



OREGON HEALTH NETWORK

Orientation 3: Go-Live

Agenda

1. ***Welcome & FCC Project Status***
2. ***Reading NOC Reports***
3. ***FCC Reporting Requirements***
4. ***Life after the RHCPP***
5. ***Recap & Next Steps***
 - *Next RHCPP orientations*
 - *Resources*

Oregon Health Network

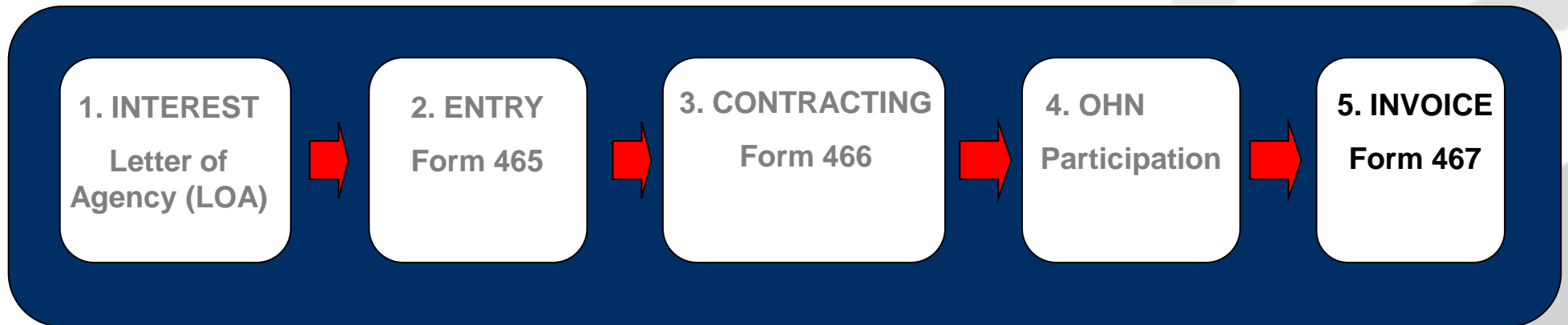
Welcome & FCC Project Status Overview

Kim Klupenger, Operations Director

Peter Tranavskis, IT Project Manager



FCC RHCPP: Project Status Overview



Your are *HERE!*

- ✓ You have participated in an RFP
- ✓ You have received proposals (bids) from vendors
- ✓ A winning bid has been selected
- ✓ You have an approved vendor contract
- ✓ Your installation is in the works or completed
- ✓ A leaf node has (recently) been installed on your site by Easystreet Online Services and you're actively being monitored by the NOC

OHN's Network Operations Center

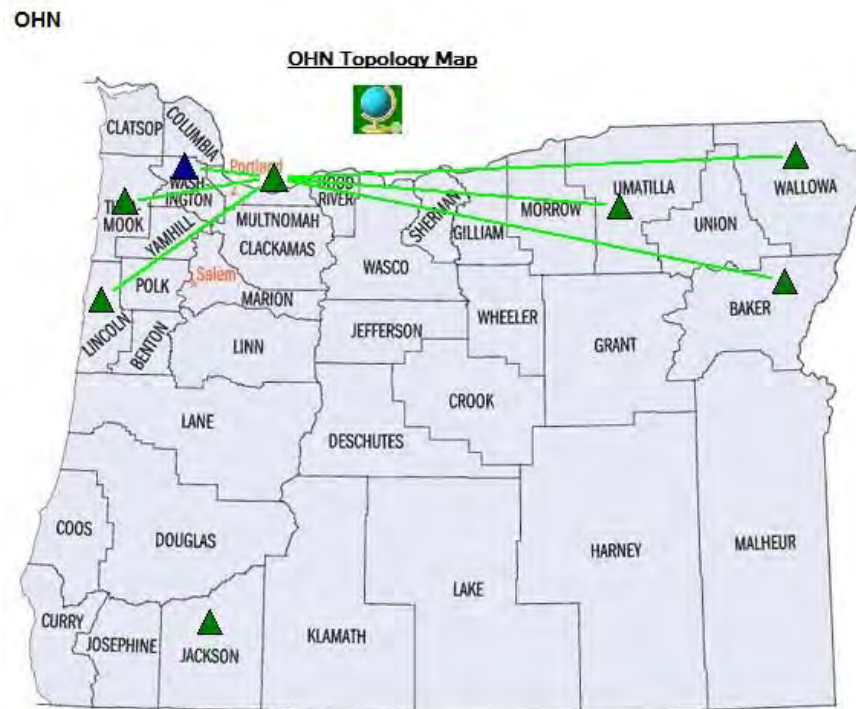
Introduction to the value and benefits of the NOC

