved complicated, and it was increasingly clear public spaces were of concern, so with the approval of the dean and associate dean, the director decided to close the physical library spaces at both campuses. The staff of eight completely transitioned in one day, and by the 17th of March the library was providing 100% virtual services and support.

The rest of the school was doing similar. Each department had the support of leadership to make decisions and be as nimble as possible, to avoid disruption to the academic programs. A crisis management team was struck, comprised of departmental leadership and they met, and continue to meet, regularly to troubleshoot and share information. The dean also created a smaller group, the emergency response team (ERT), that ensured the continuity of school activities and was able to make quick decisions.

An important factor easing the transition was infrastructure and tools already in place to support a distributed campus. The library staff all had laptops with the majority of needed software already installed, and they were able to take these to their home environments. Where equipment was missing or needed, it was provided, and missing software was installed remotely. As every home situation is unique, the staff were encouraged to work flexible hours as necessary and used a shared calendar to note those changes. The team used tools like WebEx and Google Meets to have regular check in meetings, and those were kept short and focused on updates or needed responses to issues as they arose. They also used a group chat in Google hangouts for quick communication. Although some of the technology was new to team members, everyone adapted quickly. Because of the school's distributed nature an IP based phone system was already in place. All staff were able to transition to CISCO Jabber on their laptops, basically allowing for continued use of their work phones and access to voicemail. Wireless headsets were also provided to help with the increased virtual connectivity.

The nine student assistants employed by the library were kept on for remote project work the final eight weeks of their contracts. Weekly hours were divided

equally amongst the students. The library's team leads who supervise student staffing developed a Google Sheet where staff could enter and track student project work. All students had access to a personal laptop, Internet and basic software needed to complete their assignments. Library staff were appreciative to not have abruptly lost the support student assistants provide, particularly in light of the additional work created by the pandemic.

5. New Guides & Tools

5.1. COVID-19 Guide

As public health concerns mounted, the library published a curated COVID-19 information guide for the NOSM community. The guide includes NOSM-specific updates and links to emerging information from all levels of government; daily reports from the CDC; literature collections from academic publishers; case trackers and raw data; patient handouts; clinical guidance for specific populations and disciplines; and ethical considerations for practice. Advice for identifying myths and misinformation about COVID-19 is also included. The guide has rapidly evolved since its publication and content is continually updated to reflect current practices and circumstances. Since launching the COVID-19 guide on March 1, 2020, it has quickly become the second-most popular library guide with over 440 views (The Northern Ontario School of Medicine. Health Sciences Library, 2020b).

5.2. Screensharing LibChat Feature

To enhance instant messaging services during COVID-19 the library trialed and implemented the screensharing feature in LibChat. This feature is available for all major browsers and provides the following:
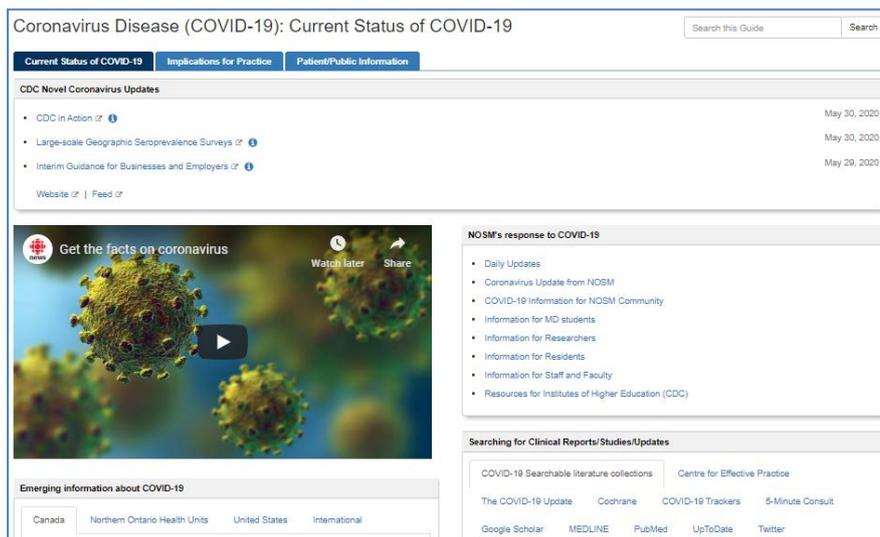

