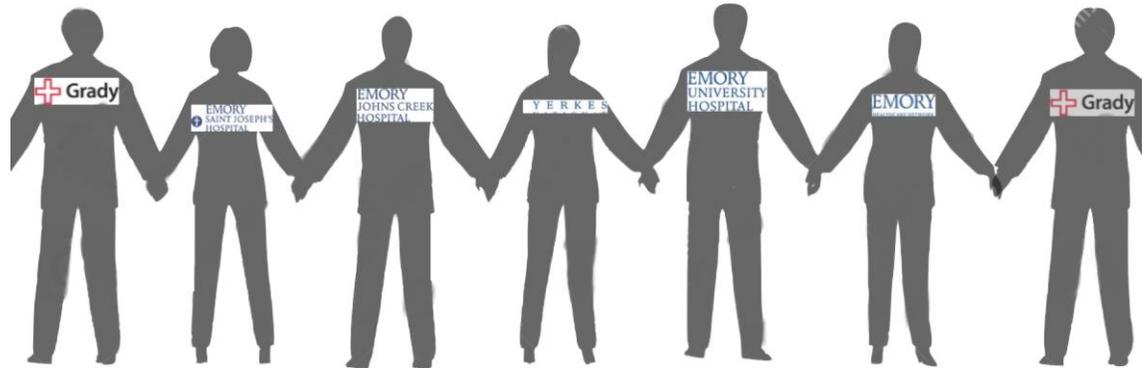


# Woodruff Leadership Academy 2015

## LinkEmory:



***Emory working best face-to-face through  
technology***

### **Team LinkEmory:**

Cheryl Day

Traci Galatas

Aneesh Mehta

Adedapo Odetoyinbo

Richard Pittman

Joyce Soule

David Wright

## **Abstract**

Emory has experienced tremendous growth in the last eight years. The potential Wellstar merger crowns the Emory system with a season of unprecedented expansion to its personnel and geographic footprint. To ensure healthy growth, careful attention must be given to maximizing operational efficiency, building new, dynamic teams, and fostering clinical, academic and management collaborations, and team building. Reliance on costly in-person meetings or their most common replacement, conference calls, seems an inadequate strategy for such a large network.

The LinkEmory team believes Emory is poised to incorporate widely available, industry-standard technology to connect colleagues through video conferencing. Unlike conference calls, video-conferencing provides the benefits of visual cues – facial expressions and body language to maintain engagement and foster collaboration.

To investigate this opportunity, LinkEmory conducted a survey of leaders and faculty at Emory University and Emory Healthcare to determine the current state of remote meeting technologies. We learned that logistical challenges require the majority of leaders to limit their in-person meeting participation. From mileage reimbursement data, we conservatively estimated the potential for approximately \$1 million per year in savings for the Emory enterprise if 25% of in-person meetings requiring off-site travel were shifted to a video conferencing alternative.

We worked closely with IT colleagues to learn what technologies are available at Emory now and in the near future. Fortunately, the Emory's Library & Information Technology Services recently identified and licensed a secure video-conferencing product called, Vidyo®, to foster virtual collaborative meetings. Though available to all for free, there is a lack of awareness of this effective video conferencing tool and it has not yet seen broad adoption at Emory. LinkEmory quickly embraced Vidyo and utilized video-conferencing for over 70% of our 18 meetings during our WLA project. We estimate that we saved over 100 hours of travel time during the course of this project for our seven member team by meeting virtually. We would have not been able to work this closely, bring this project to completion without the benefit of video-conferencing. Our team highlights use cases of Vidyo at Emory to demonstrate significant value of this tool for Emory leadership. In addition, LinkEmory has developed a toolkit with simple instructions written by peers to get started, establish best practices, and foster etiquette for integration into the everyday work life.

Most importantly, we are requesting Emory leadership to encourage the cultural shift necessary to make this a daily option when the costs of in-person meetings outweigh their benefits and significant logistical challenges for true collaboration exist. We believe that Enterprise-wide adoption of video-conferencing solutions will facilitate fruitful collaborations, mitigate travel costs, enhance organizational efficiency and improve the quality of work life.