Peter Trnavskis, IT Project Manager

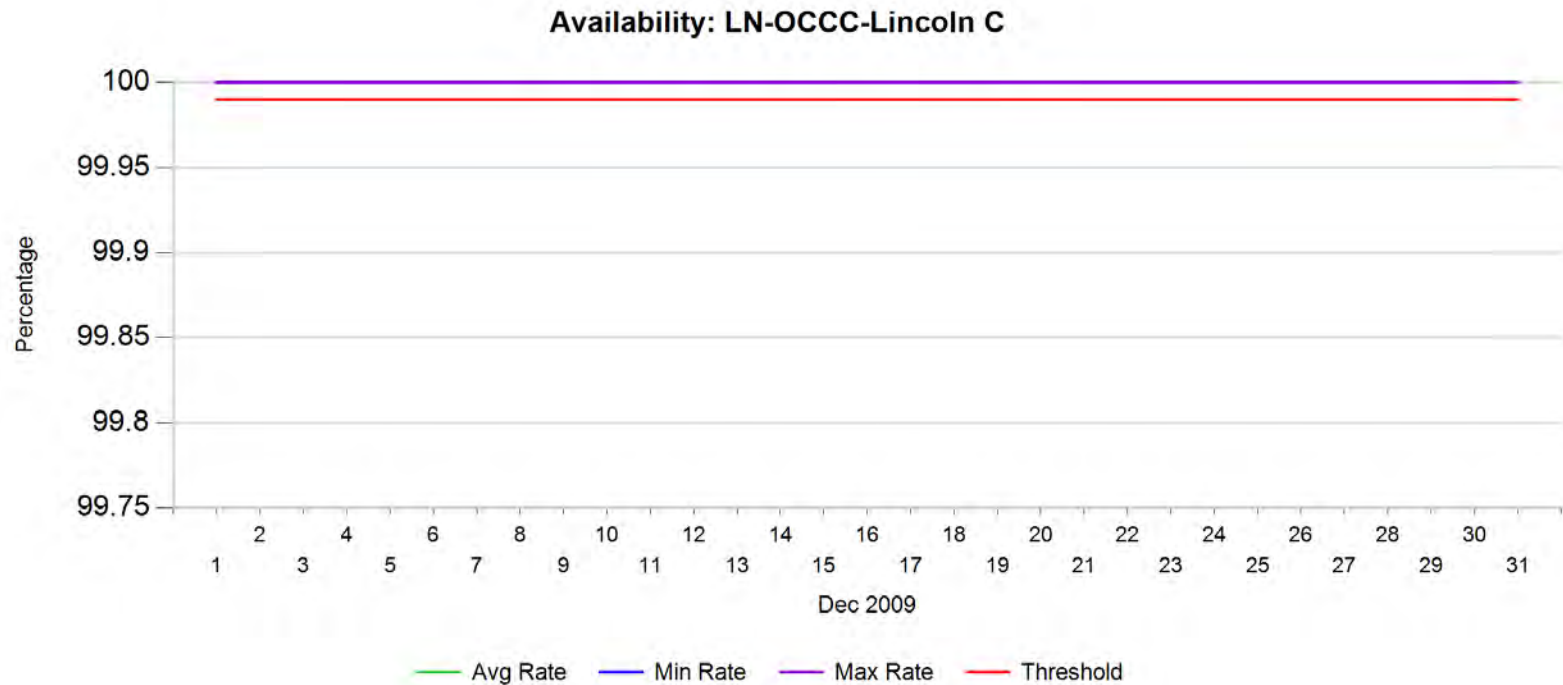
NOC Reports

1. Overview

- You will begin to receive these after the 1st month via email
- Cover all metrics mandated by your Vendor Service Level Agreement (SLA)



