Designing for Doctor and Patient Interactions in the Leave-taking Experience

A Project Report
Motivation and context of this project

This project report captures the work of our team for a capstone class at the Weatherhead School of Management - Design in Management: Concepts, Methods of Practice & Products.

This class was a one-year studio course with various sponsors across several teams. Our team collaborated with Cleveland Clinic’s Office of Patient Experience from Fall of 2010 to Spring of 2011.

This project report was created and provided as a deliverable to the Office of Patient Experience and complements the oral presentation given at Cleveland Clinic on April 26, 2011.

A separate document captures our design process with detailed photos of our brainstorm sessions and ideation. If you are interested in getting a copy of this, please let us know.

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This project report consists of six main parts: introduction, identification of a pressing problem in the area of patient experience within Cleveland Clinic, our hypothesis on how to explore the problem, design research, our product, and concluding thoughts.

Although Cleveland Clinic possesses much strength in being a physician-led organization, it is facing challenges in providing world-class, doctor-to-patient communication because it is difficult to change the behaviors of these leaders. To make the problem manageable as a project, our group has focused primarily on physician and patient interactions during the discharge period of in-patients. This is a critical moment in the patient journey that currently does not provide patients with quality communication moments with their doctors.

To address this problem, we propose an interaction guide – composed of actions, words, and props – to help physicians and their team say goodbye to patients and families during leave-taking. This service guide embodies ideas synthesized from themes that emerged during our team’s research process. The interactions are depicted in the form of short sketches and demonstrate scenarios that support the conditions for conversation and connection between doctors and patients.

The project report concludes with some thoughts on how these ideas have the potential to have impact for the organization as a whole. A short section at the end captures thoughts on how the interaction concepts could be implemented as well as their financial implications.
01. Introduction

Founding principles • Healthcare innovation • Caregiver/patient communication
Founding principles

“Cleveland Clinic was founded in 1921 by four renowned physicians with a vision of providing outstanding patient care based upon the principles of cooperation, compassion and innovation.”

Cleveland Clinic still upholds its original mission statement - “To provide better care of the sick, investigation into their problems, and further education of those who serve.”

The vision is captured by “Striving to be the world’s leader in patient experience, clinical outcomes, research and education.”

Cleveland Clinic holds these values: Quality, Innovation, Teamwork, Service, Integrity, Compassion.

Cleveland Clinic’s group practice model - which means that the doctors on staff are salaried employees and are not in private practice - is a unique structure and has also been formed by the principles of teamwork (collaboration/cooperation) and innovation.

In 2007, the various practices of the Clinic were restructured to complement the group practice model. By combining specialties surrounding a specific organ or disease system into practice units called “institutes,” Cleveland Clinic believes it is better equipped to provide integrated patient-centered care along with an easy-to-understand structure for patients and families.

Furthermore, in 2004, the former CEO, Dr. Floyd D. Loop, unified the idea of providing great care under the umbrella of “World Class Service,” and this has more recently been captured by the guiding principle of “Patients First.”

Innovation

Celebrating its 90th year this year, the organization has deliberately branded the celebration under the guiding principle of “Patients First.” As the Clinic reflects upon its 90 years of success and growth and considers its vision for the future, CEO and President, Dr. Delos (Toby) Cosgrove, evokes one of the three founding principles - innovation.

“The future belongs to those who seize the opportunities created by innovation.”

- Dr. Delos M. Cosgrove

Innovation is a theme that is at the core of what the Weatherhead School of Management is exploring. We have called this theme of innovation and entrepreneurship, “Managing as Designing.”

Therefore, our project group took this theme of innovation very seriously for the past year and questioned what is meant by “healthcare” or “medical innovation.” After examining the landscape of healthcare, we propose four kinds of healthcare innovation:

• Quality & safety innovation
• Biomedical innovation
• Technological/device innovation
• Service innovation

The visual mapping on the next page shows how various healthcare institutions in the United States fall into one of the four areas.

1 Cleveland Clinic Facts & Figures handout, Revised 5.2010.
2 Cleveland Clinic Experience booklet.
3 http://my.clevelandclinic.org/about/overview/mission_history.aspx.
### Kinds of healthcare innovation

#### Quality & safety innovation
- University of Pittsburgh Medical Center (Center for Quality Improvement & Innovation)
- Reagan UCLA (Center for Health Quality & Innovation)
- Johns Hopkins Hospital (Center for Innovation in Quality Patient Care)
- Massachusetts General Hospital (Stoeckle Center for Primary Care Innovation)
- University Hospitals - Ohio (Research & Innovation Center)
- Mount Sinai Hospital
- New York - Presbyterian
- Hospital of the University of Pennsylvania

#### Humanistic care
- Arizona State University (Herberger Institute)

#### Service innovation
- Kaiser Permanente (Garfield Center)
- Mayo Clinic (SPARC)

#### Discovery
- Cleveland Clinic

#### Invention
- Duke University - Medical & Business School (Center for Entrepreneurship & Innovation)
- University of Michigan Health System (Medical Innovation Center)
- University of Michigan Health System

#### Mechanistic care
- University of Washington Medical Center

#### Biomedical research innovation
- Arizona State University (Herberger Institute)
- Cleveland Clinic

#### Technological/device innovation
- Duke University - Medical & Business School (Center for Entrepreneurship & Innovation)
- University of Michigan Health System (Medical Innovation Center)

The mapping above depicts some of the major healthcare institutions or healthcare-related organizations in the United States.

The left side of the mapping indicates healthcare institutions that have strong research capabilities and consider “discovery” (finding and fixing problems) as the primary goal. The right side of the mapping is a place for healthcare institutions that consider “invention” (novelty) as the primary goal. The bottom of the mapping emphasizes “mechanistic care” where specific parts of the body are usually considered to find an innovative solution. The top part captures care that can be described as being “holistic/humanistic”: this type of care has the potential to also describe care that focuses on the “well-being” of people. The dots represent where each institution gravitates toward in terms of how the organization’s innovation initiative may be perceived by others.

