Action Research Team: Hospital Sustainability

Final Report

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Table of Contents

Executive Summary ..................3
Objectives ............................5
Significance/Background ..........5
Initial Conditions .................6
Research Methodology .............7
Data/Cost Analysis .................9
Key Findings .........................9
Recommendations .................10
Conclusion ..........................11
References ..........................13
Appendix ............................14
Executive Summary

The Hospital Sustainability Team’s purpose, implicit in its name, is to progress the Ronald Reagan Medical Center towards being a fully sustainable institution. Through researching other universities and their partner medical centers, in addition to large private hospitals (such as Kaiser Permanente) that are at the forefront of modern sustainability, we have been able to compare the sustainable practices implemented at other sites to those implemented at our own medical center. Potential projects included farmers’ markets, reusable sharps containers, and research of the efficacy of sustainability pledges throughout the hospital’s history. However, the rise of legal, monetary, and practical viability issues undermined progress in all three initiatives.

In turn, we redirected our efforts toward the education of the hospital’s constituents about sustainability in hopes that the increased awareness will directly translate to more green-oriented practices. Invested with newly found vigor upon the recruitment of key figures Dr. Wendie Robbins of UCLA’s School of Nursing and a corresponding graduate student Kyle Hyman, our team swiftly moved to capitalize on the few remaining weeks. Moving past prior failures, we configured multiple approaches to increasing education throughout the hospital. We decided it best to target and, soon, collaborate with the largest and most influential group in Ronald Reagan – the nursing staff. The nurses of Ronald Reagan, though possibly wrongfully underestimated at first, are the fundamental gears that move the hospital day in and day out. Moreover, their enthusiasm and efficiency proved them to be the most viable method of instilling the entirety of the hospital staff with knowledge regarding possible sustainability practices.

In order to begin raising awareness immediately, we met with two lead nurses from Ronald Reagan, Cheryl Lehuquet and Holly Phelan. Through collaborating with these two, and, in turn,
their staffs below them, we formulated a two-pronged approach to raise awareness. The former involved raising awareness about concurrent, over-looked, sustainable practices through Nurse Huddles. Huddles are established weekly nurse meetings that serve as a forum for new information to spread throughout the staff quickly and efficiently. However, in hopes of improving sustainability awareness, we had to first gauge the baseline status of their knowledge. To do this, we created a survey that could accurately assess the extent of knowledge the nursing staff of Ronald Reagan has about hospital sustainability, and their successive interest in the topic. Once created, we passed the survey along to Doctor Robbins and Kyle, who together edited the piece, making it worthy of approval by the Education Board and their sister committees. Our second angle of approach involved establishing a recurring monthly meeting for the heads of the nursing staff, concurrent environmental advocates, and future ART team members. This will allow brain-storming of future sustainability practices and movements.

The approval of the survey marks the culmination of the ART Hospital Sustainability Team’s first tough year of existence. Though it was a struggle initially, as a team we assessed several approaches to improve hospital sustainability and finally landed on a viable option. Through its continuation, the nurses’ survey and monthly meeting may serve as a base to build upon in the future, and can allow for implementation of future practices. Once it is completed and returned to us, we can begin to instill green practices and heightened awareness into the hospital through the nursing staff huddles. After six months, we will resend the survey, collect the data, and then analyze the difference in order to see the practical change our educational approach has made. If successful, future ART teams can provide this information as support for their efforts toward investing more time and money into hospital sustainability.
Overview/Objectives/Project Goals

This is the first year the Action Research Team has had a Hospital Sustainability Team. In the past it has always been one of the goals to create a liaison between the ART team and the hospital to cooperate together in raising sustainability awareness and in bringing greener practices to the hospital. The hospital, being an essential part of the UCLA campus, is also one of the institutions that creates a large amount of waste. Through the research conducted by our team we have realized that there are many possibilities for reducing hospital waste and opportunities for more sustainable practices. Many of the things being thrown out are never used nor open, can through proper sterilization procedure be reused. We have also realized that many of the hospital units lack the adequate recycling programs for paper, plastic, glass that could also help reduce waste. After researching about distinct programs conducted at other sustainability leading hospitals such as UCSF and Kaiser Permanente, our ART team decided to implement similar programs and practices from these other institutions to the UCLA Ronald Reagan Hospital. We began with many different goals and objectives in mind, through reviewing and attempting the different projects, the best result we had was cooperating with ICU nurses. Since our main goal is to raise awareness about sustainability, we have realized approaching staff members is the most effective method. Through cooperation for future programs, collaborating on elaborating more innovative ideas and working together on creating changes in practice, we will be able to achieve our main objective of bringing greener practices to the hospital.

Significance/Background

Our team’s contribution to the UCLA community was primarily focused on the hospital. The Ronald Reagan Medical Center essentially operates as an entirely separate entity and is often unaffected by much of the sustainable changes that occur throughout the rest of campus.
However, in a lot of ways the hospital needs to be treated separately because of the unique nature of its purpose. Fortunately our team was able to meet these unique needs by focusing on the wasteful practices that can occur in an emergency setting. There is a constant battle within the hospital to conserve resources but not at the expense of patient care and health. The significant part of our team is find a sustainable balance that still meets the needs of the even the most critical patients.