Availability

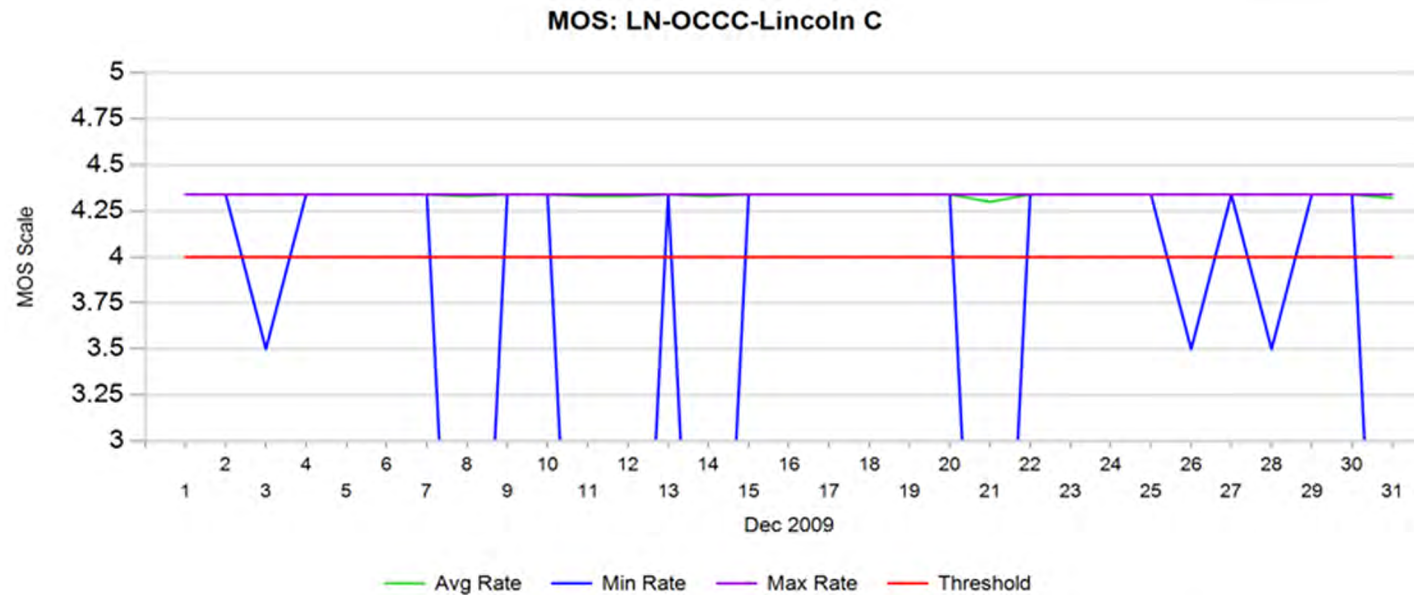


What is availability? Availability indicates the ability of the OHN NOC to “see” your leaf node.

Why is it important? If the NOC cannot see your leaf node, it means the NOC is receiving no data from you.

When should I worry? Availability should be 100 percent at all times. Anything less indicates a problem.

Mean Opinion Score (MOS)



What is a MOS score?

Mean Opinion Score is a measure of voice quality over a given link. On a scale from 1 to 5, it is the resulting calculation taken from several data sources.