If an institution is in one part of the four quadrants, it should not be interpreted that it is limited to having only that kind of innovation. For example, Johns Hopkins Hospital has a strong research arm as well as a Center for Bioengineering Innovation and Design that is a joint effort at the university level between the medical and engineering schools (Technological/device innovation).

However, since only the Center for Innovation in Quality Patient Care is a part of both the medical school and hospital, the primary or dominant type of innovation at Johns Hopkins Hospital has been designated in the quality & safety innovation quadrant.

Out of the four kinds, service innovation is the nascent, “innovation frontier.” The model for this kind of innovation is the hospitality industry where the notion of designing for services has been around for more than 80 years.5

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Service innovation & Cleveland Clinic

Cleveland Clinic has all four kinds of healthcare innovation represented in its organization.

The Quality and Patient Safety Institute explores innovative ways to enhance quality metrics and safer environments and processes for patients and families. The Lerner Research Institute specializes in translational and clinical research. Its mission is to understand the underlying diseases and to develop new treatments and cures. Cleveland Clinic Innovations (including the Global Cardiovascular Innovation Center) continues the legacy of technological innovation at the Clinic. Beginning with a pressurized rubber suit for surgical patients (1903) and the first successful blood transfusion method (1906), Cleveland Clinic continues to engage in innovating devices/technologies and creating spin-off ventures. Hence, Cleveland Clinic’s positioning on the map is supported by its strong emphasis on technological innovations.

The Office of Patient Experience (see next section) is the group that has been formed to explore “service innovation.” There is great desire for the organization to start moving into this emergent space.

At Cleveland Clinic, experts from organizations such as the Ritz-Carlton, Disney Institute, Lincoln Center for the Performing Arts, Siegfried & Roy (i.e. Empathy & Innovation Summit), and also Four Seasons have been invited to begin conversations around service innovation. The idea of performance (i.e. Disney refers to their employees as cast members) may begin to shift and challenge parts of Cleveland Clinic, which at this time can be characterized as an “engineering culture.”

“Patients today are savvy healthcare customers. They judge healthcare providers not only on clinical outcomes, but also on the courtesy of their personnel, the convenience of their facilities and their ability to deliver excellent service.”

- Dr. Delos M. Cosgrove
Office of Patient Experience & HCAHPS

“...and soon afterwards, the Office of Patient Experience. The Office of Patient Experience has played a pivotal role in raising the level of awareness of patient experience at Cleveland Clinic, starting various initiatives such as the H.U.S.H. Quiet at Night program to address the issue of nocturnal noise levels, and importantly, facilitating conversations around the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey (please refer to Appendix A for details about the HCAHPS and why they are important). To assist the Office of Patient Experience, our group investigated the nature of the HCAHPS survey and discovered an interesting paradox between the above-the-national-average scores that measure overall satisfaction (questions 21 & 22) and the less-than-national-average (or well below the targeted 90th percentile) scores that measure parts of the patient experience.

While there are many ways to interpret and organize the HCAHPS survey (see Appendix B for more details and a breakdown of the survey questions),

one way is to organize the questions into parts and wholes. In the above visualization, the green outer rings capture all the HCAHPS questions except 21 and 22 and they have been grouped into categories of communication, information, services, and environment. Communication captures questions that deal with empathy and behaviors between caregivers and patients (e.g. “Did doctors treat you with courtesy and respect?”). Information envelops straightforward questions that deal with “knowledge” and are not necessarily tied to emotions and empathy (e.g. “Did hospital staff tell you what the medicine was for?”). Information is inside the domain of communication since it is a form of communication. Services deal with staff responsiveness and pain management. Environment provides a place for questions that asks about cleanliness and noise levels of the stay area.

The blue area is the totality of the patient experience.

One of the important questions when looking at this visualization is, “Can service innovation begin to bridge the gap between the parts and the whole and also raise the quality of the parts to match the whole?”

Caregiver & patient communication

Totality of hospital experience

Parts of patient experience

Communication

Information

Services

Environment

Safe Zone (positive scores)

e.g. successful surgery

When looking at the HCAHPS this way, it is glaring that a bulk of the questions deal with issues of communication between caregivers (doctors, nurses, staff) and patients (and families).

As mentioned in the previous section, communication captures emotional and behavioral types of communication as well as straightforward information that is exchanged between caregivers and patients.\(^7\)

Setting the scope of our interest to communication between caregivers and patients was an important first step in the process and would eventually form into our problem statement.

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Strengths of Cleveland Clinic

“The result of such an organization will be that the entire staff - the bacteriologist, the pathologist, the biochemist, the physicist, the physiologist, and radiologist, no less than the internist and the general surgeon, each, we hope and believe, will maintain the spirit of collective work, and each of us will accept as our reward for work done, his respective part in the contribution of the group, however small, to the comfort, and usefulness, and the prolongation of human life.”

- Founder Dr. George E. Crile

Cleveland Clinic is a physician-led organization. Along with Mayo Clinic, Cleveland Clinic takes great pride in this unique form of leadership.

This is the way it was founded and in many ways this spirit of collective work led by the physicians is they way many describe it today.

There is much to boast in this culture where physicians lead the programs, institutes, and innovation. Many of the physicians have patents in their name and contribute heavily to the ongoing development of new ideas.

Physicians are the soul, the “officer core” (also referred as one of the “guardians of the enterprise”), of Cleveland Clinic and patients and families travel from near and far to receive treatment from these world class caregivers.

A challenge for Cleveland Clinic

While this model of leadership (i.e. physician-led) offers much strength, it also has its challenges.