## ***Introduction***

As Emory's footprint continues to expand throughout Atlanta, challenges for collaboration between groups at each site will increase directly with the distance separating them. Emory Healthcare has experienced tremendous growth geographically over the last eight years with the addition of Emory John's Creek Hospital in 2007, establishment of the Emory Healthcare Network in 2011 (400+ private practice physicians), and the additions of Emory Saint Joseph's Hospital and Southern Regional Medical Center in 2012. Emory will continue to be faced with geographical challenges for collaboration if the Wellstar merger occurs in 2016. This changing landscape poses significant challenges when it comes to keeping employees and leaders connected to one another and the people they work with and support. Too many leaders are spending many hours on the road each day, missing important meetings and attending the majority of meetings via conference calls. Employees and leaders across entities don't just need to communicate, they need to collaborate, sharing ideas across lines of business and areas of expertise.

We believe we have a remarkable opportunity to utilize widely-available, industry-standard technological practices to connect colleagues via collaborative video conferencing. By seeing everything from facial expressions to body language, video conferencing increases understanding, even across language and cultural boundaries. Some video conferencing solutions exist across the Emory Enterprise, however, these solutions are inconsistently available and underutilized by many groups who could benefit. The LinkEmory team is focused on the identification, standardization and optimization of available remote interactive meeting technologies across the enterprise.

Our project will demonstrate how wide-scale implementation of this tool will increase Emory's organizational efficiency by expediting decision making and improving productivity; improving communication and collaboration with better performing teams; and mitigate costs with dollars saved in reduced meeting time, reduced downtime ("Windshield Time") and reduced travel costs. We will provide an overview of feedback obtained from a survey conducted by Team LinkEmory to Emory leaders and faculty on the current state of meetings today, discuss barriers to full scale implementation at Emory, introduce Vidyo, showcase use cases at Emory, provide an illustration of the financial impact of travel costs and lost productivity and finally, discuss future state goals of video conferencing at Emory.

### ***Why we choose this project***

Our team is diverse, working from locations across the Emory enterprise (Emory Johns Creek Hospital, Emory Saint Joseph's Hospital, Emory University, Yerkes, downtown Decatur, and Grady Memorial Hospital). As we began to schedule meetings to develop our WLA project, we quickly became aware of the logistical challenges of meeting in person. We longed for face to face meetings, but began with conference calls. It was imminently clear we needed a better solution, and that this problem was not unique to us, but systemic to a growing Emory. How can we enhance communication, foster collaboration, and improve efficiency as we grow apart geographically? Our second meeting was with Emory IT in which we discovered the video conferencing tool available at Emory called Vidyo. We quickly obtained access to this tool and began meeting virtually as a team. Nearly 70 percent of our meetings were held virtually via Vidyo, saving 108 hours on a 7-person team over 3 months (approximately 15 hours per person).

### ***The current state of meetings at Emory***

As technology continues to expand and enable the widespread use of video conferencing across the globe, the LinkEmory team developed a survey to determine the current usage of remote meeting technologies by faculty and staff at Emory University and Emory Healthcare. Our survey was designed to address the following questions: (i) determine how many off-site meetings are attended by Emory University and Healthcare employees each week; (ii) define the financial and productivity implications of hours spent and mileage incurred by traveling to meetings across metropolitan Atlanta; (iii) determine which remote meeting technologies are currently being used across Emory; and (iv) determine the perceived effectiveness and convenience of various remote meeting technology options.

With the help of the WLA Dean, Gary Teal, our survey was sent to the faculties of the Schools of Medicine, Public Health, and Nursing; Emory Healthcare Executive Management, Emory Healthcare Senior Leaders, and all current and former WLA fellows. We received a total of 360 survey responses: 53% of responses were from employees of Emory Healthcare and 47% of responses were from employees of Emory University. The greatest number of survey responders were between the ages of 35-44 years, and have been employed by Emory for 5-9 years. There were more survey responses from women (59%) than men (41%).

Analysis of our survey results revealed a high burden of travel on a weekly basis to attend meetings outside of primary work locations at Emory. Of all survey responders, each person attends a median of 3 off-site meetings per week. When evaluating the data according to job category, Emory Healthcare Executive Management attended the greatest number of meetings per week outside of primary work locations (median of 6), followed closely by Emory Healthcare Senior Leaders (median of 4).

To further define the financial and productivity implications of traveling to multiple off-site meetings per week, we next determined the number of miles traveled and hours spent traveling per week to attend meetings. Analysis of our entire survey population indicated we are traveling a median of 15 miles per person per week, culminating in at least two hours of travel time per person per week, just to get to the meeting venues. Consistent with our findings above, Executive Management and Senior Leaders also traveled the greatest distances (median 22-30 miles per week) and spent the greatest number of hours (median 3-4 hours per week) traveling to attend meetings at a site other than their primary work location at Emory.