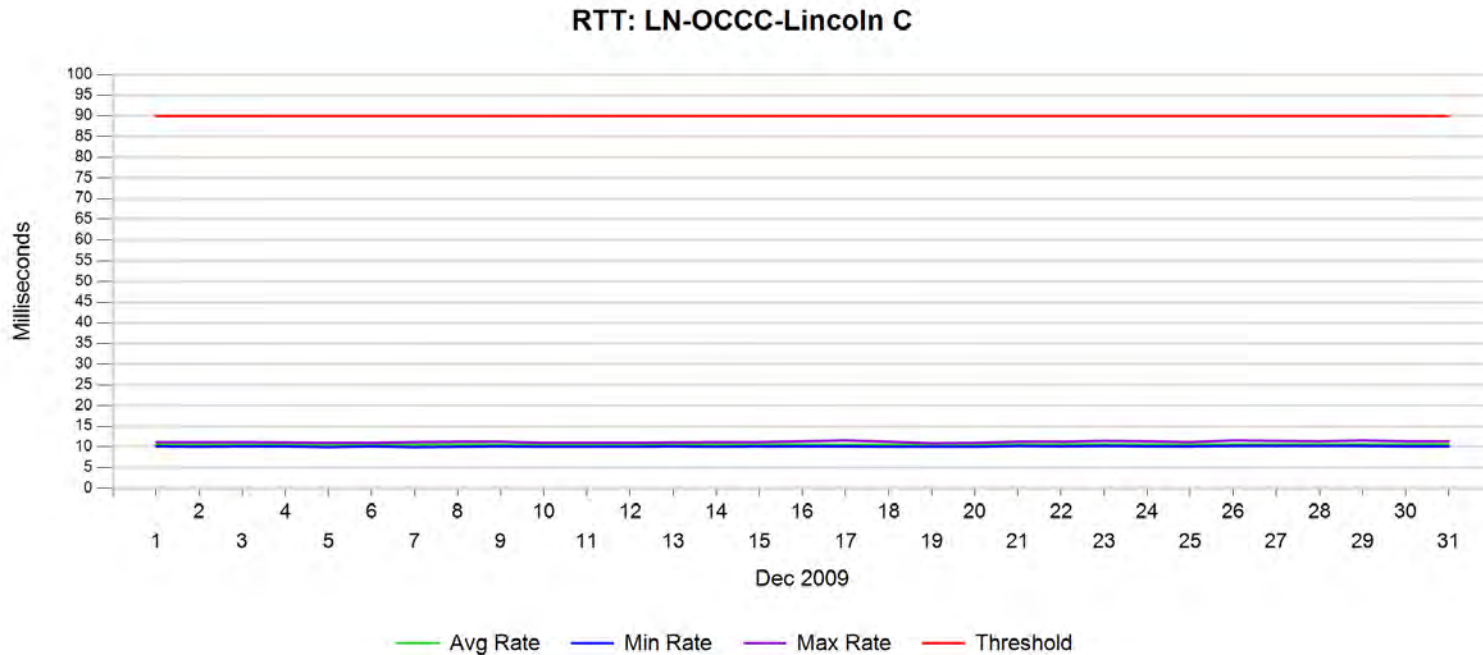
Why is it important?

MOS represents what the experience will be like if you send voice or video over the network.

When should I worry?

As indicated by the red line in the graph to the left, a score of less than 4 means voice quality will be degraded.

Round Trip Time (RTT)



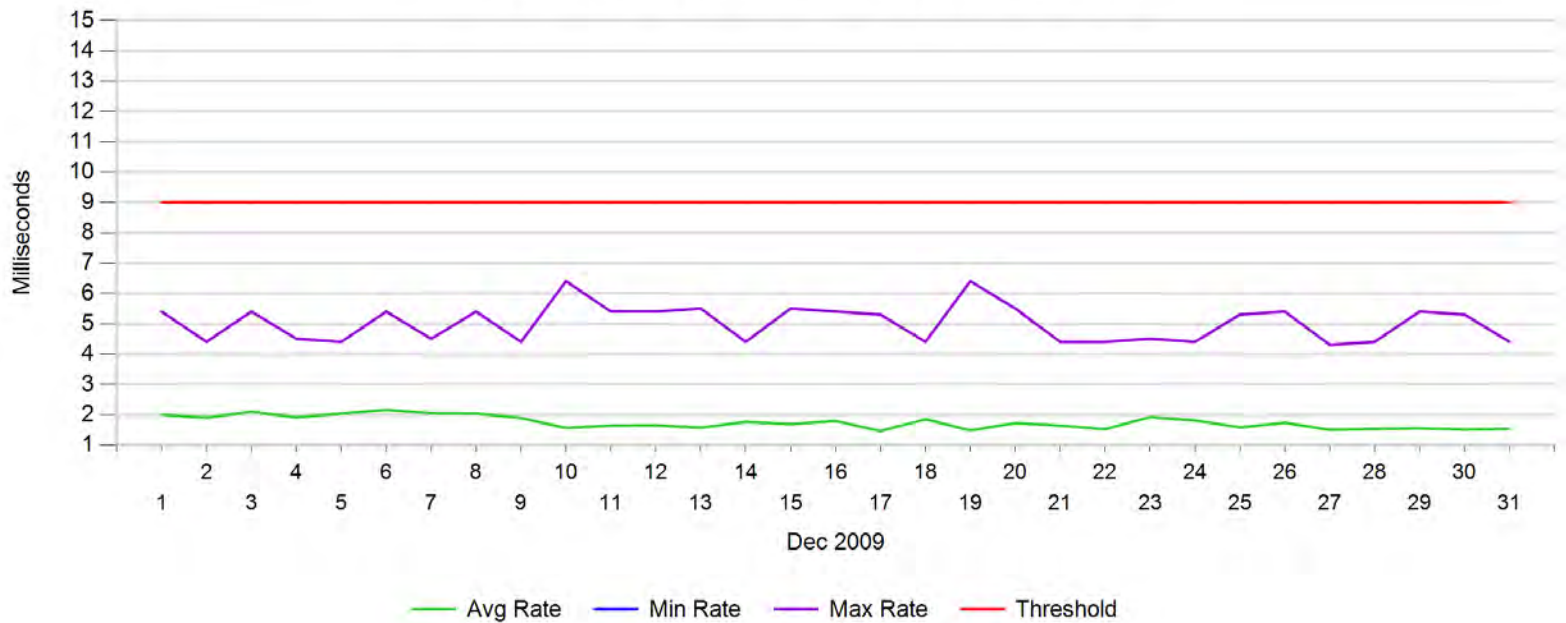
What is RTT? Round Trip Time (RTT) is the time it takes a signal to leave your leaf node, reach its destination and return to your leaf node.