Initial Conditions

The Action Research Team Program did not previously have a team devoted to helping the Ronald Reagan Medical Center until this year. Many of the teams focused on campus sustainability and housing for both undergraduate and graduate students, but we were fortunate enough to work with the medical center for the first time. Due to this being the team’s first year in existence, we started with the basics: research of other hospitals and medical centers’ sustainability programs. After gaining information about the various projects at other hospitals we analyzed which would be best for our medical center, determining the most efficient and effective place to begin with.

We collected data from other universities and their medical centers, as well as large hospital chains such as Kaiser Permanente. Many of the university medical centers that we researched had implemented changes in their infrastructure, which Ronald Reagan Medical Center had also already included in its building design. Kaiser Permanente has been a leader in hospital sustainability with several changes in their practices, including a paperless, online system for its physicians and patients. A major project that Kaiser had begun in 2003 was the addition of farmer’s markets to the majority of its branches, bringing sustainable foods to its grounds on a monthly basis. The establishment of these markets has since then been extremely
successful and studies done by the hospitals have seen positive changes in the communities participating.

Through our research and observations of Kaiser Permanente hospitals, and our initial connection with hospital staff, we focused our attention on implementing a farmer’s market on hospital grounds. The idea behind providing a sustainable marketplace was to bring an easily accessible and environmentally friendly resource to hospital staff and patients. Many of the hospitals’ doctors and nurses do not have enough time to have a sustainable lunch and sometimes settle for fast food. With a farmer’s market within their workplace they would be able to avoid unhealthy meals and gain education about the benefits of eating locally and organically grown foods. Similar to staff, patients and patients’ families often do not have time for regular chores such as grocery shopping and would most likely buy them from businesses in Westwood. A farmer’s market would benefit them, too, in the same way by essentially bringing the groceries to them and, again, educating them on the advantages of sustainable foods. Although implanting this project appeared to be both profitable and helpful, it was not feasible for RRMC and we shifted gears to a new focus.

Research Methodology

Initially, the focus was on compiling research on sustainability in the health care setting, focusing in on two successful organizations, the UCSF medical center and Kaiser Permanente. In order to complete the assessment process, specific information had to be gathered about the UCLA medical center. This was accomplished through meetings with the administration at UCLA to see what was already in place and then devise and implement a plan from there.

The hospital sustainability team’s major research involved repetitive trial-and-error as well as several dead ends. The first of our endeavors was the Ronald Reagan farmer’s market. In
concordance with Nurit and the hospital’s facilities manager, our team researched every aspect of the market for its grand opening, including: monetary issues, farmer appeasement, physical logistics, optimum dates and time, cargo loading, and conflict with existing farmers’ markets and cafeterias. However, fire hazard legalities undermined the viability of the market. In addition, many legality issues, costs for certification and approval from the UCLA administration became obstacles to make this happen. Next, with the aid of Kyle Hyman, we looked into research of past hospital sustainability initiatives and their efficacy. However, due to legal reasons of information sharing, we could not access the numbers to fully complete our research. Our final mode of effort involved meeting with Dr. Wendie Robbins, who, when associated with Kyle Hyman, served as a guiding light in our research. Together, they provided us with insight about current and past sustainability practices in the hospital and the existing lack of awareness. We decided to try and work with the nursing staff because nothing can happen in a hospital without the help of the nursing staff and to take advantage of Dr. Robbins’ contacts. Around this time we started working with Cheryl Lehuquet, an RN from Ronald Reagan who is in the Nursing Masters of Science program at UCLA.

The first step was to have an initial meeting with the leaders of the nursing staff, Heidi Crooks, the Chief Nursing Officer, as well as Dr. Gine Bufe, the Director of Nursing Education and Training, to obtain their support, which they granted immediately. Ms. Crooks even invited us to present at the following weeks Nurses Leadership meeting to drum up support. Our plan at this point had had two distinct prongs. First, we needed to put together and administer a survey to the Nursing staff at Ronald Reagan to obtain a baseline measurement of their knowledge of sustainability in general as well as what programs are being implemented in the hospital. By collecting this data, we can administer a survey after our interventions to measure how effect our
programs were in increasing the staff’s sustainability knowledge. The goal was not only to understand the nursing staff’s knowledge of sustainability, but to also make them aware that it is possible to integrate sustainable policies into a medical center. Second, we wanted to start a Nurses Sustainability Group that would meet once a month that would address certain aspects of their job as nurses that the group deemed unsustainable. This led to our nurses’ survey, which has been recently approved, and will begin circulation by June 2011.

Data/Cost Analysis

The ART Hospital Sustainability Survey to determine the level of awareness in the hospital will be sent out in the month of June and the results are expected to be available at the end of the year.