Figure 3. COVID-19 Guide

- Built-in audio to talk with a user live over a high-quality VoIP connection.
- Ability to request keyboard & mouse control of the user's screen to guide them right on their own computer.
- Integrated 2-way screen annotation including the ability to mark up and highlight elements on the user's screen or vice versa. (Springshare, n.d.a)

As this feature is Zoom-based LibChat screensharing is enabled utilizing Springshare's Zoom keys. The Health Sciences Library does not have a Zoom account although other institutions who do could use their own Zoom keys. This does require some setup on the library's end.
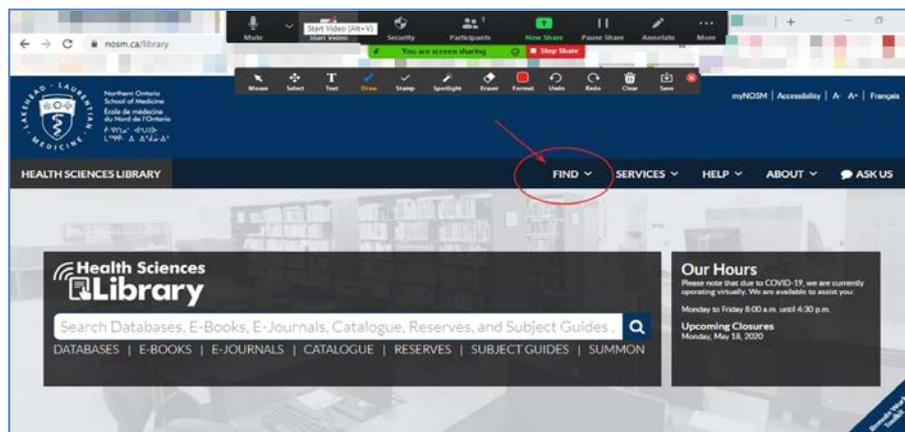

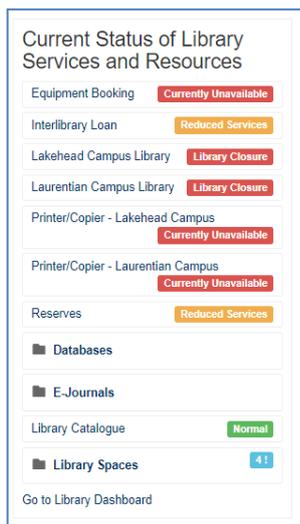**Figure 4. Screensharing sample with markup**.

Figure 5. Full system status management update.

5.3. **System Status Management Tool**

A tool public services had been investigating prior to the pandemic was the system status management application offered through Springshare (Springshare, n.d.b). Elements of the system were implemented quickly in the first weeks of the pandemic and fully launched by early May. The outward facing interface of the application enables the library to share with users any planned or unplanned resource outages, service issues and space closures. Previously users were notified of such issues via social media and these messages would display on the library's Twitter feed featured on the front page of the library website. Internally, the system status management application provides the library with