Why is it important? RTT directly influences how quickly interactive applications respond, such as audio and video transmissions.

When should I worry? As indicated by the red line in the graph to the left, RTT approaching 90 milliseconds indicates there is a problem that should be analyzed and resolved.

Jitter: Leaf Node to Exchange/Exchange to Leaf Node

Jitter (Leaf Node to Exchange): LN-OCCC-Lincoln C



What is Jitter?

Jitter is the variation in the time between packets being sent and their arrival. Jitter can be caused by network congestion, timing drift, or route changes.

Why is it important?

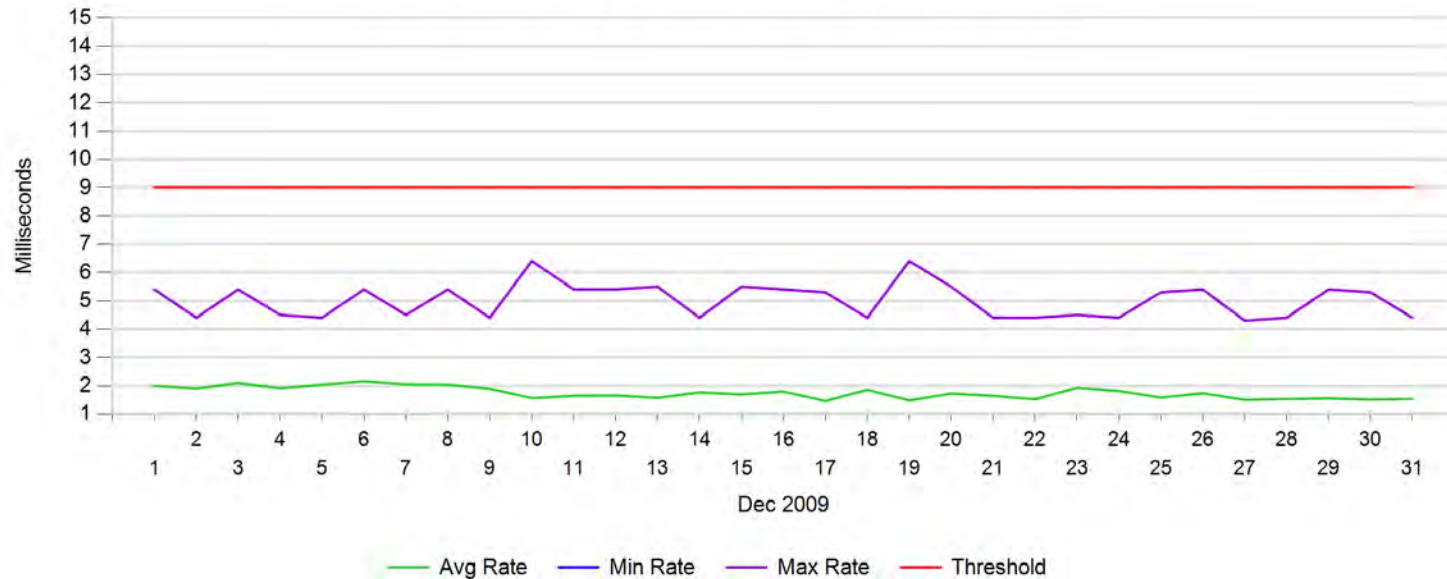
When Jitter occurs, the packets are delivered in the wrong order and, as a result, video and voice communications become garbled and difficult to understand.