Upon exploring the domain of caregiver and patient communication that was identified in the last section, an important issue began to emerge in this area (Appendix C is a list of other issues the group identified as possible areas of exploration). While physicians at Cleveland Clinic are great formal leaders, there is the challenge of being servant-leaders. Another way of stating the issue is, “As a physician-led organization, how can Cleveland Clinic’s ‘officer core’ be leaders at the same time not leaders?”

This issue can be illustrated in an interaction that two of our team members witnessed at Cleveland Clinic between a caregiver (further details are not disclosed to preserve anonymity) and a patient. The patient was told by other doctors elsewhere that her leg would need amputation but the physician at Cleveland Clinic was able to save it. Despite this, she complained about his arrogance and poor communication skills.

When we asked the caregiver after this exchange what will be done, the response was that the physician who provided treatment for that patient is a seasoned and senior physician who is at Cleveland Clinic for a reason - he is a world class expert at what he does. To raise such an issue to this doctor and say he needs to change his behavior and communication with patients is not an easy task. The caregiver’s response was, “It's a touchy issue.”

Providing quality interpersonal interactions between staff and physicians, physicians and physicians, families and physicians, and, most importantly, patients and physicians is a formidable challenge for Cleveland Clinic.

Problem statement:

It is difficult for Cleveland Clinic caregivers to change the behaviors of physicians with patients and their families.
03. Hypothesis

Patient journey • Why focus on discharge?
A patient’s journey consists of the flow of patient actions, thoughts, emotions, and interactions in an environment of the patient. There are various “entry points” for a patient’s journey. This journey could initiate when a patient looks up information about her condition online and stumbles across the Cleveland Clinic website, as soon as her primary care doctor recommends she visit a specific doctor at Cleveland Clinic, or even through an accident that brings the patient to the doors of Cleveland Clinic’s emergency services. The patient’s journey with relations to Cleveland Clinic could end once the patient leaves the physical environment, arrives home, transitions to her next care facility, or may not end for many years since she may continue to receive care due to an ongoing condition.

**Hypothesis:**

Focusing on building quality encounters between doctors and patients during the discharge phase makes a memorable impression and will benefit an important part of the patient journey.

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Leadership thoughts on discharge

“I believe this [discharge phase] is the Achilles’ heel - the last day or two of hospitalization. This exit is important - when people are well enough to be annoyed, and then they don’t get the instructions they need, and go away mystified ... instead of feeling good about knowing how to take care of themselves. This is also a big part of re-hospitalizations because people leave and they really don’t understand the instructions. And I don’t think it’s bad patients - it’s a lot to do with communication. Doctors are talking way above most people’s ability to understand (13th grade level as opposed to 3rd grade level of common understanding). We have data on all this.”

- Dr. Eugene Blackstone, Head of Clinical Investigations at the Sydell and Arnold Miller Family & Vascular Institute at Cleveland Clinic, interviewed on March 10, 2011

“Discharging a patient from a hospital - in my opinion - is probably one of the most important objectives that has to be undertaken immediately. This whole domain of transition of care is exceedingly important ... and we have this terrible problem with high re-admission rate ... you can be the sickest person in the world and come in, have an operation, and have your life saved, and have dozens of people hovering over you. Then one day, you’re at home and all you have is your family, if you even have family. I think that [discharge phase] is a huge area of need. We have taken small bites, but they’re very small bites.”

- Dr. Randall Starling, Head of the Section of Heart Failure and Cardiac Transplant Medicine, Vice Chair for Clinical Operations, interviewed on April 10, 2011
It has been argued that scientific medicine is the very essence of the concept of “Patients First.”12 This approach collects survey data and other types of metrics and have been proven to produce better outcomes such as in the case of the Cardiovascular Information Registry, a collection of data across several decades. Cleveland Clinic holds “an enormous range of health information that can be retrieved at the touch of a finger, and sliced and diced in a thousand different ways.”12

Design research is another way to gather data (e.g. emotions) that complements the rich data that are collected every day at Cleveland Clinic.13 Design research gathers data primarily in the field and can consist of observations (ethnographic-type research), co-creation, co-designing/participatory design, and generative-making activities, among others.

Our team used the following research methods for this project:

• Participating in conferences related to healthcare innovation
• Participating in the H.E.A.R.T.™ Service Recovery program
• Brainstorming with the Office of Patient Experience
• Observations
• Interviews
• Participatory design tools & methods

H.E.A.R.T.™ program participation

It was a great experience participating in Respond with H.E.A.R.T.™ Service Recovery program offered by the Office of Patient Experience and overseen by the Department of Nursing World Class Service. Most of the participants were non-physicians and many of them were engaged with the narratives that were shared throughout the two hour session.

One of the course’s highlights is a set of role-playing activities to let the participants try out the service recovery model under different scenarios. It is a great way to engage the caregivers and provide a prototype of how the service would be implemented in a real setting. This model offers a tool for how caregivers can react and use caring words when complaints arise.

Brainstorming with the OPE

Our team had an opportunity to work with two staff members of the Office of Patient Experience who have many years of experience as nurse practitioners at Cleveland Clinic. They were insightful in pointing out the various challenges in the discharge experience.

This session was helpful in gaining insight into the mechanics of what happens in the backstage among caregivers for a “happy path” (in-patient going directly home after a procedure) as well as an “unhappy path” (in-patient going to a long-term care or skilled nursing home facility) during the last moments of a patient’s stay. Going through the parts of the process revealed much complexity surrounding the discharge experience.
Observations

Observing the raw setting of caregivers and patients and how they act and live is a great way to get insights. While shadowing caregivers, it was evident that there is no idle employee at Cleveland Clinic. Individuals have their own rhythm and loose-script on how to interact with patients and families.

Patients and families have their own set of needs and desires. One of the family members of a patient (shown below) who has been at the Clinic for several months livens up the room with seasonal decorations - a snowman for Christmas, four leaf clover stickers on the wall, Easter basket for the upcoming holiday - to stay preoccupied and comfort her loved one.

