Action Research Team: Hospital Sustainability

Final Report

Winter – Spring 2012

Joseph Behjat Jessica Galvan Emily Foster Sona Galstian Faye Mendoza Kumar Nadhan

Stakeholder:
Teresa Hildebrand
Sustainability Program Manager:
Ronald Reagan Medical Center
UCLA Santa Monica Medical Center

Table of Contents

Executive Summary	3
Overview – Objectives – Project Goals	4
Background – Significance	6
Initial Conditions	8
Research Methodology	8
Data	10
Key Findings.	12
Recommendations	12
Conclusion	14
References	16
Appendix	18

Executive Summary

The objective of the Hospital Sustainability Team is to advance the green practices of Ronald Reagan UCLA Medical Center (RRMC). Along with our stakeholder Teresa Hildebrand, RRMC's Sustainability Program Manager, we completed two major projects these past two quarters: adapting the Green Office Calculator to be user-friendly for hospital departments, and creating a sustainability handbook that will eventually be distributed throughout the UCLA Health System.

To first gauge where Reagan stands in comparison to other institutions, the first two weeks were devoted to researching university medical centers and private hospitals that are on the cutting edge of modern sustainability. Our team discovered Reagan to be impressive in its structural design; it had been constructed to be environmentally sound from the very beginning. Additionally, a number of sustainability efforts were already put in place, including meatless days in the cafeteria and proper disposal of bio-hazardous waste. Our team did find areas we could feasibly improve upon: assessment and awareness.

With assessment, our stakeholder noted that Reagan was lacking a tool to measure exactly how each department was contributing to the hospital's sustainability effort. There was, however, a pre-existing Green Office Calculator that was created to gauge the performance of offices in categories such as energy consumption, waste, and recycling. Our task was to adapt this calculator to one that could be applied specifically to patient care and non-patient care areas of the Health System. The department would then be given a rating based on its overall score. After acquiring the backing of Support Services, we conducted interviews with departments interested in participating in the assessment. During interviews with patient care and non-patient care areas that include Non-Invasive Cardiology, Emergency and Trauma Services, and

Radiology, we asked department heads about their current practices and discussed areas of improvement (Appendix A). On the whole, they were all enthusiastic about involving their areas and were interested to hear about practical changes that can be made, especially in common spaces such as break rooms and computer areas. After collecting field notes, the Green Office Calculator was refined and updated, with the finished product now including a specific section for patient care and non-patient care areas.

For awareness, we thought it useful to provide a simple resource that any hospital employee could use to further their green practices. Again, we witnessed much enthusiasm from employees, who truly wanted to minimize the waste they see everyday – unfortunately, they just did not have enough information on how to implement changes. The pre-existing guidelines were cluttered, redundant, and inaccessible. Thus, we synthesized the information into neater categories, and compiled them into a digestible format. It is meant to convey the relative ease and practicality of green actions in a hospital setting. The simplicity of the design was modeled after the Office of Residential Life's "Green Guide to Living," which contains useful information on recycling, energy, and sustainable foods while living on campus. Once approved by our stakeholder, the slides will be transferred to the "Green Guide" template and published as a pamphlet and PDF version for RRMC. This handbook may then be updated by future Hospital Sustainability team members, which will further solidify RRMC's path to being a fully sustainable institution.

Overview - Objectives - Project Goals

Our stakeholder Teresa Hildebrand had a vision of this year's idea for the Action Research Team's project. Our project was to create a new Green Office Calculator for the patient care and non-patient care areas of the UCLA Health System. Our first step in this task was to practices and where clinics excelled in green practices. This provided us a foundation to build the calculator. However, within the process of creating a new calculator for the clinical areas, our team found much of the information within the calculator for the offices applicable to the interviewed departments. This led us to add an extra tab to the already existing Green Office Calculator. This tab corresponded to only the clinical areas and will be useful in determining whether an area qualifies for platinum, gold, or at least, silver standard of green practices. For the pilot program of the calculator, departments could compete to see who would qualify for the highest standard in regards to green practices (see Appendix D).