When should I worry?

As indicated by the red line in the graph to the left, Jitter approaching 9 milliseconds is a problem that should be analyzed and reviewed.

Packet Loss: Leaf Node to Exchange/Exchange to Leaf Node

Jitter (Leaf Node to Exchange): LN-OCCC-Lincoln C



What is packet loss? A packet is the envelope which contains data to be transmitted over a network. Packet loss is the probability that a packet will be lost in transit from source to destination.

Why is it important? Lost packets require retransmission, which makes data transfer inefficient. The loss of information at the receiving end could result in static in audio or video transmissions.

When should I worry? As represented by the red line in the graph to the left, steady or frequent packet loss of 0.3 percent or more indicates a problem.

OHN NOC Technical Report

Month	Node Name	Availability (<99.99%)			Jitter DS (>9.00ms)			Jitter SD (>9.00ms)			MOS (<4.00)			PL DS (>0.30%)		
		MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX
9/2009	LN-OCCC-Newport	99.08	99.87	100.00	0.00	2.53	6.50	0.00	1.91	5.40	0.00	4.33	4.34	0.00	0.01	10.00
10/2009	LN-BMCC-Baker City	100.00	100.00	100.00	0.00	3.02	23.20	0.00	1.54	16.00	4.34	4.34	4.34	0.00	0.00	0.00
	LN-BMCC-Pendleton	100.00	100.00	100.00	0.00	2.76	6.40	0.00	1.69	5.50	3.50	4.33	4.34	0.00	0.17	10.00
	LN-OCCC-Lincoln City	100.00	100.00	100.00	0.00	2.86	8.80	0.00	2.32	6.50	0.00	4.34	4.34	0.00	0.00	0.00
	LN-OCCC-Newport	99.85	100.00	100.00	0.00	2.47	6.50	0.00	1.86	6.50	0.00	4.34	4.34	0.00	0.01	10.00
	LN-OCCC-Waldport	100.00	100.00	100.00	0.00	2.33	6.80	0.00	2.66	7.50	3.50	4.34	4.34	0.00	0.00	10.00
	LN-Wallowa	90.33	99.66	100.00	0.00	3.35	76.80	0.00	2.65	15.50	0.00	4.33	4.34	0.00	0.00	0.00
11/2009	LN-BMCC-Baker City	100.00	100.00	100.00	0.00	2.78	43.00	0.00	1.85	14.70	4.34	4.34	4.34	0.00	0.00	0.00
	LN-BMCC-Pendleton	100.00	100.00	100.00	0.00	2.60	7.60	0.00	1.35	5.50	3.50	4.33	4.34	0.00	0.08	20.00
	LN-OCCC-Lincoln City	100.00	100.00	100.00	0.00	2.80	8.70	0.00	2.04	6.50	0.00	4.34	4.34	0.00	0.00	0.00
	LN-OCCC-Newport	100.00	100.00	100.00	0.00	2.45	7.60	0.00	2.16	7.60	3.50	4.34	4.34	0.00	0.00	0.00
	LN-OCCC-Waldport	100.00	100.00	100.00	0.00	2.25	6.70	0.00	2.78	8.80	0.00	4.34	4.34	0.00	0.00	0.00
	LN-Wallowa	100.00	100.00	100.00	0.00	3.40	73.00	0.00	2.75	15.30	0.00	4.34	4.34	0.00	0.01	10.00
12/2009	LN-BMCC-Baker City	100.00	100.00	100.00	0.00	2.84	33.60	0.00	1.76	12.30	0.00	4.34	4.34	0.00	0.01	10.00
	LN-BMCC-Pendleton	0.00	97.29	100.00	0.00	2.69	7.70	0.00	2.11	6.60	0.00	4.33	4.34	0.00	0.06	10.00
	LN-OCCC-Lincoln City	100.00	100.00	100.00	0.00	2.86	9.70	0.00	1.74	6.40	0.00	4.34	4.34	0.00	0.00	10.00
	LN-OCCC-Newport	100.00	100.00	100.00	0.00	2.44	7.50	0.00	2.27	6.70	0.00	4.34	4.34	0.00	0.00	10.00
	LN-OCCC-Waldport	100.00	100.00	100.00	0.00	2.32	6.70	0.00	2.71	7.70	0.00	4.34	4.34	0.00	0.00	10.00
	LN-Wallowa	100.00	100.00	100.00	0.00	3.53	48.80	0.00	2.90	15.90	0.00	4.34	4.34	0.00	0.01	10.00
1/2010	LN-BMCC-Baker City	0.00	99.72	100.00	0.00	2.96	33.20	0.00	1.60	11.10	0.00	4.22	4.34	0.00	0.02	10.00
	LN-BMCC-Pendleton	100.00	100.00	100.00	0.00	2.71	6.60	0.00	2.29	6.40	0.00	4.22	4.34	0.00	0.04	10.00
	LN-OCCC-Lincoln City	100.00	100.00	100.00	0.00	2.80	7.70	0.00	1.42	5.50	0.00	4.22	4.34	0.00	0.02	10.00
	LN-OCCC-Newport	100.00	100.00	100.00	0.00	2.44	6.60	0.00	2.45	7.60	0.00	4.22	4.34	0.00	0.01	10.00
	LN-OCCC-Waldport	100.00	100.00	100.00	0.00	2.38	6.60	0.00	2.62	7.70	0.00	4.22	4.34	0.00	0.02	10.00
	LN-Wallowa	0.00	99.92	100.00	0.00	3.47	15.40	0.00	2.81	9.90	0.00	4.21	4.34	0.00	0.00	10.00

