GoShadow
Dr. Tony DiGioia
December 6th, 2015
www.pfcc.org/IHIForum

Disclosures
Medical Director, Bone and Joint Center and Innovation Center of UPMC
Faculty, Institute for Healthcare Improvement
Founder GoShadow LLC
President, AMD3 Foundation (not-for-profit)

Learning Objectives
• Shadowing is a standardized approach to measure experiences and processes
• Provides the emotional connection that creates an urgency to drive change
• A real-time tool that will help your teams transform care

Why Change?
• No industry has survived without focusing on the needs and wants of their end users
• Patient “Activation”

The Opportunity
• New delivery systems coupled with new payment systems
• The biggest hurdle is the lack of the “How to…”

Why Change?
You run this hospital…where would you start and what would you do?

OK... what would you do?

Why Shadow?

This is Your Hospital Care Team


Contacts/Patient: 86/Day and 260/Hospital Stay i.e. Opportunities to Impact a Patient and Family Experience
Patient Centered Value System

Experiences

Outcomes

Cost

3 Keys For The New Patient Centered Value System

1. View All Care as an Experience Through the Eyes of Patients and Families
2. Co-Design
3. Implementation and Teams

The Patient and Family Centered Methodology and Practice (PFCC)

The Experience Based Design Sciences

- Designing services, interactions, processes and environments for the complete experience
- Making it better for the end user
- Strength: Implementation and the “How To”

www.pfcc.org

The Patient at the Center Aligns The Catalyst For Change With Our Mission

Shadowing

Shadowing is repeated real-time observations of patients and families as they move through each step of their healthcare journey... not a “secret shopper”
Shadowing is Eye Opening

We watch what people do (and do not do) and listen to what they say (and do not say). The easiest thing about the search for insight – in contrast to the search for hard data – is that it’s everywhere and it’s free...

...This enlightened perception reveals the experience, not just the process.

Change by Design, Tim Brown

GoShadow

• View All Care Through the Eyes of End Users
• Determine Your Current State
• Co-Design
• Improvement Opportunities
• True Costs
• Build Implementation Teams

GoShadow for Process (and Performance) Improvement

• Time studies
• Transitions in care
• Communication gaps
• Inefficiencies
• Bottlenecks
• Redundancies

Care Experience Flow Map

(...And Fewer Hassles)

Care Experience Flow Map (Hassle Map*)

Shadowing: The Urgency to Drive Change*

URGENT CHANGE STARTS NOW

Shadowing Changes Your Perspective

I can't tell you how impactful Shadowing is; once people Shadow, they talk about care differently—getting to view care through the eyes of patients and families truly provides Care Givers with a different perspective.

- Susan P. Ferguson
  Chief Nursing Officer,
  Baptist-Collierville

Who Can Shadow?... Anyone

- Any Care Givers
- New Hires and Light Duty Staff
- Health Profession Students, Volunteers, Summer Interns
- Patient Advocates

Impacting Future Healthcare Leaders

Students in...
- Medical School
- Nursing Students
- Public Health
- Graduate Students
- Pharmacy
- Health
- Information
- Management

Merging Technology and Process Improvement

goshadow.org

GoShadow

iOS App Collection Tool

Cloud-based Collaboration Platform
GoShadow Reports

- Care Experience Flow Map
- Comprehensive Report captures all qualitative and quantitative aspects
- Observational Report: Opportunities for improvement that the patients and families propose
- Opportunity Report: Highlights key observations
- Time Studies

I. Patient and Family “Activation” and Partnerships

- Patients’ and families’ knowledge, skills and willingness to help
- Improves clinical outcomes

II. Population Health

Populatio health management will deliver higher value and preserve the patient at the center, which is really what we are all about.

– David Nash, MD, MBA

III. Joy at Work = Collaborative Solutions

We MUST throw a lifeline to Care Givers

PFCC + Shadowing @ UPMC

70+ Care Experiences

United States: 27
International: 7

If Any Doubts...Go Shadow

- Engages patients and families as full partners in care delivery redesign
- Opens eyes and creates urgency to drive change

Aim for the Heart and Backfill with the Data

About You

A Shadowing Story

“Sarah? Get the broom…”

Power of One

Shadowing

Shadowing is the repeated real-time observation of patients and families as they move through each step of their health care journey.

Lisa Schraeder, MS ~ Senior OD Consultant ~ Patient Experience ~ PFCC Innovation Center of UPMC
Shadowing is a Multi-Purpose Tool…

Is Co-Designing with Patients and Families

Another Benefit: Co-Design
Experience Based Co-Design
Consulting and Advising
Service Recovery
Engagement-Partnership-Activation

Creates Urgency to Drive Change

Engages Care Givers in Designing Improvement

Will Break Down Silos
A Care Giver’s Perspective

Do you view care differently now?