The second idea for the Action Research Team was to create a new Green Handbook for the health system to use. Examining the previous handbook, we searched for redundancies, old information, and missing information. The compiled data was then used to create a uniform handbook outlining green practices. We created a new design to create a better flow and to make it easier to read.

In addition to our projects, the hospital created a steering committee which covered five topics in regards to the health system sustainability practices: utilities management, procurement sourcing, sustainability program marketing, recycling and waste management, and sustainable food. They established scheduled monthly meetings in which members decided how to create more sustainable practices and update the group on the work done by each subgroup. For example, a recent focus was in further researching ways to become completely mercury free; this meant replacing light tubes that contained mercury and finding alternatives to lab tests that currently require using a mercury compound.

One of the first projects that the group ensued upon its establishment was an Earth Day contest in order to determine the direction that each team could embark upon. Using a simple questionnaire sent to hospital staff they opened a forum for ideas that would be both beneficial and feasible to the hospital in regards to increasing sustainability. The group received an overwhelming response to this and was able to set their goals based on the feedback provided by their community. They encouraged this process with the incentive of a free iPad for submitting an idea and entering into a drawing. The entries were rated as either 1) viable, recommended for implementation, 2) recommended for further evaluation, or 3) not feasible. Those categorized as 1 or 2 were entered into the drawing. A staff member from the Outpatient Rehab department was randomly selected and his idea is in the process of being implemented. His proposal was to completely digitize their quarterly patient newsletters; as part of the staff and a patient himself, he receives multiple hard copies of the newsletter that have been an unnecessary use of paper. Although this idea was selected as the winner of the contest, the group will be reviewing the remainder of the ideas in the drawing as time goes on in order to further implement a systemwide sustainable improvement.

Background - Significance

The Hospital Sustainability Action Research Team in 2011 embarked on a journey with no direction and essentially with goals made and changed along the way. Being the first team to work with the health system community proved to be more challenging than originally thought to be. Ronald Reagan Medical Center, though already sustainable in regards to infrastructural implementations, did not have a single power or team of employees in charge of overseeing sustainability practices within the hospital. Being thrown from one department to the next, a feasible project was out of reach for the team as the first quarter of the project progressed. Hopes

of emulating Kaiser Permanente's Farmers' Markets were diminished when fire marshal approval was denied. It wasn't until meeting with Kyle Hyman, a graduate student in the School of Public Health that their project was able to make real progress.

With the help of Kyle and Dr. Wendi Robbins from the School of Nursing, a project surfaced in the form of a survey aimed at gauging the sustainability awareness of the nurses within RRMC. After gaining support from several nurses in varying departments, a team of "Green Champions" was to be established – this team would have monthly meetings and discuss the current issues concerning sustainability within health systems. Their project wrapped up with the hopeful approval from the Nurses' Research Board (NRB) and the distribution of the survey created by the team. However, changes to the survey were requested by the NRB but the end of the quarter had passed and the team had disbanded, leaving the survey incomplete. The information was never gathered and the data never analyzed for future teams to use.

The Hospital Sustainability Action Research Team for 2012 has made great strides towards a more sustainable UCLA community by targeting the Ronald Reagan Medical Center in its entirety and its affiliated medical plazas. The previous team's difficulty was in a lack of leadership; in October of 2011 RRMC hired Teresa Hildebrand as an official hospital sustainability manager and gave our team the leader it was waiting for. With her help, the team was able to conduct research in all areas of the hospital, both clinical and non-clinical, gathering information about where each department stood in regards to sustainable practices and habits. Using this information, the team created a new "Health System" tab on the current UCLA Green Office Program Calculator as well as a customized Health System Green Handbook. These two items can and will be used by anyone and everyone within the health system and bring UCLA closer to its goals in sustainability.