One-on-one interviews

One great way to gather data is to directly engage with patients and caregivers, preferably in their natural environment (e.g. patient’s room at the hospital). Through personal networks, a wide range of physicians and patients were interviewed.

To get an understanding of the discharge experience, one-on-one interviews with caregivers, patients, and families from Cleveland Clinic, University Hospitals, MetroHealth system, and private practices were arranged. In addition, our team met with a few leaders within Cleveland Clinic to gain clarity about the problem statement and hypothesis. These interviews consisted of questions as well as doing activities (see next section).
### Interview tools & methods

In addition to questions about the discharge phase, interviewees were asked to participate in two activities. The first is a service blueprint activity. Caregivers and patients were asked to depict their/the discharge journey and encouraged to share personal stories during their 1.5 hour interview. There are areas that capture the front stage interactions between patients and caregivers, back stage actions performed by caregivers that are not visible to patients/families, and supporting processes (i.e., EPIC) that allow for the exchange and flow of information across the various moments of the patient journey (see Appendix D for a quick download of how to use and interpret service blueprints). The second activity is a collection of metaphor cards that help patients and caregivers share the emotional dimensions of their discharge experience. Interviewees were asked to pick 3 cards that represent their discharge experience and share stories of why those were chosen. Some insights for both activities are shared in the next two pages.
“I was at a session recently called ‘Act with Heart’ where they had a man come in and he related an experience of his father who had been hospitalized. He sat in front of a group of about 100 cardiologists and surgeons and in a matter-of-factly way looked us in the eye and said, ‘My father was transferred from Metro [to Cleveland Clinic], he was in the coronary care for 5 days, and we never met the attending physician – we don’t even know his name.’ That’s a miserable failure.” - Cleveland Clinic physician

“Patients could be there anywhere between an hour to twelve hours after we finish because they’re waiting for transportation to a nursing home or a family member to pick them up ... or internally they need one last set of blood samples ... there’s definitely a gap between when we’re done seeing them and when they leave the hospital ... I not only do not touch that process, I have no idea what happens in that process ... the patient disappears.” - Cleveland Clinic intern

“Nowadays, the doctor’s big role is to have gotten the d/c orders done. And then they’re off doing other things. So the doctor is probably not even around when this is happening. If it’s a surgeon, may come in at 6 before her 7 am case, wake you up and say, ‘Hey, you feeling okay?’ Patient says, ‘uhhhhh ehhhhhh ... I’m fine ...’ Doctor says, ‘Good! Good! Your leg looks great! I’ll see you in a couple weeks at the office. Bye!’ and they’re out of there.” - Cleveland Clinic physician

“I’ll tell you what really contributed to patient experience for our family. After having a procedure done and then being discharged, when the person [doctor] who performed the procedure then calls us that night and asks, ‘How are you doing? Is there anything I can do?’ That makes all the difference in the world.” - Patient/physician

“Some patients are awake because they know we’re coming ... you ask them silly questions like, ‘How was your sleep?’ having just woken them up. They ask a lot of questions but I try avoid giving committed answers because plans can change.” - Cleveland Clinic intern

“If the doctor gave me something I’d love it – I would treasure it. It could be anything – like a pen from the department. Our doctor said, ‘Before you leave, I’m going to give you a labcoat.’ I said, ‘I’d love that!’ And he said, ‘I’m going to ask Cleveland Clinic to do it for you.’ Even if the doctors gave us something symbolic, I don’t mind taking it. It tells me that I’m special to the doctor. That means he cares about us and put us in his mind before coming to see us – he said, ‘Let me do something special, let me ‘melt the eyes’’. When you’re comfortable with the doctor, you heal better.” - Patient’s family
Cleveland Clinic Patient Discharge Experience: Service Blueprint

**Discharge process**: highly complex with lots of variables (i.e., depends on the type of condition for which the patient has come to receive care).

- **Physicians** may not play a big role during a typical discharge experience; if there is a physician, she is most likely an intern or resident.

- **If an attending or chief physician is present**, the interaction with patients is at the level of assessing a patient's biomedical condition; the attending is trying to optimize various data (i.e., doctors have varying estimates of when discharge can be considered). In some cases, the attending is not the most optimal - in fact, these interactions may be quick, swift, and in poor quality (e.g., a quick check to see if a patient's biomedical condition is okay and the physician is off to see another patient, usually, someone with more severe issues).

- **Once the patient has been instructed on how to take medication and how to take care of herself at home or a new facility, many times, leaving the hospital may be entirely up to the patient** (i.e., doctors have moved on to other patients/cases); for patients and families, this means taking care of parking, getting the airport to go back home, and readjusting back to life at home (e.g., paying hospital bills, home utility bills, catching up on missed emails and work, etc).

**Some take-aways from this analysis are:**

- Discharge process is highly complex with lots of variables (i.e. depends on the type of condition for which the patient has come to receive care).

**Analysis of the discharge experience**

The Cleveland Clinic patient discharge experience service blueprint to the right captures the frontstage interactions between patients/families and caregivers (doctors, nurses, case managers, discharge planners, physical therapists, social workers), backstage interactions among the caregiver staff, and also supporting processes (we’ve mainly captured how information processes are tied to EPIC) for a case when a patient must go to another facility and has the assistance of some family members. Some key considerations - including thoughts and actions - at each moment in the discharge journey are captured inside each bubble.

Some take-aways from this analysis are:

- **Discharge process** is highly complex with lots of variables (i.e., depends on the type of condition for which the patient has come to receive care).

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Pain points and emotional considerations

The service blueprint of the discharge experience on the left has been overlaid with an emotional dimension. This emotional dimension is a short narrative from the patient perspective that captures frustrations, anxieties, and sadness that may occur during the discharge phase of the patient journey.