“In addition to being the eyes and ears for our patients and families, I have gained a completely new perspective for how hard each of my colleagues work— their tireless dedication is awe-inspiring. I have become a better listener, more empathetic, and look for opportunities to connect people, processes, and ideas for improvement.”

An Administrator’s Perspective

I am no longer a fan of surveys. Everyone always told us how nice we were and gave us high scores. Shadowing, however, showed us our real opportunities to improve the patient experience.

Pat Fustich
Administrative Assistant
Pediatric Surgery

Noreen Fredrick
RN, MSN, DNP
Executive Director, Mon Yough Community Services

Is a Terrific Onboarding Tool

Enlightens Leaders of Tomorrow

Can Be Used for Time Studies

Highlights Inefficiencies and Waste

I am no longer a fan of surveys. Everyone always told us how nice we were and gave us high scores. Shadowing, however, showed us our real opportunities to improve the patient experience.

Pat Fustich
Administrative Assistant
Pediatric Surgery

Noreen Fredrick
RN, MSN, DNP
Executive Director, Mon Yough Community Services

This experience has given me a different way to look at patients in the hospital setting which I think is very valuable.

“Shadowing helped to see patient care in action rather than just hearing about it in theory in my classes.”

“From this experience, I was able to learn that it is about the patient and the family.”

PFCC Innovation Center of UPMC
Measures True Cost

A Surgeon’s Story...

Why Shadowing Matters

‘Go Shadow’ 101:
The Before, During and After

What to Know Before You Go

- Not a Secret Shopper
- Beginning and End
- Who and # of Shadowers
- How to approach

Overcoming Hurdles

“We started Shadowing a year ago...

Our challenge was cold calling patients over the phone to ask them about Shadowing but once we got over that, we found Shadowing to be extremely powerful and got so much feedback.”

During Shadowing: In the Field

Note:
- Care Givers
- Touchpoints
- Time
- Patient Comments
- Your Observations
- Anxiety/Emotive Response

Cynthia Rasmussen, MD
Harvard Vanguard Medical Associates
FAQ: Won’t Care Givers change their behavior if they know they are being Shadowed?

FAQ: Should a Shadower ever intervene on behalf of the patient or family?

FAQ: How Many Times?

After Shadowing: Sharing Findings
- Tell the Patient’s Story
- Report in Order of Experience
- Share Observations & Recommendations
- Include Care Experience Flow

Tangible and Thought Provoking
- In fact, start with mapping what you think the flow looks like...
- Let's use an outpatient office visit as an example...
Office Visit Pre Shadowing
Care Experience Flow Map

Touchpoints:
- Clinic Suite
- Reception Desk
- Waiting Room
- Exam Room

Care Givers:
- Registrar
- Medical Assistant
- Nurse
- Physician Asst./Dr.

Because...

Office Visit Post Shadowing
Care Experience Flow Map

Touchpoints:
- Parking Lot
- Clinic Suite
- Reception Desk
- Waiting Room
- Exam Room
- Reception Desk
- Main Hallway
- Lab
- Clinic Suite/Desk
- Pay Station
- Parking Lot

Care Givers:
- Parking Attendant
- Housekeeper
- Registrar
- Medical Assistant
- Nurse
- Physician Asst./Dr.
- Greeter
- Phlebotomist
- Lab Tech

Your Turn!

Go Shadow
In the Field

ER Hallway

ER Treatment Room

Patient and Family Reunion

Imaging

Creating Your Shadowing Report

What to Include
GoShadow Reports

- **Care Experience Flow Map:**
  - A map of the patient’s journey including all TP’s and CGs
- **Comprehensive Report:**
  - Captures qualitative and quantitative aspects of the care experience
- **Observational Report:**
  - A report that captures as much info you were able to gather while shadowing
- **Opportunity Report:**
  - Highlights any observations that may be an improvement opportunity
- **Time Studies**
  - Tracks the amount of time patient travels from TP to TP and with Care Givers

Putting It all Together

Your report...the patient’s story...will compel people to action.

Writing and Presenting Reports

- Offer suggestions made by patient and family
- Include your own observations and recommendations
- Deliver tactfully and include positive observations
- Remember to note any emotive response as that could become a priority project
- Pictures are worth a thousand words

Pictures are Worth...