Initial Conditions

The Hospital Sustainability Team enjoyed its second year in 2012. However, due to its recent creation, it did not have a substantial basis upon which to build off of. In 2011, the team explored the various departments of Ronald Reagan for obvious sub-green protocols. Since Ronald Reagan, in accordance with UCLA, is one of the most advanced hospitals in sustainability, the team ran into several obstacles along the way. They finally decided to create a survey that assessed the amount of sustainability knowledge among Reagan's nursing staff.

As this year's team could not continue the work on the survey, due to unavailability of certain contacts, we returned to exploring the hospital for possible departments in need of sustainability improvements. Although there are several managers in charge of making their respective departments green, there was no cohesive force bringing each individual department to a similar high standard.

Research Methodology

In the beginning of the winter quarter the team did research on what other hospitals and health systems were doing in order to "green" their practices and facilities. Many places were seen to be making changes in the infrastructure of their hospitals, improvements that RRMC had already made. Other hospitals like Kaiser Permanente had switched over to completely computer based systems, eliminating paper waste from patient documents and records. Many of the changes made by other institutions found in our research will actually be implemented within the next fiscal year at RRMC. They will be specifically working on installing new "Hydration Stations" and beginning a post-consumer composting program in their cafeterias to complement the already existing, pre-consumer composting. They will be developing a campaign to kick-off the sustainability program as a whole, focusing on something simple like "The Top 3 Things

You Can Do to Be More Green." Some possible initiatives in the campaign will be: "Don't Print!" (for paper use reduction), "Use Less Power!" (to encourage turning off lights and computer monitors or PCs), and "Say No to Single Use Water Bottles!" (to promote the new water filling stations, staff members will also be given a reusable water bottle).

Once meeting with Teresa we decided our focus would be on the analysis of any individual department's sustainable practices in the health system and devising a way to promote awareness of the issues. After seeing the success of using UCLA's Green Office Program in administrative offices within the health system, she wanted to develop a way for clinical areas to participate in a similar type of program, if not the same program but using a specialized section for patient care areas. In order to develop a new tab for the UCLA Green Office Program Calculator, Teresa and the team decided that interviewing willing departments would be the best way to gather the most accurate information. Teresa sent out an invitation to be interviewed by members of our team to the entire health system. To our surprise she received responses from several departments right away and we scheduled meetings for the following weeks.

Each of our members was responsible for meeting with and interviewing at least one department. We asked each participant the same set of questions and were able to see first hand the current habits of their employees and their general sustainable practices. After completing this interview process we gathered all the information collected and saw that many places had recurring problem areas, such as a lack in recycling bins available to patients and staff. We formulated a draft for the potential new tab that would be added to the GOP Calculator and once approved by Teresa, it would be sent to Nurit Katz for final approval.

After completing the creation of the new tab, we shifted our focus to making a more personal approach to spreading awareness of sustainability by making a customized Health

System Green Handbook. Using the "Green Guide to Living" as a visual model and the "UCLA Faculty and Staff Sustainability Handbook" for general information, we formed a handbook that would be user friendly and informative to health system personnel specifically. We split the work up into sections and let each member focus on one area within the handbook, narrowing down the information needed and incorporating information specific to the health system. A digital version of the handbook will be distributed primarily and printed copies will be distributed at Teresa's discretion. Since we had been working on a handbook for the health system using the existing one for UCLA faculty and staff, Nurit asked us to refurbish and update the old one. Using similar designs as those found in the "Green Guide to Living," all three UCLA affiliated handbooks now have a recognizable uniform look.