If a patient is not going to be able to go home and has to be moved to a post-acute care setting, long-term care setting, or skilled nursing facility, this news may be difficult for some patients. It is a lifestyle transition that requires a readjustment of one’s habits as well as accepting big changes that may or may not have been expected. If a patient has accepted that things will not be the same, he/she still must consider what is most meaningful to her/him and make it an important choice (e.g., a patient may decide to live with her daughter and choose not to go to a healthcare facility for the pleasure of being able to spend time with her grandchildren). Therefore, the “Accepting” moment of the patient journey during discharge is critical.

Another critical moment during the discharge phase is the “Learning” (“Educating,” from the caregiver perspective) period. Although this is a vital moment to transfer instructions on how to best care for oneself and transfer medication instructions, patients may be physically and emotionally drained; therefore, they may be unable to fully comprehend what the caregivers are telling them. Some may just be eager to get out of the hospital so the information does not process well. In addition, while it is ideal that caregivers can take their time to provide these instructions, they are also busy, most likely multitasking and caring for multiple patients, and may not provide a comprehensive discharge plan.

If this “Learning” moment does not have sufficient negotiations between caregivers and patients as well as quality interactions, patients may incorrectly take prescribed medications or not adhere to the care plan created by the hospital discharge team.14 This results in early readmission or the worsening of patients’ conditions and has severe consequences for them as well as Cleveland Clinic.
There are four major themes that emerged from the research:

**Redeeming the time**
"Filling the unforgiving minute" - Rudyard Kipling ("If")

Spending quality time with patients is a challenge for physicians who are already overburdened with other tasks (e.g. documentation). This theme captures the desire of caregivers as well as patients to make the most of time spent together. If time is limited, there may be a way to make the most of it.

**Simplifying information**
"Omit the unimportant" - Dieter Rams

Patients receive a lot of information during the discharge phase and have a difficult time differentiating and understanding the essential information. It is a challenge presenting information in a way that resonates and sticks in the mental model of patients and families. One way is to keep the information simple.

**Restoring dignity**
"What a piece of work is a man" - W. Shakespeare ("Hamlet")

Upon entering a healthcare setting, patients will often “lose” their dignity. This may be inevitable as doctors must consider broken body parts/systems as a technician would. However, once treatment is done (and even during the process), people are still people and possess the sanctity of life. This theme captures the need to uphold the dignity of people as often as possible and in case when it’s “lost,” to restore immediately.

**Supporting transitions**
"You cannot step into the same river twice" - Heraclitus

After treatment, people must go through a physical or environmental transition as they prepare to move from the hospital to another facility or home. This theme of transition also captures the notion that people’s lifestyles and/or being may be completely altered. In many cases, they may return to the same location as a different person, or a different location as a different person.
Ideation using actions, words, and props

Using the four themes from research, three main ways of understanding interactions between doctors and patients were explored:

**Actions:**
The “Cleveland Clinic Experience” interactive learning sessions provide a great way to interact with patients through the 10/4 Rule: “At 10 feet away, make eye contact and smile. At 4 feet away, maintain eye contact and greet warmly.” The filter of actions during our team’s ideation process wanted to push the encounter closer than 10 or 4 feet.

The question asked was, **“What are some actions between doctors and patients that can happen at 2 feet away? At 1 foot away?”**

**Words:**
Great care has been put into thinking about the right words when communication occurs between doctors and patients. In fact, the Respond with H.E.A.R.T.™ service recovery program provides a wide range of possible scenarios when caregivers face complaints from patients and families. Much of the words in the context of Respond with H.E.A.R.T.™ have been formed as a response or reaction to issues that may arise in the day-to-day delivery of care. Also, Respond with H.E.A.R.T.™ provides verbal (as well as actions) guidance on what kind of words and in what ways caregivers should respond to mostly medically related complaints.

The question asked during our ideation was, **“What are some proactive words doctors can use to interact with patients? Also, can there be conversations not related to medicine or healthcare?”**

**Props:**
In line with the idea of performance (i.e. the stage metaphor of the service blueprint), certain props can be cues or triggers for behaviors. Since doctors and caregivers are very busy with numerous things to consider at any given moment, certain props could provide an affordance - that is, a quality of an object, or an environment, that allows an individual to perform an action.

The question asked during our ideation was, **“What are some props - preferably things that are already present in the room - that could invite an interaction between doctors and patients?”**
Henry has just woken up from surgery and has no idea where he is and what is to happen next. Dr. Cameron walks in, sits next to him, and gives Henry a menu-looking card. He then asks Henry to open it up and tells him that this little card contains a simple map of what Henry can expect during the last few days of his stay at Cleveland Clinic.

Henry opens the card up to look at the content inside. As Dr. Cameron said, there is an easy-to-read map with boxes, bold type, and arrows that summarizes the events Henry can expect to occur during the last moments of his stay. Dr. Cameron points to where they are in the map and tells Henry that he will see him again at another point in the map. Dr. Cameron encourages Henry to think about questions to ask in the meantime. Henry feels pretty good knowing that he has but a few boxes to go through before he heads home to see his grandchildren.

Mrs. Gibson has been told by Dr. Victoria that she can go home soon. She has made all the travel arrangements and is waiting for her daughter to pick her up in a few hours. Before she leaves, Dr. Victoria stops by for five minutes to give Mrs. Gibson her “Top three kit,” which contains 3 contacts for Mrs. Gibson should anything come up (or if she has any questions), 3 things she must do, and 3 things she must not do.

After quickly reviewing each card, Dr. Victoria asks Mrs. Gibson if she has any questions. They review the simple points one more time to make sure Mrs. Gibson understands everything. The cards are then placed in a folder along with the other documents Mrs. Gibson is given for a proper discharge.