Given the high burden of meetings required by leaders and faculty at Emory at multiple locations throughout Atlanta, we next determined how many meetings people are missing due to logistical challenges, and what remote meeting technologies are currently being used at Emory to attend meetings remotely, to overcome in part the logistical challenges of attending meetings in person. Over 80% of our survey responders reported that once or twice each week they must either limit their attendance at meetings, or not attend meetings at all, due to logistical challenges, the most common of which were driving time and distance, tightly scheduled meetings, and the infamous Atlanta traffic.

To compensate for these logistical challenges to attending meetings in person, an overwhelming majority of our survey responders (87%) reported using some mode of remote meeting technology, of which most people (89%) reported using traditional conference call lines. When questioned specifically regarding the use of video conferencing technologies, we found that Emory leaders and faculty are currently using at least 12 different video conferencing programs to attend meetings remotely, thus indicating a remarkable lack of consistency in the use of video conferencing programs across Emory. Although conference lines were perceived to be more convenient to use, when compared with video conferencing, video conferencing programs were perceived to be significantly more effective than conference lines.

Overall, our survey results provide valuable insights into the metrics of the number of meetings we attend, the expansive distances traveled, and the time we must spend to travel to attend

meetings at multiple Emory sites across metropolitan Atlanta. Nearly all of our survey population reported they would use remote meeting technologies if these technologies were made available to them, thus providing compelling evidence of the widespread support for the further development and implementation of remote meeting technologies across Emory. Moreover, the large diversity of different video conferencing technologies currently being used at Emory, combined with the overwhelming support for use of video conferencing technologies, provides a timely opportunity to establish and implement best practices to promote expanded use of specific video conferencing technologies that are fully operational and supported by IT departments at both Emory University and Emory Healthcare. We describe the use of Vidyo, an IT-light high-definition video conferencing technology readily available at Emory, in further detail below.

***Our solution: a one-to-one video-conferencing tool***

The advent of free tools such as Skype, FaceTime and Google Hangouts has made this once space-age technology as easily available as your next smartphone purchase. While videoconferencing has become a mainstream personal communication tool and its use continues to spread across several industries, concerns about online privacy, security and the need for ongoing technical support has limited its more widespread adoption in healthcare and definitely at Emory. Our default is to use phone conferencing whenever we cannot get together for face-to-face meetings.

We have all had negative experiences with technical support that wasn't present for setup or at a crucial point in the meeting, documents that couldn't be shared in real time and the workstation that had no camera or microphone. We have been intimidated by the complexity or blamed the technology for our woes without realizing that the solution could be as simple as finding the right tool to suit your meeting format.

Videoconferencing needs generally fall into three categories, with tools optimized for each use case. Most of us are familiar with hardwired in-room systems. The Cisco-Tandberg system is most widely used at Emory, currently supporting several inter-campus meetings that are broadcast from conference rooms and lecture halls. This is a great tool for the “many-to-many” meeting format. Its main drawback is hardware expense and the amount of technical support required for set up and troubleshooting at each meeting.

The “one-to-many”, or lecture format, is another format many in our enterprise are becoming familiar with. Emory’s IT supported tool is Adobe Connect. It can be accessed via personal computers and mobile devices but requires an administrator to moderate meetings and sign in participants, and may also require departments to incur costs for additional licenses.

Arguably, the most needed yet least utilized videoconferencing option is the “one-to-one” format. The ideal situation is for small teams to conference in with little advance notice from work desktops, tablets or mobile devices without the need for an administrator or technical support. The ideal tool should also support real time document and desktop sharing and be flexible enough to enable participants to transfer from workstation to mobile device with minimal interruption. We started our project prepared to research a suitable tool out of the numerous options available on the market and were pleased to learn that Emory IT already supports a secure, user friendly and versatile tool called Vidyo.

### ***Meet the tool – Vidyo***

Vidyo, pronounced "VID –YO" is a popular, high definition video conferencing tool supported by Emory for over five years. Vidyo has broadly expendable capabilities, but seems best suited for small group meetings where each individual has their own screen and camera. The software is routine to install with administrator access and requires a one-time IT effort to install the program on a work device and obtain an account. It is available on major modern platforms.