Data

As discussed earlier, we were able to gain insight into the inner workings of the hospital through interviews with several doctors and members of the hospital staff. Through these interviews we were able to familiarize ourselves with current hospital procedures so as to establish each department's capacity for improvement, and identify any existing sustainable practices. We used this knowledge while creating the green clinic calculator. Our notes are compiled below:

Janet Rimicci – Emergency & Trauma Services

- Very approachable, receptive and open to our project, though slightly unfamiliar with the topic of sustainability itself
- Trauma 1, helipad equipped, department sees about 100,000 patients/year
- Has lounge room w/bulliten boards, lockers, mailboxes, recycling bins distributed throughout ER area and lounge
- Stock room cardboard and plastic already recycled
- Transitioning to use same online charts as Kaiser
- Possible improvements: behavioral changes, general awareness, sustainable practices at Kaiser, Oregon State Hospital, Providence St. Vincent Medical Center

Robert Yang – Cardiology Department

- Head manager of Non-Invasive Cardiology (conduct EKG's, echocardiograms, holter monitoring, stress tests)
- Already transitioned department into digital EKG reports
- Reports are still printed out for echos so the doctors can edit and review them, working on making them online, just need new software
- Has already encouraged staff to turn off expensive, power-consuming machines over night, makes rounds to make sure all machines off, quite sustainable already

Melanie Gideon - Operation Mend Program

- Tried to put us in contact with Carolyn Casillas and Bryan Carrigan in Plastic Surgery and Marie Weber in Radiation Oncology to see if we could help their departments but they were not interested
- We were not able to change/recommend much

Naomi Gedion – Diagnostic Radiology

- One small room, not much to work with other than carts that they send out to patients
- No recycling bin in office space (she will put request in for one) but only print necessary documents, email otherwise
- Office will start reusing scrap paper for sending notes to other departments
- Will go through calculator at some point to make sure they can't make any further changes
- Debbie Embry Patient Escort Services
- Very small space with multiple recycling bins already in place
- Exchanged light bulbs for CFLs, eliminated paper memos, all communication done online
- All vehicles used run on natural gas

Andrew Krishna – Radiology

- Already had implemented many sustainable policies, including switching from printed/faxed patient records to digital records
- Was interested in water filtration systems, the team created a chart highlighting many different water filtration systems. The chart was then emailed to Andrew.

Lauri Ashford – Rehab Services

- Attended meeting with three other associates, all from different sub-sections within the Rehab Services department
- None of the separate sections had any real coordination in sustainability besides having recycling bins in certain offices
- Were all interested in pilot program for the new GOP calculator

• Received quick tips very well and found areas of improvement over the course of the discussion, such as printing double-sided, using scrap paper for notes, and unplugging equipment that does not need to remain powered all day

Pollyanna Lo – Liver Institute

- One trash bin in waiting room, nearest recycling bin on floor below
- Suggested to reach out to primary care, women's heath, etc. as areas where we can focus on items such as sustainable food options and raising awareness of them to patients
- A lot of paper waste generated from patient records
- As an outpatient clinic, they focus on efficiency in time, with 15 minute appointments with potential non-English speaking patients, the best way to communicate with patients is sometimes printing out info and other related resources in their native languages
- Very little space in exam rooms to add recycling bins but staff is responsible for recycling packaging materials
- Suggested that equipment such as x-ray light boxes are quick and easy to unplug and plug back in when needed

Key Findings

Over the quarters, the team explored almost every accessible department in Ronald Reagan, meeting with the coordinators of each. By meeting with the department coordinators, we realized that there is no consistent standard enforced between different departments. Moreover, some departments were unaware of possible improvements to be made and some desired improvements but did not have the means to complete them. In order to fully evaluate these deficiencies, we devised a green-office calculator suited for the hospital departments. This will better summarize these findings and present them in a more beneficial format in order to facilitate future findings, thus allowing different departments to improve on their own accord.

Recommendations

This being the second year of the Hospital Sustainability team, we had a head start relative to last year's team. Last year's team recommended a few things, all of which we were able to follow through with and improve upon. Kyle served as their guide to the inner workings of the hospital last year and Teresa was ours this year. She, along with the knowledge we

gathered, helped us better understand the bureaucracy that is a large hospital like Ronald Reagan, which was essential to making progress. Future teams should make sure that they understand the hospital in this same manner so that they know what reforms are feasible. Another recommendation from last year's team was to work diligently with hospital staff and not get easily discouraged if we failed. Luckily, our stakeholder, Teresa, held a new position at the hospital dedicated entirely to sustainability. She was able to connect us directly with the hospital in a way that allowed us to reach anyone and everyone who wanted to get involved with making the institution more sustainable.