Once she gets home, Mrs. Gibson is able to put all three cards onto her refrigerator as easily accessible reminders since the cards have magnets on the back side.
Words, words, words

Physicians already speak to patients about their biomedical condition (1st type of words). They also can use the H.E.A.R.T.™ framework to respond to complaints (2nd type of words). What are some proactive, non-medical words doctors can use to relate to patients? (3rd type of words)

To come up with a set of keywords that physicians can use to proactively have conversations with patients, The Office of Patient Experience can organize a workshop with caregivers and brainstorm possible conversation starters with patients. These could be centered around helping patients readjust back to their lives.

Dr. Julian uses one of the conversation starters from the workshop he attended by asking his patient, Mrs. Rooney, “So, Mrs. Rooney, what is the first thing you plan on eating when you get home?” Mrs. Rooney shares her fantasy of eating her favorite ice cream and the two share a moment of laughter.

Insights from research:

• Doctors with great communication skills use cues from their environment or previous interactions with patient to follow up with something happening in patient’s life outside the hospital (e.g. family vacation)
• Patients have concerns about things happening outside the hospital, such as home and family

Dignity blanket

Carole has been prepped for surgery by caregivers at Cleveland Clinic. Instead of lying naked on the operating table where people can see her exposed body, a caregiver covers her with a blanket.

Carole has surgery for several hours and it ends successfully. She is already in her bed when she wakes up from her sleep.

Afterwards, and during the beginning moments of her discharge experience, Dr. Beth stops by and presents her with the washed blanket that was used to cover her. She feels protected from this small gesture - surprised even, that her caregivers covered her when she was most vulnerable.

Insights from research:

• Patients lose their sense of dignity when they can’t go to the bathroom on their own, can’t wear their own clothes, and have to expose their body parts
• Some doctors provide preferential treatment to people they know especially when they think other patients and families are not looking
Joe has been distraught with the changes that will happen in his life after his big surgery. He only gets a moment with Dr. Pete - just enough to go over his biomedical condition but not enough to ask some of the questions regarding his lifestyle changes. Dr. Pete apologizes for the short face time and has to run along.

During the weekend, Dr. Pete gives Joe an unexpected call just to check up on him. Dr. Pete says, “Hi, Joe. How are you feeling? I’m sorry I had to run the other day. Thought I’d give you a call just to say hi and see how you’re doing.” Joe can hear Dr. Pete’s family in the background and realizes that Dr. Pete is calling him during his personal time.

Not wanting to take too much of Dr. Pete’s time, Joe asks him one or two questions and really appreciates Dr. Pete’s thoughtful phone call. While he still has a long list of outstanding questions, just having a 5 minute phone call with Dr. Pete has put him at ease and less anxious about his condition.

Insights from research:
• One great way for doctors to spend time with patients is through a simple follow-up phone call when they have more time and when away from the stress of the hospital environment
• Patients appreciate this simple gesture that is not often practiced and are surprised if it ever happens

Bob’s doctor walks into his room and says while taking off his white coat, “Bob, I only have about 3 minutes but I wanted to come in here to ask if you have any questions or if you need anything from me.”

Bob has been concerned about where he should go next after leaving Cleveland Clinic’s main campus and lets his concern known to Dr. Carson. Although not able to stay and explain everything, Dr. Carson acknowledges Bob’s concern and says he will let his team members know and will do his best to help Bob in this matter.

Insights from research:
• Some patients consider doctors unapproachable because they always seem very busy
• Patients also feel like it’s not appropriate to ask questions even though they may have a list of questions since they don’t want to be rude by asking for some personal time with doctors
Insights from research:

- Discharge is usually confirmed on the day of and it’s really a moving target - therefore, during most of the discharge, caregivers can’t make guarantees.
- Patients treasure what doctors give them even if it’s something small.
- Small activities of daily living matter to patients.

Charles has been lying in bed for days and is eager to leave the hospital. When he asks his doctor when he will be discharged, he hears a wishy-washy answer - “Hopefully soon,” and the next day, “We’re almost ready to let you go home.” This uncertainty only adds to Charles’ feeling of not having control over his health and life during his hospital stay.

Instead of just giving Charles a collection of uncertainties, Charles’ doctor provides him a service that is guaranteed - a free pass to use some of the grooming services at the Wellness Institute.

Not having had his hair washed since his surgery, he requests to get his hair washed. This milestone helps him take the first step toward recovery and getting reimmersed back into some of the small, functional tasks of his day-to-day life.

Insights from research:

- In many cultures, it’s rude to say goodbye and then close the door - people are expected to walk out to where the guest’s car is and wave goodbye as the guest leaves.
- There is no real interaction between doctors and patients as patients are leaving the hospital.

Today is Dorothy’s last day at Cleveland Clinic and she’s just about to head home. As she is escorted to the elevator to go downstairs, she is greeted by Dr. Simon who was the main physician who treated her during this inpatient experience. Dr. Simon walks with her to the elevator, presses the elevator button for her, and shakes her hand to wish her the best. As the elevator door closes, she can still see Dr. Simon standing there waving goodbye with a firm smile on his face.

As Dorothy approaches the exit for the clinic, she is taken to a designated “Check out station” that has a physician who provides any kind of guidance or last minute questions about medication Dorothy is supposed to take. Dr. Judy, who is at the station at this time, asks Dorothy if everything went well and if she has any questions about the information she received from her final contacts upstairs. Dr. Judy then says everything is good to go and wishes Dorothy the best.
Mrs. Porter’s doctor, Dr. Mary, is spending some time with her and explaining Mrs. Porter’s condition. The problem is that Mrs. Porter has no idea what Dr. Mary is talking about.

Instead of letting Dr. Mary continue, Mrs. Porter takes one of the Cleveland Clinic coins she was given at the beginning of her discharge experience and puts it in the jar. This lets Dr. Mary know that she is talking too “medical” and needs to speak in a language that Mrs. Porter can understand.

Dr. Mary smiles, realizing that she has been using “doctor-speak,” and says to Mrs. Porter, “Let me try this again.” Mrs. Porter is much more engaged this second time and is able to ask important questions related to her care. She also ponders about what she can buy at the gift store with all the coins she’s put in the jar.

