OPTN Network Operations Oversight Committee
Meeting Summary
September 8th, 2022
Webex

Edward Hollinger, MD, PhD, Chair

Introduction

The Network Operations Oversight Committee (NOOC) met via Webex on 09/08/2022 to discuss the following agenda items:

1. Welcome
2. OPTN Technology: The Journey
3. OPTN Technology: APIs
4. Discussion, Recap and Takeaways

The following is a summary of the committee's discussions.

1. Welcome

The committee discussed a recent news article about OPTN technology and the Senate Committee on Finance (SFC) Hearing. Dr. Ed Hollinger, Committee Chair, laid the framework of the meeting to address to provide the committee with a timeline of the OPTN Technology, what the technology has been like over the years and also the APIs the OPTN utilizes and the importance of these APIs to the story of OPTN technology.

2. OPTN Technology: The Journey

UNOS Chief Technology Officer, Alex Tulchinsky, gave an overview of the technology transformation since the early 2000s, what the technology looks like in present day, and identified potential opportunities of growth. Mr. Tulchinsky explained that he also planned to give the committee a deeper understanding into what APIs are, and the current state of vendor adoption.

The "yesterday" section of the presentation gave an overview of the system from 1999 to 2013. During this time, one of the biggest projects was creating and building UNet into a more "modern" system.

Michael Ghaffari, UNOS Director of IT Software Engineering, gave an overview of what the technology system looks like today (2014 to 2022). Mr. Ghaffari highlighted that the IT department completed five years of policy backlog work in two years' time. Mr. Ghaffari detailed the collaboration throughout the IT department and changes that were made to address the increase in workload. Mr. Ghaffari noted the implementation of TransNet, which was a completely API driven effort that allowed for the use of microservices. The focus of this project was to create microservices that could be used interchangeably. The IT department also focused on the integration of APIs to allow member organizations to share their data with TransNet seamlessly.

Mr. Ghaffari highlighted the efforts done to convert testing to become code centric. He noted that the OPTN used Salesforce to redesign the membership application. Mr. Ghaffari referenced many more areas where microservices were utilized to improve the system and grow with the changes in technology. He also shared details of the OPTN's work to move into a cloud configuration using Nutanix.

Mr. Ghaffari highlighted future plans for UNet and where the OPTN foresees changes in technology. The OPTNs focus remains on collaboration and feedback to best address customers concerns around the OPTN Technology System. The OPTN has focused its technology to produce fast and efficient deliveries of technology enhancement tools to customers.

Mr. Tulchinsky presented information about uptime availability of the system from 2000 to 2022. He noted that although there have been many changes over the years, this has not affected the uptime of the system.

3. OPTN Technology: APIs

Marty Crenlon, UNOS Healthcare Integration Program Manager, presented on Application Programming Interfaces (APIs). Mr. Crenlon gave a high-level explanation on APIs to explain that APIs are a piece of software that allows other programs to communicate with each other. Mr. Crenlon provided a step by step OPTN Integration Pipeline on how APIs are deployed to member institutions. Key integration milestones are presented in terms of the OPTN, clinical software vendors, OPTN member organizations, and OPTN users. Mr. Crenlon presented the vendor level adoption trends, breaking the vendors down into major lab products, major OPO products, and major transplant hospital products. Mr. Crenlon showed the overall picture of adoption trends and discussed that the OPTN is seeing substantial growth with API traffic.

Summary of discussion:

HRSA asked if there was a dashboard for API adoption per OPTN member. UNOS staff responded by informing the committee that this is not something that is currently available but something that staff is looking to build on. HRSA also asked if there is a timeline for code deployment for implementation of policies. UNOS staff explained that the implementation of new APIs does not include a policy component because this is an enhancement for members to use for projects they are already performing. When implementations are on the horizon, the OPTN identifies them early on for members to be aware of and to ensure they are updated throughout the policy development process.

HRSA asked how implemented changes are measured in terms of efficiency in adopting changes to the system. Mr. Tulchinsky informed the committee that members are asked to complete a member survey to express whether they are satisfied with the timelines and are satisfied with the rate at which feedback is received and implemented. HRSA wanted to know if there is a specific timeframe the OPTN follows to make certain changes within their system to make sure there are no lulls in the system. UNOS staff explained that there are two categories of work: policy work and system enhancements.

Next steps:

The committee will continue their discussion on how to plan future meetings to discuss the reports and topics of the OPTN Technology that they wish to address. The committee will continue to brainstorm where the OPTN IT system may be utilized to better tackle other miscellaneous projects across the organization.

4. Discussion, Recap and Takeaways

Summary of discussion:

A committee member commented on the difficulties of getting member organizations to participate in APIs when it is not mandatory. The member suggested adding a membership requirement for API participation if the OPTN wants 100% participation. The member also wanted to address the Senate Finance Committee Hearing and commented that there was misinformation during the hearing. Dr. Hollinger discussed the OPTN data dashboards and wanted to engage the committee on the conversation around what data the OPTN contains in its system, and the data it does not collect.

HRSA stated it would be helpful to discuss the comments made about the IT system and identify what the committee thinks needs to be done, and present their findings to the full board. Dr. Hollinger pointed out that the focus of the committee's meeting today was to lay the groundwork for the committee to better understand the entirety of the IT system. Dr. Hollinger asked whether there was information that might better encourage, specifically transplant hospitals, to adopt APIs in their organizations. The next NOOC meeting is planned to focus heavily on member adoption and any obstacles that this process may encounter.

A committee member expressed that the NOOC should not work outside of its purview to address certain claims during the hearing. They stated that in addressing organ availability and organ discard rates, member organizations should share information and bring this to CMS' attention. Another committee member commented that from an OPO perspective, working with data in the system that transplant hospitals utilize is a challenging process and is unsure this process would yield information that OPOs would use. A committee member stated that integration of APIs must be mandated by the OPTN for member organizations. In their experience, they have seen how much this can positively change transplants and believe that mandating this is a great first step in making change happen.

Upcoming Meeting

- September 16th, 2022
- October 20th, 2022
- November 15th, 2022

Attendance

- **Committee Members and Advisors**
  - Adam Frank
  - Bruno Mastroianni
  - Clifford Miles
  - Daniel Yip
  - Ed Hollinger
  - James Pittman
  - Jeff Sterrette
  - Kelley Hitchman
  - Melissa McQueen
- **HRSA Representatives**
  - Adriana Martinez
  - Adriane Burton
  - Adrienne Goodrich-Doctor
  - Arjun Naik
  - Chris McLaughlin
  - Frank Holloman
- **UNOS Staff**
  - Alex Tulchinsky
  - Amy Putnam
  - Bridgette Huff
  - Jason Livingston
  - Liz Robbins
  - Marty Crenlon
  - Michael Ghaffari
  - Morgan Jupe
  - Rob McTier
  - Ryan Ehrensberger
  - Susie Sprinson
  - Terri Helfrich