One of the projects that Teresa was able to create through her contacts at the hospital was the Sustainability Steering Committee. This group of hospital staff and faculty discusses issues in regards to sustainability. They also work together to monitor and solve any relevant problems. We had the opportunity to attend a few of these meetings, and they were a great way to see real progress within the institution and get directly in touch with the people working in the hospital. In the following years the team should continue their involvement with the committee and attend as many meetings as possible. This will be a great way to stay updated on any improvements and will allow for better cooperation between the team and the hospital staff.

Another project that we worked on, the Green Calculator, has yet to be implemented throughout the various departments in the hospital, and if Teresa and the Steering Committee do not put it into action soon then this could be an area for future teams to work on. We had talked about possibly creating a competition between departments and even with the Santa Monica campus for who could achieve the highest green rating, so this is definitely a possibility for the future. We had also wanted to get more involved with Earth Day events at the hospital, so this would be a great way for future teams to stay involved with Teresa.

While much was accomplished this year, sustainability is only recently gaining awareness among hospital staff and faculty. Last year they advised us not to reach for goals beyond our means, but at this point sustainability has been established as a serious concern for the hospital and frankly anything is possible. We would suggest that future teams work to raise awareness of these types of issues so that the entire hospital can work together toward a more sustainable future.

Conclusion

Throughout the last two quarters, the ART team encountered many obstacles and through the help of stakeholders and office personnel, grew as a sustainability team. We started off the quarter with what last year's team had accomplished, including the initiation of interest in sustainability. With that in mind, we started by researching sustainability processes in other medical centers, especially the award-winning University of California San Francisco Medical Center. We then dove right into the current policies at UCLA's very own Ronald Reagan center and researched ways to enhance sustainability in its office settings. Our stakeholder, Teresa, was our guide through the intricacies of the hospital bureaucracy since the beginning of the winter quarter and engineered the multiple meetings we had with office personnel. Coordinating an entity as large as this health system is no simple task, therefore patience and the proper communication are essential in doing any research and making progress towards change.

The second half of the winter quarter was mostly dedicated to attending meetings with representatives from different departments at UCLA Ronald Reagan Hospital and UCLA Medical Center. Using the Green Office Calculator, our team was able to introduce and encourage many offices to adopt new sustainable policies and reduce waste. We were able to notice the areas that needed the most attention and found that awareness above all, was the most

crucial during this transitioning phase at RRMC. Throughout spring quarter, our team created a sustainable handbook modeled after the UCLA ORL "Green Guide to Sustainable Living at UCLA". After months of communicating and observing, raising awareness and promoting all of the new changes to come will be the key step in truly pushing the health system forward. We would like to thank our stakeholder, Teresa, without whom many of our ideas would not have become tangible. We wish future ART Teams great success in continuing the forgoing sustainable projects in making UCLA a better and greener place.

References

- Ashford, Lauri and associates. Rehabilitation Services. UCLA Ronald Reagan Medical Center.
- 2. Embry, Debbie. Patient Escort Services. UCLA Ronald Reagan Medical Center.
- 3. Fleischer, D. 2010. UCSF Medical Center Receives Recognition for Environmentally Sustainable Practices. http://www.ucsf.edu/news/2010/06/3301/ucsf-medical-center-receives-recognition-sustainable-practices.

UCSF Medical Center is a leader and example in hospital sustainability policies.

Their sustainable policies served to ignite new ideas that could be incorporated into UCLA Ronald Reagan Medical Center.