Insights from research:
• Patients don’t know when to let the physician know that they don’t understand what he/she is saying.
  If medical jargon is used by physicians, patients may feel embarrassed to ask physicians to dumb down the language.

Jim is greeted by Dr. Susan after his surgery. He notices some badges and stripes on her shoulder and asks what they are and why some doctors have them and why some don’t.

Dr. Susan tells Jim that these badges are based on a ranking system based on feedback from patients. Her patients have given her high ratings for things like communication skills and empathy. She says she’s trying hard to earn her next badge - the third level of “empathy” - which is one rank higher than what she has currently.

The next doctor Jim sees is Dr. Nate. Jim points to Dr. Nate’s shoulder and asks why he doesn’t have the same badges Dr. Susan has. Dr. Nate says he’s fairly new and working hard to earn his first rank - the first level of “compassion.” He then asks Jim how he feels and takes some time talking with Jim before his assessment.

Insights from research:
• Physicians are competitive at Cleveland Clinic
• When mandates from the top of the organization are enforced, physicians comply reluctantly
• Dr. Cosgrove’s story at Harvard Business School when audience member asked him if Cleveland Clinic teaches its doctors empathy
To implement some of the concepts, the recommendation is to do a soft roll-out with approximately fifty physicians. This trial group would include 25 of the top 50 highly ranked HCAHPS performing physicians (i.e. performers ranked around 26-50) as well as 25 other well-performing physicians in the next tier (i.e. performers ranked around 51-75).

Physicians with high-scoring HCAHPS are recommended because they are already motivated and may have a willingness to try something new to further the awareness of patient experience initiatives. Physicians with low HCAHPS scores may not have the desire or enough motivation to try some of these ideas - they may even be turned off by some of the concepts since they propose some notions of doctor-patient interactions that are unconventional in the current landscape of physician behaviors.

By including a portion of the high-performing physicians, a control group could be established since these physicians are already doing well. Comparing them with the next tier of well-performing physicians should provide success metrics regarding the implementation of the recommendations.

Once there are signs that these concepts have merit and can also be evaluated, the next step would be to scale the concepts for implementation across a greater part of the organization. This could be done through workshops but the greatest test of whether or not these ideas have impact is to see if the fifty physicians in the soft roll-out have a word-of-mouth type of impact within their units and institutions. Ideally, these chosen physicians are leaders in their area of care and would have tremendous influence by being an example to their staff and other physicians.
Business case: costs

There will be several costs to implement the recommendations; however, many of them are marginal. Some of the costs will be incurred from managing additional consumable inventory such as the dignity blankets. Others will be incurred from internal consulting and training costs as well as the cost of printing materials.

The fifty-person pilot study would incur approximately $1,100 in printing costs of high quality training materials. Additionally, Cleveland Clinic would come to realize various time and resource expenses during the pilot program. Internal consulting and design costs for the design of training materials could be in the range of $150 to $300 per hour.

Business case: benefits

The return on the investment for this recommendation can be seen in at least three significant ways:

Patient Lifetime Value:
A major benefit is having people choose Cleveland Clinic for the long-term. In the Respond with H.E.A.R.T.™ Service Recovery training program, Cleveland Clinic notes that the Customer Lifetime Value (CLV) of each patient is approximately $1 million. When compounded with population growth - notably the growth in senior populations over 65 years old - this can quickly extrapolate into a significant sum. The number of people aged 65 and over is expected to grow an average of 3.28% per year from 41.1 million in 2011 to 46.8 million in 2015.16 This represents potential customers of Medicare, or more pointedly, approximately $5.7 billion of possible revenue from providing care to the elderly. The proposed concepts to improve patient experience could increase patient word-of-mouth marketing, resulting in attracting more patients to Cleveland Clinic.

HCAHPS, in-patient market, and government reimbursement:
The second benefit is the capture of the Medicare and Medicaid market. The current hospital market size is $757 billion, of which approximately 72.5% is in-patient services, amounting to $549 billion.17 Additionally, government healthcare programs account for approximately 48% of hospital spending with a total medical (in-patient, out-patient, pharmaceutical, and other) value of $809 billion in 2010. The estimated Compound Annual Growth Rate (CAGR) is 5.37% to $1,051 billion in 2015.18

The issues pointed out in this project are all the more important in this context since the HCAHPS specifically asks questions about doctor-to-patient communication and the discharge experience. According to numbers from Cleveland Clinic, if the HCAHPS do not improve by 2013 and remain similar to scores from 2010, there is a potential lost of $13 million per year from government reimbursement. The ideas in this report could mitigate this potential shortfall as well as capture more of the expanding healthcare market.

In addition, improving the discharge experience (i.e. handling information and education of patients better) could lower the readmission rate of patients. This, in turn, also has financial implications since the readmission rate is tied to government reimbursement.

Brand equity via service innovation:
Lastly, Cleveland Clinic could see benefits in service innovation. Cleveland Clinic has already begun to invest in areas of service innovation yet there is still much to explore in this space. Implementing some of the concepts to improve patient and doctor communication could position Cleveland Clinic as a global leader in service innovation and raise the brand equity of the organization. With regards to the discharge experience, since physicians all across healthcare institutions do not participate actively during this time, doing this well would provide a clear service differentiator that is not provided at most places.

Not only would Cleveland Clinic be considered as a place of great clinical outcomes, but also as a place that takes the notion of holistic care seriously with bold investments in patient experience.

15 H.E.A.R.T.™ training program refers to this as the “Cost of dissatisfied patients.”
16 Based on population data from U.S. census website: http://www.census.gov/.

Risks

The successful implementation of the concept recommendations will require management to pay attention to several risks:

First, if the concepts improve communication between doctors and patients during the discharge experience, Cleveland Clinic will desire similar executions of the proposed ideas in the earlier phases of the patient journey (e.g. prearrival, introduction, treatment phases prior to discharge - see page 22). The organization may also want these ideas to be rolled out to the regional hospitals as well as to its global satellite facilities. This will impact established processes, policies, and also shift the culture.