one central location to track important notifications eliminating the need for multiple emails. Currently the library features the full system status management update on their FAQ page (Figure 5) (The Northern Ontario School of Medicine. Health Sciences Library, 2020c). Here users can click on the various headings for more detail and applicable updates (Figure 6).
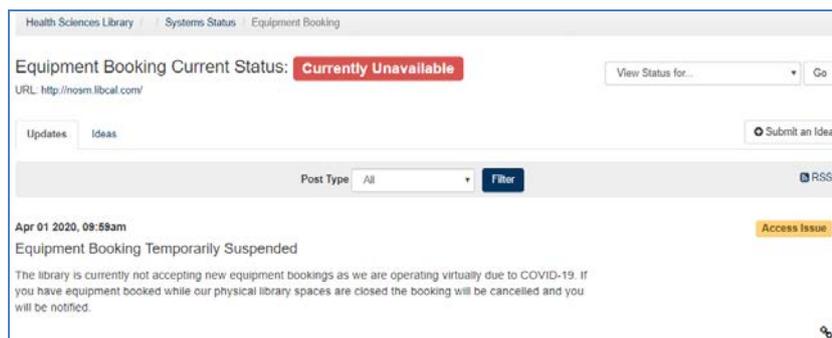

Figure 6. Detailed view of equipment booking service disruption.

In addition to the full system status management update notification widgets can be placed on library webpages. The library placed such a widget on the reserves page since hardcopy reserves are unavailable at this time. Users can click on this notification to see the full system status management update, view related FAQ's, start a chat conversation with staff or provide feedback (Figure 7).
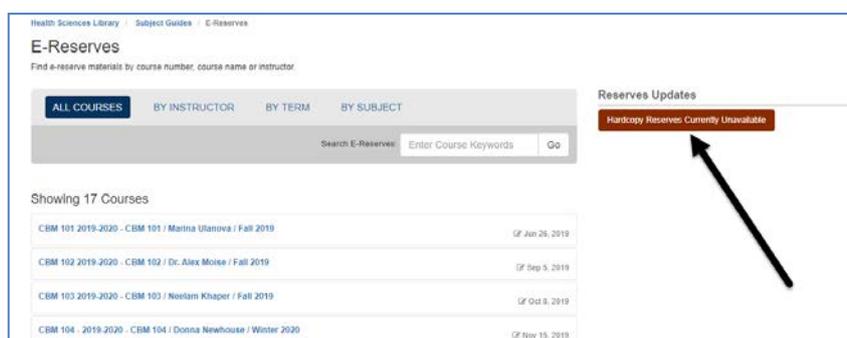

Figure 7. System status management widget on e-reserves webpage.

Figure 8. Clicked view of system status management widget on e-reserves webpage.

5.4. **Enhanced Wellness Resources**

In the first week of working remotely it became very clear to the Health Sciences Library that all NOSM members were facing new challenges working from home, sometimes with children, partners and pets. Many were isolated from family and friends and coping with living during a pandemic period. In collaboration with the Healthy Workplace Group (HWG) and the director of learner affairs and equity, the library developed additional pages for the already existing Health & Wellness Guide, a long standing HWG and library collaboration (The Northern Ontario School of Medicine. Health Sciences Library, 2020d). The first page, titled Working @ Home, provides NOSM members with information on wellness and productivity including a tool kit put together by IT; working at home safely and ergonomics; and a variety of resources for members with children to help keep them occupied. The second page, Being Active @ Home, contains links to videos and articles on stretching, yoga, cardio and strength training that do not require fitness equipment. Also included are links to live and on-demand workouts provided at low or no cost by local organizations and businesses. This guide experienced an 822% increase in views from 74 between March 16-May 31 in 2019 to 682 in 2020 during the same period.

A few weeks later the HWG was approached by a medical student interested in developing a virtual book club for all NOSM members. Wellness books would be the focus of the book club. At that point the library only provided hardcopy wellness books of interest however with funding from the HWG the library was able to acquire a number of e-books in support of the blossoming Virtual Wellness Book Club and the Health & Wellness guide. Subsequently, this guide

has been featured in the Dean's daily "NOSM Update COVID-19" communiques and resides on the Wellness Resources page of NOSM's Response to COVID-19 site.