Troubleshooting Guidelines

1. ***The OHN NOC works proactively to troubleshoot the OHN Network***

- The NOC will open tickets on a client's behalf once a problem is detected.
- The NOC will contact a client via email to let them know a ticket was opened on their behalf
- It is very important to keep your contact information up to date!

2. ***Before opening a ticket...***

- Make sure to have your on-site IT team review the problem and determine if it is a local network/hardware problem or a problem with the OHN Wide Area Network.

3. ***Always contact your vendor first!***

- Your primary point of contact for all troubleshooting should be your vendor
- The vendor will work with the OHN NOC at a high level to quickly isolate and solve any problems
- It is important to develop a relationship with your vendor

FCC Reporting Requirements

Kim Klupenger, Operations Director

FCC Reporting Requirements

- 1. All RHCPP's (including OHN) are required to submit quarterly reports to USAC (FCC) on a quarterly basis.***
- 2. After you are actively on the network, OHN staff are required to work with you to document how your new connection helped your organization implement or improve:***
 - Telehealth/telemedicine
 - Greater access to medical/experts
 - Education/research
 - Etc.

Life after the RHCPP

Kim Klupenger, Operations Director

Life after the RHCPP: Eligible for RHC

- After May 2014 (5th year of RHCPP), OHN **can help** “roll over” OHN sites that are eligible for the FCC’s standard Rural Health Care (RHC) program if:
 - Your site is not in an urban community (over 20,000) or included in a Metropolitan Statistical Area
 - You remain an OHN participant
 - You meet other eligibility requirements set out by the FCC

Life after the RHCPP: Ineligible for RHC

- If you are *ineligible* for the standard FCC Rural Health Care program, OHN will:
 - Continue to provide 24x7 monitoring through the NOC
 - Work to identify and prioritize critical applications that will be running on the network to meet or exceed growing quality of service requirements
 - Work to identify additional services or hosted solutions that provide the greatest value to OHN participants
 - Continue to build and leverage a growing state-wide strategic partnership network to ensure that all participants have access to sound best practices, training & education, advocacy/policy support and applications/hardware to support your telemedicine & education initiatives

Recap & Next Steps

Kim Klupenger, Operations Director

Next Steps!