Key Findings

The most significant elements of our action research come from the information we gathered. Our journey was more of a fact finding mission than anything else and it was extremely prolific in that respect. Our hardest struggle, also lead to our biggest accomplishment. From the very beginning we had trouble deciding from what angle to address sustainability within the hospital, defining the right people who were interested but also in a position to affect actual change. In retrospect we definitely underestimated the size of the hospital bureaucracy. It is for this reason that we found that the nurses would be in the best position to champion sustainability in Ronald Reagan. The nurses are in such a crucial position because their jobs involve such a variety of practices at every level in the hospital. They are also a part of every single department in the hospital so any changes we make will not be unrepeated. We were excited to find a group of like-minded nurses that had been waiting for an opportunity that our team provided.
Another key finding we discovered was what type of sustainable practices we could effectively address. The attempts at creating a weekly farmers market as a way to promote sustainability proved to us that our efforts would be better spent in the realm of sustainable purchases, recycling, and staff education. We also discovered that the level of education among the staff was extremely varied, which is what initially lead us to the survey. An important step for the future will be to improve education in the areas that the survey reveals could be improved.

Recommendations

This was the first year of operation for the Hospital Sustainability Team. As we had no foundation to build off, it took a while to find our footing. In the past 20 weeks we have come a long way from where we started and made strong headway into making RRMC more sustainable.

We faced our share of bureaucratic hurdles and setbacks but we didn’t let this affect us. Perseverance will key characteristic of future teams if they are to succeed. The RRMC has its own priorities and procedures that need to be respected. ART should not be disheartened if their ideas are not deemed feasible. The ART should be adaptable to various situations and not be stubborn in its approach. Teams should take failure in their stride and work with the RRMC rather than for their own agenda.

Our biggest achievement was establishing the Green Team. This independent group of nurses who have volunteered to promote the environmental cause will meet on a monthly basis. It is essential that future ART work closely with the Green Team, which will act as a liaison between ART and RRMC. The Green Team will be the only constant in the endeavor towards sustainability and will be an invaluable resource and ART’s first go-to point.
Teams should come into the ART program with open minds and not take the title ‘Hospital Sustainability’ too literally. There are a vast number of cogs in the operational wheel of RRMC some of which are independent of the RRMC. Teams should look into these various components before narrowing down tier choice. This year we focused only on the RRMC before we met Kyle (Masters Student in School of Public Health). He served as our guide and mentor and helped us achieve what we did. It will be beneficial to think outside of the box in the future.

Finally, Teams should not try and achieve goal beyond their means. This year we were worried that other teams were accomplishing more than us but in hindsight we too did a marvelous job. ART is not a competition. A small start can go a long way in the future as our Green Team has shown.

Conclusion

The last two quarters have been rather eventful and busy for our ART. From our initial excitement at commencing to the various rejected ideas to finally establishing the Green Team, this period has seen its share of highs and lows. The Team came into this project with lofty ambitions and ideas, which we were compelled to change due to various circumstances. Yet our resolve as a team never wavered and week in and week out we brought the same level of energy and enthusiasm. We received lots guidance from the ART Directors, stake holders, Kyle and Dr. Robbins. Without all of their collective help we wouldn’t have achieved even a fraction of we have and for this we are grateful.

Sustainability is a process that is dynamic and ever evolving. In setting up the Green Team we have set up a strong foundation for other teams to build upon. Though we have seen no tangible results yet, we are confident that we have taken a step in the right direction. The process of helping the RRMC reach its sustainability potential will be a long one and will carry
on way after we have graduated. We wish future ART teams all the best in their efforts and sincerely hope that they further our work while simultaneously exploring other horizons. The desire to be sustainable is evident, and efforts to do so only have to be channeled in the right direction. Through systematic advancement and cooperation UCLA’s goal of Green 2020 can easily be realized.
References


6) Singh, Amanjeet, Syal, Matt, Grady, Sue C., Korkmaz, Sinem

   Effects of Green Buildings on Employee Health and Productivity

   *Am J Public Health* 2010 100: 1665-1668


The following is the survey sample:

**ART Hospital Sustainability Survey**

1. Please select your age:

2. In which unit of the UCLA Medical Center do you work?

3. In your workplace, what does being green/sustainability mean to you?

4. How sustainable/green is the Ronald Reagan UCLA Medical Center?
   - 1 (least sustainable) 2 3 4 5 6 7 8 9 10 (most sustainable)

   1-10

5. Which of the following, if any, have you observed at Ronald Reagan UCLA Medical Center?

6. How often do you participate in any of the following?
   - Never Seldom Sometimes Often
   - Renew bins to recycle expired items
   - Reuse programs for leg squeezers, BP cuffs, pulse oximeters, pressure bags
   - Blue wrap recycling

7. Do you have any ideas about improving sustainability/being green in your workplace?

   If you would be interested in helping to improve sustainability at the Ronald Reagan UCLA Medical Center please

   email hospital-sustainability@googlegroups.com