QUIT PLEASE
EXAMS IN PROGRESS

...A Thousand Words

Your Turn

Care Experience:

Date:

Shadower:

Request:
Patient and Family Bio

ED Care Experience Flow Map

Touchpoints:  
Care Givers:

In the Field

Exam Room

Waiting Area

Imaging
Opportunities/Suggestions

- 
- 
- 
- 
- 
- 

Impact Projects:

Real World Results from Shadowing

Impact of Shadowing: Cervical Spine Clearance

- Decreased clearance time, 50 then 70%
- Previous attempts to address issue unsuccessful
- Decreased length of stay
- Increased patient satisfaction

Impact of Shadowing: Going Home with Meds in Hand

- Increased compliance
- Reducing readmission rates
- Improving health

Impact of Shadowing: Reducing Readmissions

- Staff Shadowing between inpatient and outpatient settings
- Self-management tools developed
- Reduced readmission rate
- Projected Annual Cost Savings = $400K

Infant Security

“Without Shadowing, we never would have known that our new protocol was missing the mark.”

Maribeth McLaughlin, CNO, Magee-Womens Hospital of UPMC
Shadowing Network

Goal:
- A framework to drive change across your Health System
- Create “Horizontal Connectors” to adopt, accelerate, and spread the PFCC Methodology and Practice

Power of One

Be the Spark. Ignite Change.

Q & A

GoShadow

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Patient Centered Value System

Experiences

Outcomes

COST
The Cost Crisis

Value = \frac{Outcomes}{Cost} \quad \text{(Important to Patients)}

Actual Costs…
Not “Chargemaster” or Reimbursements

$89,104 \quad \text{Hospital Charges}$

$26,696 \quad \text{Hospital Reimbursement}$

Value = \frac{Outcomes}{Cost} \quad \text{(Important to Patients)}

The Final Frontier…

Steps to Determine the Actual Cost of Care

- What activities are performed?
- What Care Giver is performing each activity?
- What other resources (space, equipment, and consumables) are used?
- How long?
- What is the cost per minute? for each Care Giver and resource?

Actual Cost to Deliver Care
Time Driven Activity Based Costing

For a full cycle of care:
- Personnel
- Space
- Equipment
- Consumables
- All resources for any clinical condition

Robert S. Kaplan and Michael E. Porter
“How to Solve the Cost Crisis in Health Care,” HBR 2011
Steps to Determine the Actual Cost of Care

1. Identify Segment of Care
2. Create Process Maps
3. Determine Time That Each Resource is Used
4. Determine $/min per Resource
5. Calculate Total Costs

We Needed a “Connector”

Real World Example

TJR: Actual Costs for CMS CCJR, Bundling and Referenced Pricing

Follow the Patient

**What is the total # of provider categories?**
1 Month Before to 3 Months PO

**True Costs for the Full Bundle**

<table>
<thead>
<tr>
<th></th>
<th>THR</th>
<th>TKR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>45%</td>
<td>50%</td>
</tr>
<tr>
<td>Consumables</td>
<td>52%</td>
<td>45%</td>
</tr>
<tr>
<td>Equipment</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Space</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Process Improvement and Refocusing Resources**

<table>
<thead>
<tr>
<th>Stage</th>
<th>THR</th>
<th>TKR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pre-Op/Office</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>2. Pre-Op Testing &amp; Consults</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>3. Day of Surgery/OR</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>4. PACU</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>5. Inpatient Stay</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>6. Therapy</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>7. Follow-Up Visits</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

**OR Costs**

<table>
<thead>
<tr>
<th>Stage</th>
<th>THR</th>
<th>TKR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Consumables</td>
<td>83%</td>
<td>78%</td>
</tr>
<tr>
<td>Equipment</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Space</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Consumable Costs (THR) For the Full Bundle**

- 77% Implant
- 11% Medications
- 5% Custom Hip Pack
- 2% General Nursing
- 2% Saw Blades
- 1% Skin Antiseptic
- 1% Surgical Dressing
- 1% Suture Materials

- 53% of Cost related to Consumables
**Personnel Capacity Rate ($/min)**

Total # of Personnel = 46 Categories

<table>
<thead>
<tr>
<th>#1 - 10</th>
<th>#36 - 46</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopaedic Surgeon</td>
<td>11.6</td>
</tr>
<tr>
<td>Radiologist</td>
<td>8.1</td>
</tr>
<tr>
<td>Cardiologist</td>
<td>6.0</td>
</tr>
<tr>
<td>Anesthesiologist</td>
<td>5.8</td>
</tr>
<tr>
<td>Internist</td>
<td>3.0</td>
</tr>
<tr>
<td>CRNA</td>
<td>1.8</td>
</tr>
<tr>
<td>Nurse Practitioner Office</td>
<td>1.2</td>
</tr>
<tr>
<td>PA - Office</td>
<td>1.2</td>
</tr>
<tr>
<td>PA - Hospital</td>
<td>1.1</td>
</tr>
<tr>
<td>Sr. Prof Staff RN</td>
<td>1.1</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>0.4</td>
</tr>
<tr>
<td>Health Unit Coordinator</td>
<td>0.4</td>
</tr>
<tr>
<td>Rehab Aide</td>
<td>0.4</td>
</tr>
<tr>
<td>Registrar</td>
<td>0.4</td>
</tr>
<tr>
<td>PT Office Assistant</td>
<td>0.4</td>
</tr>
<tr>
<td>Pharmacy Tech</td>
<td>0.4</td>
</tr>
<tr>
<td>Room Service Attendant</td>
<td>0.4</td>
</tr>
<tr>
<td>Transporter</td>
<td>0.3</td>
</tr>
<tr>
<td>Housekeeping - SSA</td>
<td>0.3</td>
</tr>
<tr>
<td>Sales Rep</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**TKR: Personnel Time and Cost**