1. Attend ALL RHCPP Orientations. Dates and times are listed on our website: <http://www.oregonhealthnet.org/resources/siteorientations>

- **Orientation 4: Invoicing & Billing**

- Review of the highly detailed and interdependent FCC invoicing process. How to review and approve vendor invoices for RHCPP reimbursement
- You will receive an invitation to attend this orientation. Additionally, all dates and times for upcoming orientations are listed on the website
- *Who should attend?* All IT, accounting or administration staff responsible for invoice approval and processing

Next Steps!

2. Do you have the support you need within your own team?

Get all members of your team/organization behind you.

- RHCPP's highly interdependent process and aggressive deadlines= it is very important to get everyone in your organization behind you throughout the 3-6 month, 5-step process

3. OHN resources to help you and your team

- 4 Orientations (have the right people attend them all!)
<http://www.oregonhealthnet.org/resources/siteorientations>
- Staff (see next slide for roles and contact information)

Resources

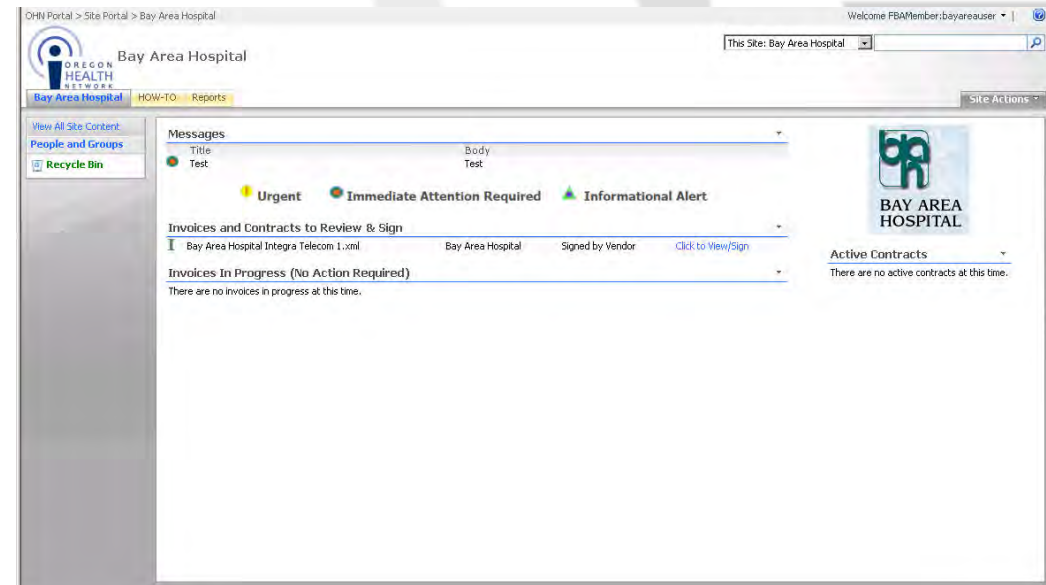
1. Web:

www.oregonhealthnet.org

2. OHN Participant (Site) portals

- Secure, authorized permission site. Login information is issued to pre-identified contacts within your organization.

3. OHN Staff



OHN Staff Contact Information

General Account & RHCPP Questions:

Kim Klupenger, Operations Director

kklupenger@oregonhealthnet.org

503.781.7929

Information Technology and Technical Questions:

Peter Trnavskis, IT Project Manager

ptrnavskis@oregonhealthnet.org

(503) 344-3744

RFP Vendor Award Process Questions:

Peter Trnavskis, IT Project Manager

ptrnavskis@oregonhealthnet.org

(503) 344-3744

Post RFP Award Process Questions:

Deborah Galiel, Assoc. Project Coordinator & Office Mgr.

dgaliel@oregonhealthnet.org

503-344 -3741

Legal/ Contract Questions:

Kim Klupenger, Operations Director

kklupenger@oregonhealthnet.org

503.781.7929

General OHN/Program Questions:

Kim Klupenger, Operations Director

kklupenger@oregonhealthnet.org

503.781.7929

Network Service Issues:

NOC Helpdesk

ohnnoc@easystreet.com

OHN Participation Fees & Billing Questions:

Kim Klupenger, Operations Director

kklupenger@oregonhealthnet.org

503.781.7929

OR

Deborah Galiel, Project Coordinator & Office Mgr.

dgaliel@oregonhealthnet.org

503-344 -3741