6. Looking Forward

On May 27, 2020 all NOSM staff and faculty received a draft of the *Return to Campus Planning Framework* developed by the ERT led by the school's dean. This framework was created to guide individual units and portfolios in developing a plan for returning to campus based operations. Based on this framework the library is drafting a return to campus plan entitled *Looking Forward: On-Campus Library Services and Spaces During COVID-19*. In light of the unpredictable circumstances that COVID-19 presents (potential for multiple waves, lack of vaccine, etc.) this plan will allow for staged implementation - with the flexibility to scale back accordingly. As the situation evolves and best practices are developed services will be modified in response. The plan outlines key considerations related to the library's spaces, services, and resources - including modified services to limit the spread of COVID-19. All modified services outlined, and the partial reopening of the library spaces, are dependent on guidance from Public Health, NOSM Leadership, and the host Universities.

The library is considering implementing a curbside service for hardcopy materials. With a minimum of 24 hours advanced notice users would be able to schedule a pickup or drop off time for materials through a LibCal booking calendar. The library user would then receive a confirmation email detailing the steps to follow at pickup and drop off. This service will hopefully begin in the summer months and be offered once a week. As of September it would ideally be available daily. While this plan details "curbside service" this service could be offered "library door-side" or "shelf-side" within the library depending on access to the medical school buildings.

The library is also assessing reopening the spaces in a limited fashion this September. Staff would be present on campus on a rotating schedule. To ensure social distancing the library plans to provide NOSM users with the ability to book socially distanced study spaces through another LibCal calendar. Users would be permitted an allotted number of hours to book in each day and with a maximum amount of bookings per week. These hours would aim to coincide with class schedules to primarily meet learners' needs (ex. 8am-11:30am and 12pm-4pm). Number of users permitted in the library will be dependent on public health guidelines. At present that would mean ensuring a minimum of 6 feet or more between those occupying study spots. Users will be designated to a specific spot. Group work will be prohibited. All additional chairs will be removed or taped off from general seating to further encourage social distancing measures. Necessary PPE will be provided for staff working in the library. A protocol for decontamination of the spaces will be required and is dependent on

advice from the Facilities department. This protocol will be followed between each set of bookings and at the end of each day.

The delivery of the library's education services will depend upon the decisions made by NOSM. Any sessions previously delivered in person will likely not be feasible, and alternate arrangements will be made. Traditionally, orientations for undergraduate and postgraduate learners have been delivered in person and included a tour of the physical space. Going forward, the content will be moved online to circumvent any issues relating to campus closures and library capacity limits. The synchronous sessions will be delivered via WebEx or similar platform, and include didactic and interactive content. For academic sessions previously attended by librarians, a flipped classroom approach will be adopted with asynchronous library tutorials on aspects of evidence-based medicine, library literacy, database searching, and citation management.

Once the return to campus plan is complete the library's director, designated as the library's Return to Campus (RTC) planning lead, will seek to have it approved by the ERT. Once approved the library will move forward with purchasing needed materials such as "sneeze guards" for the information desks, social distancing signage and necessary PPE. While the team looks towards returning to campus they are well aware it will be under the guise of a new normal for users and staff alike. Though this is a time full of uncertainty the Health Sciences Library's goal is to continue to provide resources and services in an efficient manner to users in the safest way possible. Whatever that may look like.

References

The Northern Ontario School of Medicine. Health Sciences Library (2020a). Library Services During COVID-19. https://www.nosm.ca/library/library-update/

The Northern Ontario School of Medicine. Health Sciences Library (2020b). Coronavirus Disease (COVID-19): Current Status of COVID-19. https://libraryguides.nosm.ca/covid19

The Northern Ontario School of Medicine. Health Sciences Library (2020c). FAQs. https://nosm.libanswers.com/

The Northern Ontario School of Medicine. Health Sciences Library (2020d). Health & Wellness. http://libraryguides.nosm.ca/healthandwellness

Springshare. (n.d.a). How to enable and use LibChat Screensharing in LibAnswers. https://ask.springshare.com/springboards/faq/1916

Springshare. (n.d.b). What is the System Status Management Tool? https://ask.springshare.com/libanswers/faq/1670