

## Problem Statement

The lack of coordinated care within the Northern California Adventist Healthcare System (NCAHS) leads to the inability to optimally manage their accountable care organization. To address this issue I developed a telemedicine program, concentrating largely on Teleintensive care.

## Discovery

1. I developed an initial business model by starting to attend our daily administrative leadership "huddle." I then interviewed each leader separately.
2. I was surprised that each hospital within the system was trying to act as a silo and not looking at integrating and coordinating services between them.
3. Based on these observations, I had the insight that a telemedicine platform based on tele-intensivist services could be the solution to integrate such services.

Category of Interviewees	No. of Interviews
<b>Medical Providers</b>	
Intensivists	5
Hospitalists	31
Other Specialists	17
Nurses	20
<b>Administrators</b>	
Physicians	4
Nurses	7
Non-Clinical	6
<b>Total</b>	<b>90</b>

## Goals and Objectives

**Goal:** To complete setup of a NCAHS teleICU program by the end of 2017. To expand the program out of state by mid 2018.

**Outcome-oriented Objective:** To use the quantitative measures of CMI, Total Patients Served, Total Revenue, and LOS to show the benefit of this service so that we meet our growth objectives above.

## Results

	% Increase in Census	No. Increase in Census	Total Increase in Revenue
2016 (from 2015)	9%	4,103	\$15,181,100.00
2017 (from 2016)	8%	3,788	\$14,015,600.00
<b>Total Increase from 2015</b>	<b>34%</b>	<b>11994</b>	<b>\$44,377,800.00</b>

	ALOS		CMI
2016	5.86	2016	2.16
2017	4.26	2017	2.22
<b>Total Decreased LOS</b>	<b>1.6</b>	<b>Total Increase in CMI</b>	<b>0.06</b>

	Medicare ALOS
2016	4.1
2017	4.05
<b>Total Decreased LOS</b>	<b>0.05</b>

Month	Total Cases	Outcome Cases	Total Deaths for Outcome Cases	Observed	Expected	Variation	O/E
2016 Average	30.58	29.25	4.83	0.16	0.13	0.04	1.28
2017 Average	33.00	32.00	5.00	0.15	0.16	-0.01	0.95

## Lessons Learned

### Lessons Learned:

- **Did your project achieve the results you had hoped for?** Yes, very much so! At the time of this writing I am being invited to present at national healthcare meetings to be considered for national contracts.
- **What would you do differently?** I would have spent more time in the development of personal relationships with key executives instead of trying to sell them on our vision (deal with people more on the level of their heart than their head).
- **What key insights did you gain that you would share with others?** Patience is a virtue, not a weakness. One can concomitantly be aggressive with their goals while also being patient. Don't go it alone! Develop strategic business to business relationships and have your business attorney help with these contracts.
- **How might someone implement the project at their organization based on your work?** Each healthcare system is different. One would have to listen to the needs of their unique healthcare system
- **Did conducting the project change how you lead in your organization?** Yes, it gave me a profound appreciation of the strength and skill needed to manage people and politics to achieve one's aims

### Next Steps:

- **Is the project finished?** No. We still need to secure all telemedicine contracts in the NCAHS. There are 2 remaining that I am aiming to acquire prior to the end of 2017.
- **Will you continue and if so what is your plan for continuing the project?** Yes. My plan is to take our medical group national. This means starting to expand out of state by mid-2018.

## Mission Model Canvas

<b>Key Partners</b> 1. Other telemedicine companies (intentionally not listed by names here) that we have strategic business partnerships with.	<b>Key Activities</b> 1. Using a telemedicine platform to integrate the coordination of medical care within the NCAHS. 2. Using the goal metrics listed to track our progress in achieving the statement in No. 1.	<b>Value Propositions</b> The ability to: 1. Increase the number of patients staying within the NCAHS for care by 10% in 2017. 2. Increase total revenue within the NCAHS by 5% within 2017. 3. Improve quality metric outcomes through the integration of care across the NCAHS by being in the 90 <sup>th</sup> percentile for the Northern California region.	<b>Buy-in &amp; Support</b> 1. The corporate office in Roseville, CA of the NCAHS 2. Commercial payors to expand telemedicine reimbursements 3. Strategic business partners with other medical groups	<b>Beneficiaries</b> 1. NCAHS (Primary) 2. Commercial Insurers 3. MediCal 4. Medicare 5. Patients 6. Employees of the NCAHS
<b>Key Resources</b> 1. Physicians board certified or eligible in critical care medicine. 2. The telehealth platform within the Northern California Adventist Healthcare System. 3. Business attorney(s) with expertise in strategic alliances and company buyouts.		<b>Deployment</b> 1. Secure financial and clinical service contracts to deploy the telemedicine program 2. Recruit the physicians needed to run the program 3. Develop the clinical and financial tracking system to report on needed metrics		
<b>Mission Budget/Cost</b> We are primarily a service business, specifically suppling medical services via telemedicine. Our primary cost(s) are the salaries of our physicians. Our secondary costs are for our office staff employees, our billing company, our attorneys, our medical practice management consultants, advertising, and computerized healthcare metric software.			<b>Mission Achievement/Impact Factors</b> Our mission is to increase the quality of medical care and to reduce its cost by the furthering of integration of medical care within the NCAHS via telemedicine.	