- 4. Gedion, Naomi. Diagnostic Radiology. UCLA Ronald Reagan Medical Center.
- 5. Gideon, Melanie. Operation Mend Program. UCLA Ronald Reagan Medical Center.
- 6. Janet. ER and Trauma Services. UCLA Ronald Reagan Medical Center.
- Krishna, Andrew. Radiology Appointment Services. UCLA Ronald Reagan Medical Center.
- 8. Lo, Pollyanna. Pfeger Liver Institute. UCLA Ronald Reagan Medical Center.
- 9. Rimicci, Janet. Emergency and Trauma Services. UCLA Medical Center.
- 10. Yang, Robert. Cardiology Department. UCLA Ronald Reagan Medical Center.
- 11. Hospital Steering Committee headed by Teresa Hildebrand, compromised of about 50 individuals from various departments and participating on different levels according to time available to each individual. Meetings are held monthly and over time might be increased to bi-monthly. In order to attend: contact Teresa Hildebrand at

<thildbrand@mednet.ucla.edu> for invitation and/or connection to any specific member
on the committee.

12. UCLA Health System Sustainability. <www.uclahealth.org/sustainability>

Appendices

- A. Interview Questions for Health System Administrators
- B. Water Filtration Systems Comparison Chart
- C. Green Office Program Calculator Sample Image
- D. Changes Proposed for Green Office Program Calculator
- E. Front Cover of UCLA Health System Green Guide

A. Interview Questions:

Energy - front desks, break rooms -

What do you have that can be monitored and consume less energy? As in, turned off at the end of the day, controlled with power strips, etc

Events and Waste - Conferences for surgeons, doctors, nurses, etc: any that are sanctioned by the hospital, to be including them under the same standards that are applicable to rest of hospital

Can we make a regulation that these outside conferences be under the same conditions as far as sustainability (sustainable food catering services, clear stream bins, etc)?

Mail and Documents - can they suggest a paperless option? use the ucla medical pay system - UCLA Health System Bill Pay

---Ink jet printers vs laser,

Do you encourage the use of the UCLA Health System Bill Pay service online? Can you add an option for patients to choose correspondence through internet only? What sustainable practices with intra-departmental business have you implemented?

Purchasing - power strips in all appliances

Which purchasing decisions does the department make of their own, do you use sustainable options available?

Recycling - bins that hang on the wall - composting? Out of the question?

Do you encourage sustainable food options for employees and patients?

Do you have space for any additional recycling bins, provided that waste management agrees to empty them?

Transportation - promote the options for sustainable transportation

Do you promote sustainable transportation outside of the van pool service?

Networking and Awareness - can we include some kind of Green Tip in their newsletters

Do you have your own newsletter or do you only receive the main RRMC one? If you have your own, do you have a section or any copy concerning sustainability?

Innovations - green champions: discussion board about sustainability among nurses, or any staff

Do you have some form of discussion forum for department employees? If not, could we implement one to encourage the conversation about sustainability? (If they have nurses) Have any of the staff participated in the Green Champion discussions?

B. Water Filtration Systems Comparison Chart

Over-Counter Filters:

Brand	Cartridge Price	System Price	Capacity
Aquasana AQ-4000	\$50.99	\$124.99	500gallons
PUR Mineral Clear 3700B	\$20.99	\$39.99	100gallons
Brita Complete Faucet	\$15.99	\$29.99	100gallons

Under-Counter Filters:

Brand	Cartridge Price	System Price	Capacity
Aquasana AQ-4600	\$50.99	\$186.99	500gallons
Cuno Aquapore	\$173.90	\$548.92	625gallons
Whirlpool WHED20	\$45.00	\$99.99	270gallons

Pitcher Filters:

Brand	Cartridge Price	System Price	Capacity
Pure 6-Cup Pitcher	\$10.99	\$22.99	40gallons
Brita Grand Pitcher	\$8.00	\$32.99	40gallons
Culligan Pitcher	\$6.99	\$14.99	50gallons

C. Green Office Program Calculator Sample Image

Welcome to the UCLA Green Office Certification Program Excel Calculator! This calculator will help you calculate how many points your office has earned and the level of certification you will receive when/if you pass your audit. Click on the Green Office Categories below and start filling in the indicated values. Your points and score will be calculated automatically for you on this summary page.