Though the user experience can vary by device quality and internet bandwidth, the tool has proven remarkably easy to use for our group. Our group of seven only faced limitations on computers' lacking administrator access or using a virtual desktop interface. Our entire group was successful connecting on our first session, though some had to use their personal iPad or home computer. Only on our first call did we struggle with sound quality, and for two people a set of headphones remedied this. Once our team discovered this tool, we never considered a conference call, and only strategically used the in-person meetings we subsequently had. As has been noted in the introduction, we estimated we saved over 100 hours of driving time for our group by using Vidyo for the majority of our meetings.

Vidyo is currently used across academic institutions, healthcare institutions and private companies. Please refer to the link to the company website for featured users: (<http://www.vidyo.com/customers/>). A few notable users in healthcare and industry include The Mayo Clinic, Northwestern Feinberg School of Medicine, and Massachusetts General

Hospital. The Vidyo website is now featuring the Department of Defense. The Cern research group, notable for the discovery of the Higgs Boson particle, uses Vidyo so extensively that an online feed of their users on the network can be monitored (<http://avcdashboard.web.cern.ch/Vidyo>).

We had the pleasure of interviewing (via Vidyo) Emory's members of the Center for Selective C-H Functionalization, Dr. Huw Davies and Daniel Morton, who use Vidyo heavily as a part of their National Science Foundation Phase 2 Grant. Their grant is centered on an unprecedented collaboration with researchers across the US, the UK and Japan. Dr. Davies attests that his group could have never become a Phase 2 center on the grant had they not had this tool to foster collaboration.

Emory currently spends approximately \$35,000 per year on Vidyo to accommodate up to 50 concurrent users. Peak use (suspected to have been from Dr. Davies Chemistry group) has peaked at 39 users connected at any one time. There are currently approximately 1,500 user accounts. Emory IT has a planned a slight increase in their Vidyo subscription for the next fiscal year - expanding to 75 concurrent users, and a move that will make new account creation much easier for individual users. A member of the Emory IT department has estimated this expansion to be \$60,000.

### ***Mitigating Costs***

As our enterprise expands, it is reasonable to expect meeting volumes and logistical complexity to continue to increase. Travel reimbursement and lost productivity due to travel are very costly for our organization. In FY2014, Emory Healthcare spent over \$500,000 in mileage reimbursement alone. Senior leaders and Executive Management reported an average of 4 hours of lost productive time per week due to traveling for meetings. With approximately 215 senior leaders at Emory Healthcare, the organization spends almost 3 million dollar a year for these 4 hours of non-productive time.

The use of Vidyo has real potential to greatly reduce costs. If Emory Healthcare transitioned 25% of meetings to Vidyo technology, the organization would save \$125,500 in mileage reimbursements and \$730,613 dollars in lost productivity, leading to an annual savings of \$856,113.

The expense is not all monetary. One key component of the Emory Healthcare Care Transformation Model is the commitment to our employees. Improving daily workflow and logistics to reduce missed meetings, travel time, and battling traffic are key factors in improving employee satisfaction, engagement and quality of work life. Reducing "windshield time" enables leaders to complete their goals and objectives more quickly and efficiently. Enhanced efficiency will enable Emory to remain a front-runner and a world class institution.

### ***Current state of the use of Vidyo at Emory***

Currently, Vidyo is Emory's enterprise-wide solution for collaborative video meeting supported by Library and Information Technologies Service (LITS). Emory's current licensing model allows for the creation of an unlimited number of Vidyo accounts for Emory University staff, faculty and students, and for Emory Healthcare employees. These accounts are created by LITS but then managed by the individual user. However, Emory's current license is limited to 50 concurrent users. While this number has not presented limitation to date, we anticipate that increased awareness and adoption of this tool will require an increase in licensed Vidyo connections. Fortunately, LITS has already planned for this increase in 2015.

### ***Barriers & enablers to roll-out***

1. Emory Healthcare Virtual Desktop (VDT) Environment: Currently, there exists a significant barrier for employees in Emory Healthcare to use the Vidyo tool. Currently, the "Virtual Desktop" environment utilized by Emory Healthcare computers presents technologic challenges with video streaming and other high bandwidth collaborative tools. However, within the past year, Emory Healthcare IT has been actively developing enhanced technologies with its vendors to support video conferencing in the VDT environment. Recently, Emory Healthcare IT launched a multi-phase plan to upgrade front-end and back-end technologies to support the various activities of Emory Healthcare, which will also enhance the availability of video conferencing.
  - Phase 1: Migrate EHC to a new user experience including deployment of Office 365 by July 2015. The plan is fully approved and funded, and implementation is underway.
  - Phase 2: Transition to Desktop Like User Experience with current generation graphic capabilities for high definition video streaming and conferencing. The plan has been presented to leadership but final approval and funding has not been fully secured. This is a critical piece needed to bring the whole Emory environment onto a compatible video conferencing platform.