Another risk is potentially alienating highly skilled medical professionals who may simply not have the desire to learn and develop these “softer” people engagement skills. Being sensitive to these individuals and understanding their concerns will be necessary for a strategic corporate implementation.

Finally, there is a potential risk of breaking down professional boundaries between physicians and patients. While these recommendations aim to help physicians empathize with patients, one could argue that there is also value in maintaining a degree of distance and professionalism between physicians and patients. For patients who prefer to view physicians as professionals, creating a new perspective of physicians as friends with great interpersonal skills may backfire against a brand that currently is lauded as a place of skilled, technical professionals.

The space of service innovation in healthcare is ripe with much room for exploration and development. With stricter government reimbursement rules, an increase in the ability of patients to select their medical provider, projected population growth of the elderly, and a demand for better patient experience in all facets of healthcare, Cleveland Clinic’s ability to differentiate in the service innovation space is both necessary and desirable.

The design process and concepts shared in this project report provide a framework to help physicians - the leaders - deliver better services during a patient's leave-taking experience. Beyond this, the thoughts and recommended actions found in this project report may be a reference, a way to initiate dialogue around doctor-to-patient communication, and a point of departure for the caregivers at Cleveland Clinic.

Thank you.

06. Final thoughts

The space of service innovation in healthcare is ripe with much room for exploration and development. With stricter government reimbursement rules, an increase in the ability of patients to select their medical provider, projected population growth of the elderly, and a demand for better patient experience in all facets of healthcare, Cleveland Clinic’s ability to differentiate in the service innovation space is both necessary and desirable.

The design process and concepts shared in this project report provide a framework to help physicians - the leaders - deliver better services during a patient's leave-taking experience. Beyond this, the thoughts and recommended actions found in this project report may be a reference, a way to initiate dialogue around doctor-to-patient communication, and a point of departure for the caregivers at Cleveland Clinic.

Thank you.
Appendix A: Why HCAHPS?

Patients are increasingly making health care decisions based on their perception of “quality.” For example, patients may interpret quality as how well their doctors and nurses communicated with them, how well their pain was managed, how easy or difficult it was for them to get an appointment, whether they felt all of their questions were answered, and whether they had all the information they needed upon discharge.

There are several survey instruments and processes that have been designed to measure patient satisfaction at different touch points. Examples include surveys sent to patients after care received by home care providers (HH-CAHPS) and after an inpatient visit (HCAHPS). Hospitals routinely survey other areas of patient care, including emergency department visits and ambulatory surgery procedures.

Currently, only inpatient (HCAHPS) and home health care (HH-CAHPS) surveys are mandated by the Centers for Medicare & Medicaid Services (CMS). The program is intended to increase transparency around patient experience and aid consumers in their health provider and hospital decisions. Every hospital in the United States that treats Medicare patients is required to administer and submit survey results.

HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) is a standardized survey designed to measure patients’ perspectives of hospital care. It was developed by CMS in partnership with the Agency for Healthcare Research and Quality (AHRQ), two agencies within the Department of Health and Human Services. HCAHPS provides a standardized methodology that allows objective and meaningful comparisons among hospitals on topics important to patients.

Proposed reform legislation would require that a portion of hospitals’ Medicare reimbursement be linked to performance measured by the HCAHPS scores. This may occur as early as 2013.19

Appendix B: HCAHPS questions

The survey is composed of 18 questions about patient care, four screening questions, and five demographic questions. Eight critical aspects of care, referred to as the HCAHPS domains, are covered in the survey questions, including:

- Overall hospital rating and recommendation
- Communication with doctors
- Communication with nurses
- Communication about medicine
- Responsiveness of hospital staff
- Cleanliness and quietness of hospital environment
- Pain management
- Discharge information

HCAHPS Questions:
1. How often did nurses treat you with courtesy and respect?
2. How often did nurses listen carefully to you?
3. How often did nurses explain things in a way you could understand?
4. During hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?
5. How often did doctors treat you with courtesy and respect?
6. How often did doctors listen carefully to you?
7. How often did doctors explain things in a way you could understand?
8. How often were your room and bathroom kept clean?
9. How often was the area around your room quiet at night?
10. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?
11. How often was your pain well controlled?
12. How often did the hospital staff do everything they could to help you with your pain?
13. How often did hospital staff tell you what the medicine was for?
14. How often did hospital staff describe possible side effects in a way you could understand?
15. Did hospital staff talk with you about whether you would have the help you needed when you left the hospital?
16. Did you get information in writing about what symptoms or health problems to look out for after you left the hospital?
17. Using any number from 0-10, where 0 is the worst hospital possible and 10 is the best, what number would you use to rate this hospital during your stay?
18. Would you recommend this hospital to your friends and family?

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19 Information taken from the collateral material from the Office of Patient Experience.
Appendix C: Issues explored

Multiple issues identified by project group for possible exploration:

- Cleveland Clinic wants to think of patient experience broadly as an entire journey versus thinking about patient experience only in terms of aspects directly affecting HCAHPS domains
- There are Cleveland Clinic staff members who think their work directly affects patient experience versus those who do not see a connection
- Valuing patient AND family experience versus only focusing on patient experience
- Patients valuing overall Cleveland Clinic experience versus being dissatisfied with particular aspects of the patient experience
- “Empathy and Innovation” as desirable themes versus a culture that fears/respects numbers and makes decisions based on past results
- Maintaining existing programs versus developing new products/services/programs guided by the new Office of Patient Experience team’s vision
- Integration and standardization of innovative services versus designing for the specific personality and culture of an individual regional hospital
- Cleveland Clinic’s physician-led organization characterized by formal leadership v. servant-leadership