	Green Office Categories	Possible Points	Points Earned
4	Click title to go to worksheet calculator	- 10	44.00
1	Energy	16	11.00
2	Events & Waste	19	13.73
3	Mail & Documents	7	5.33
4	Purchasing	20	14.00
5	Recycling	8	8.00
6	<u>Transportation</u>	12	5.45
7	Networking & Awareness	7	5.91
8	Other Ideas (Innovation)	4	12.00
	TOTAL	89	75.42
	Office Rating	GOLD	



D. Changes Proposed for Green Office Program Calculator*

1. Energy

a. Add: Appliances in kitchen/break rooms are unplugged while not in use

2. Events and Waste

- a. Change wording to include "or are part of a Sustainability Committee
- **b.** Breaking down events into 3 categories:
 - **i.** Transportation: If an outside meeting is scheduled, a video-conference is set up when possible, as an alternative to driving.
 - **ii.** Preparation: Paper use is to a minimum, alternatives are used such as virtual documentation, whiteboards, and power point presentations
 - **iii.** Evaluation: Evaluate success of event/meeting using measures found in calculator (i.e. sustainable catering).
- **c.** Add: Office uses water filtration system instead of delivered water bottles (if water source is available, i.e. sink can be fitted for a "goose neck" water filter).

3. Mail and Documents

a. Add: Intradepartmental memos and departmental announcements are done by paperless means, such as through email or posted on whiteboards.

4. Purchasing

Leave as is

5. Recycling

a. Add: "Extra Credit" for habitual recycling at home and outside of the work place.

6. Transportation

a. Add on "hybrid OR electric vehicle"

7. Networking and Awareness

**Add: Facebook page specific to your department is available to employees to discuss sustainability, arrange carpools, etc.

**Add: Office Newsletter (is applicable) includes a sustainability section.

8. Other Ideas and Innovation

**Add: Creative thinking/ideas from employees have been implemented throughout entire office (i.e. reusing office supplies like old paper as scratch paper, or reusing paperclips; holding clothing/shoe/book drives to be donated to a local charity or redistributed for reuse)

**Add: Employees are regularly asked for feedback, potentially having an "idea board" in a common space

9. **New Tab** Health System Departments/Clinics

- **a.** Recycling bins are inside of waiting rooms.
- **b.** Online and/or telephone reminders for appointments are available instead of mailed reminders.
- **c.** Patients are notified and recommended to use UCLA Online Bill Pay service upon Check-In
- **d.** Medical equipment that does not need to be charges 24 hours/day is powered down AND unplugged whenever not in use (i.e. x-ray light boxes)
- e. Waiting rooms have digital displays running basic information rather than having printed informational pamphlets (patients can instead request additional information when wanted)

* The Calculator works as an excel spreadsheet with built in formulas where inputs on sustainable behavior can be translated into points. Different behaviors are valued at different point amounts and the totals are tallied within the program. A rating is given based on the total amount of points a department qualifies for.

Competitions using this calculator as a measure of success run on an improvement scale. An initial rating is calculated and after careful suggestions are given, departments have a specific amount of time to improve eligible areas. Trained interns would then assign a new rating adding any additional points that the department was able to improve upon. Winners could be determined solely by the highest score achieved, or also by the greatest percentage of improvement. How a winner is selected, is of course, in the hands of the person, or persons, running the competition. Prizes have been suggested such as a luncheon for the winning department, free giveaways such as reusable water bottles, or simply the rightly earned bragging rights.

The new rating system has yet to be determined by Nurit Katz and Teresa Hildebrand. Upon adding the new tab to the calculator they will replace some category items with clinic items and adjust the point breakdown accordingly.

UCLA Health System Green Guide it begins with U 2012 EDUCATION FOR SUSTAINABLE LIVING **BROUGHT** PROGRAM - HOSPITAL SUSTAINABILITY TEAM UCLA HEALTH SYSTEM SUSTAINABILITY TO YOU BY

PROGRAMS