2. Toolkit and Etiquette - Please see the appendix for details of the video conferencing toolkit developed by Team LinkEmory. A planned pilot for use of our toolkit has been initiated with the Emory-VA research group task force, led by Trish Haugaard and Mike Hart. They have requested to utilize our toolkit materials to shift many of their team meetings to Vidyo and provide feedback on their experience using Vidyo and our toolkit. We will refine the toolkit based on their feedback with the hope of broader rollout to other areas at Emory.
3. Finally, the most important factor for success is the **Support and Adoption from Senior Leadership**. It will be critically important for Senior Administrators to encourage the use of Vidyo as part of standard meeting etiquette. Only with leadership adoption, will a change in culture occur. Indeed, this is likely to be the single most important step to realize the increased efficiency, cost savings, and increased collaboration across the expanding Emory Enterprise.

### ***Future state***

The utilization of Vidyo for collaborative video conferencing will likely increase steadily in the coming years. This rise will be aided by:

- Growth in concurrent users licenses as planned by LITS
- Development of the Vidyo Toolkit by our LinkEmory team and LITS to better engage users
- Creation of easily available Standard Operating Procedures (SOPs) to assist the users and enterprise
- Changing culture within Emory to allow for utilization of video conferencing in addition to current meeting modalities; the Vidyo Toolkit and SOPs will further assist with changing our culture

To further support the expanded need for and usage of collaborative video conferencing across all of Emory, it will be important to make this tool easily available for all users, including employees primarily at Emory Healthcare sites. As mentioned above, the Phase 2 expansion by Emory Healthcare IT will significantly enable this availability. The primary focus of the Phase 2 expansion will be the Desktop Like User Experience with breakthrough Graphic capabilities (DLE/G). These upgrades will foster increased usage of high-end graphics tools for patient care and for daily operations of Emory Healthcare. Phase 2 has been presented to leadership but final approval and funding is outstanding. As currently planned, the Phase 2 expansion of Emory Healthcare IT will necessitate a one-time capital cost of \$500,000 - \$800,000 for a graphic processing chip for virtual environment and additional hardware and storage. This

investment will rapidly expand the availability of important graphics based tools, including Vidyo, for all those in Emory Healthcare. The Phase 2 expansion will be completed in calendar year 2016 initiated on schedule if funding is secured.

Thus, collaborative video conferencing, using the Emory supported Vidyo solution, is well poised for expanded use across the Emory academic, clinical, and administrative enterprises. The utilization of this meeting format will close the physical and virtual gaps between the growing and ever more diverse culture of Emory and help us further our missions.

### ***Summary of the “ask”***

Emory’s health care delivery system is on the verge of unprecedented growth, both from the sheer volume of employees and its expansive geographic footprint. In any complex system, communication and collaboration is key to operational efficiency, flexibility, and success. There is an urgent need to develop new ways to maintain and enhance our communications and collaborations.

We believe our mere survival will be based on our ability to communicate effectively, grow and improve our collaborations, and become more efficient. We posit that the way to do this is through embracing video conferencing technology assisted by Vidyo communications.

As a Woodruff Leadership Academy team, we have developed a simple to use toolkit and provided best practices for the integration of collaborative video conferencing into everyday work lives across Emory. We believe these tools will enable expanded use of this platform

What we ask of our leadership is to embrace the technology, approve the funding for its expansion, use it often, request it for meetings that do not require an in-person format, and most importantly - drive the change in Culture for its use.

In the famous words of Peter Drucker, “Culture eats strategy for breakfast”... so this cannot be done without your support.

## Appendix

### Toolkit/Etiquette

We have prepared a brief toolkit to enable colleagues can easily start using Vidyo when a face-to-face meeting is not possible and a conference call is not desirable.

We have borrowed from Delta's humorous approach to mundane information in our materials, so please beware as you proceed. This toolkit includes 3 sections which are available as a web-link. Sample photos are included below.