<table>
<thead>
<tr>
<th>Time (Hours)</th>
<th>% of TKR Personnel Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>21%</td>
</tr>
<tr>
<td>Mid Level Providers</td>
<td>4%</td>
</tr>
<tr>
<td>Nursing</td>
<td>30%</td>
</tr>
<tr>
<td>Rehab</td>
<td>33%</td>
</tr>
<tr>
<td>Anesthesia Team</td>
<td>21%</td>
</tr>
<tr>
<td>Support Staff</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Personnel Categories – 46 Types**

Physicians, Orthopaedics, Surgeons, Internists, Cardiologists, Anesthesiologists
Mid Level Providers: Physician Assistants & Nurse Practitioners
Nursing: Various levels of nurses (i.e. Professional Staff Nurse, Senior Professional Staff Nurse)
Rehab Team: Various levels of Physical Therapists
Anesthesia Team: Anesthesiologist & CRNA
Support Staff: Aides, Administrative Staff, Techs, Transporter, Pharmacist

**Time Commitment and Wasted Time for Patients (TKR)**

- Actual Patient Time: 110 Hours (~4.6 Days)
- Unproductive Time: 0.2 Hours

**Hospital to Hospital Comparison**

- Facility #1
- Facility #2

**CMS - Comprehensive Care for Joint Replacement (CCJR)**

- Starting Jan 1st, 2016
- Episode: 90 days
- Hospital Focused
- $’s Risk/Benefits
Breast Imaging True Cost Project

• Tomography, deemed “Experimental” (no coverage)
• Findings: very slight actual cost difference between Mammogram and Tomography
• Building the business case for coverage

Breast Imaging True Cost Project Check In to Check Out

<table>
<thead>
<tr>
<th>Total True Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammogram</td>
</tr>
<tr>
<td>Tomography</td>
</tr>
</tbody>
</table>

Patients and Families are the only way for us to understand and deliver value...

Value for Patients and Families Results in Value for Care Givers and Organizations

Where’s the Value?

Value is not intrinsically found in any “value based” payment model but is created and increased by co-designing care delivery

Operationalize the Patient Centered Value System

Clinical Outcomes, Quality and Safety

Care Experiences

Patient and Family at the Center

True $ Cost

Patient Reported Outcomes

Triple Aim = Value Trifecta

Population Health Experience of Care Per Capita Cost

No Margin – No Mission

PFCC Innovation Center of UPMC
Now That You Know How to Shadow...

- You can now shadow in order to determine the actual cost to deliver care!

Steps to Determine the Actual Cost of Care

✓ **What activities** are performed?
✓ **What Care Giver** is performing each activity?
✓ **What other resources** (space, equipment, and consumables) are used?
✓ **How long?**
✓ **What is the cost per minute?** for each Care Giver and resource?

Easy as a Click of the Camera

**Already Have:**
- Care Givers/Personnel
- Touchpoints/Space
- Time

**All You Need is:**
- Consumables
- Equipment

The Imaging Experience

**Care Givers:**
- Nurse
- ER Physician
- Radiologist
- Aides (2)

**Touchpoints/Space:**
- Radiology Room

**Equipment**
- MRI Scanner
- Ventilator
- Gurney
The Imaging Experience

Consumables
Vent Tube
Catheter
Central Line

Shadoower’s Role…

• Capture the Shadowing Experience
• Add/include photos of:
  – Space
  – Consumables
  – Equipment
• Share all info with Project Team/Champion

True Cost Map

• ER example

And…

• Wouldn’t you rather reduce actual cost than…”

Now What? GoShadoow!

Resources and Next Steps

www.pfcc.org/IHIForum
Merging Technology and Process Improvement

goshadow.org

PFCC.org
• Videos
• GoGuides
• Case Studies
• Articles
• Resources

PFCC Community of Practice
What Matters to You?
Blog.PFCC.org

PFCC Community of Practice
myPFCC
The Pulse of Patient and Family Centered Care

PFCC Community of Practice

Resources
At the back tables!
• MyPFCC
• Step-by-Step
• GoShadow sign up