

Data for Consumers & Patients



Q: "What data & measures will consumers need to be successful patients & purchasers of care?"

A: Triple aim compass with feed forward & feedback data

What do we really want?

- **Q: How is a kilowatt-hour of electricity like a day in the hospital?**
- **A: Nobody wants either**
- **Hot showers & cold beer**
- **Better health, better care & lower costs**



Amory Lovins: End use, least costs



Consumers need data to answer critical questions

- 1. Can I get the care I want and need exactly when I want and need it?**
- 2. Am I getting the best value care for me given who I am and what health care can do?**
- 3. How can I get the data I need as care is provided, to make good decisions and to review the success of the care that I have gotten?**

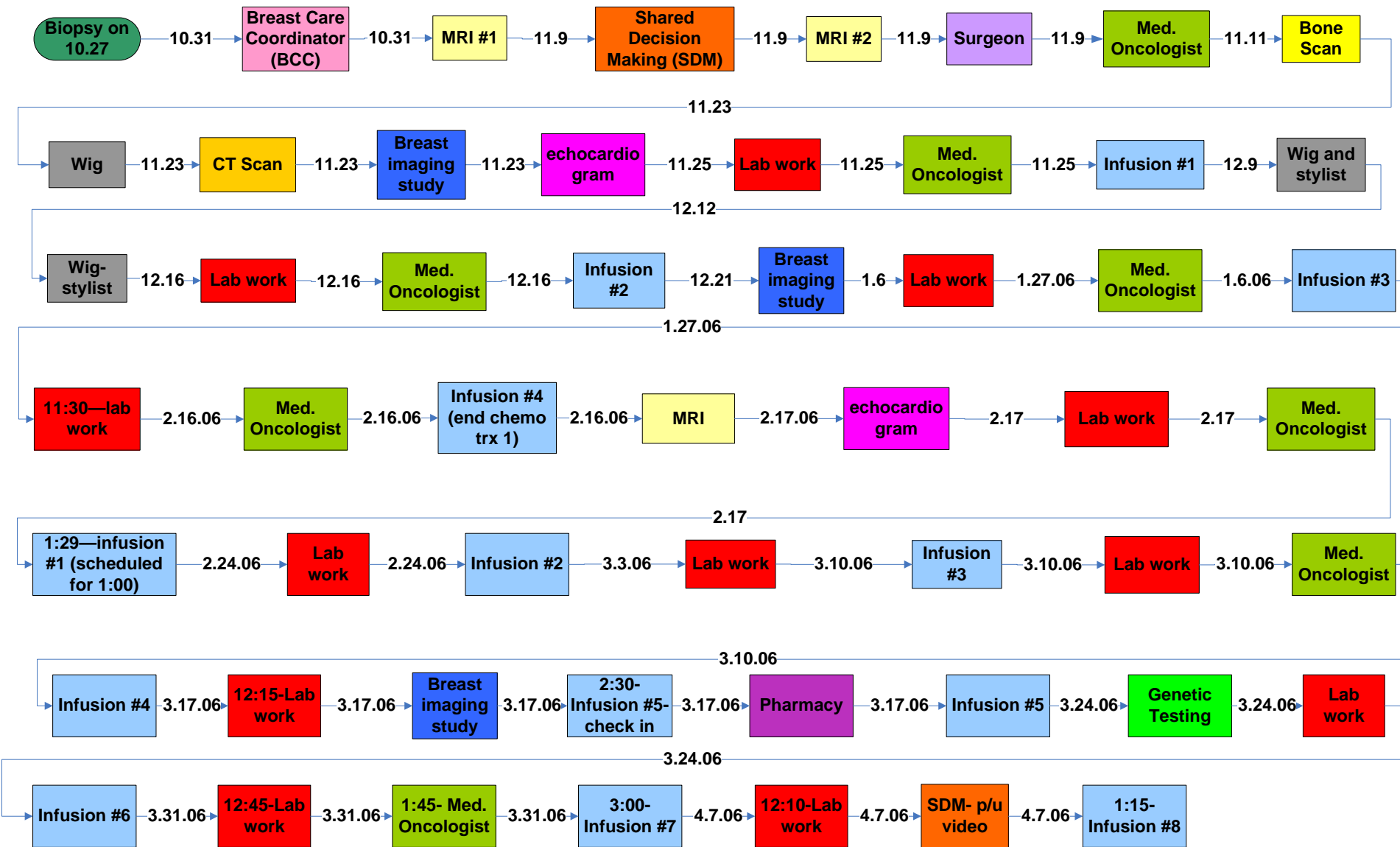
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**Can I get the care I want and
need exactly when I want and
need it?**

**Meet Amy ... 38 years old,
single, new to area, school
teacher, found a lump ...**

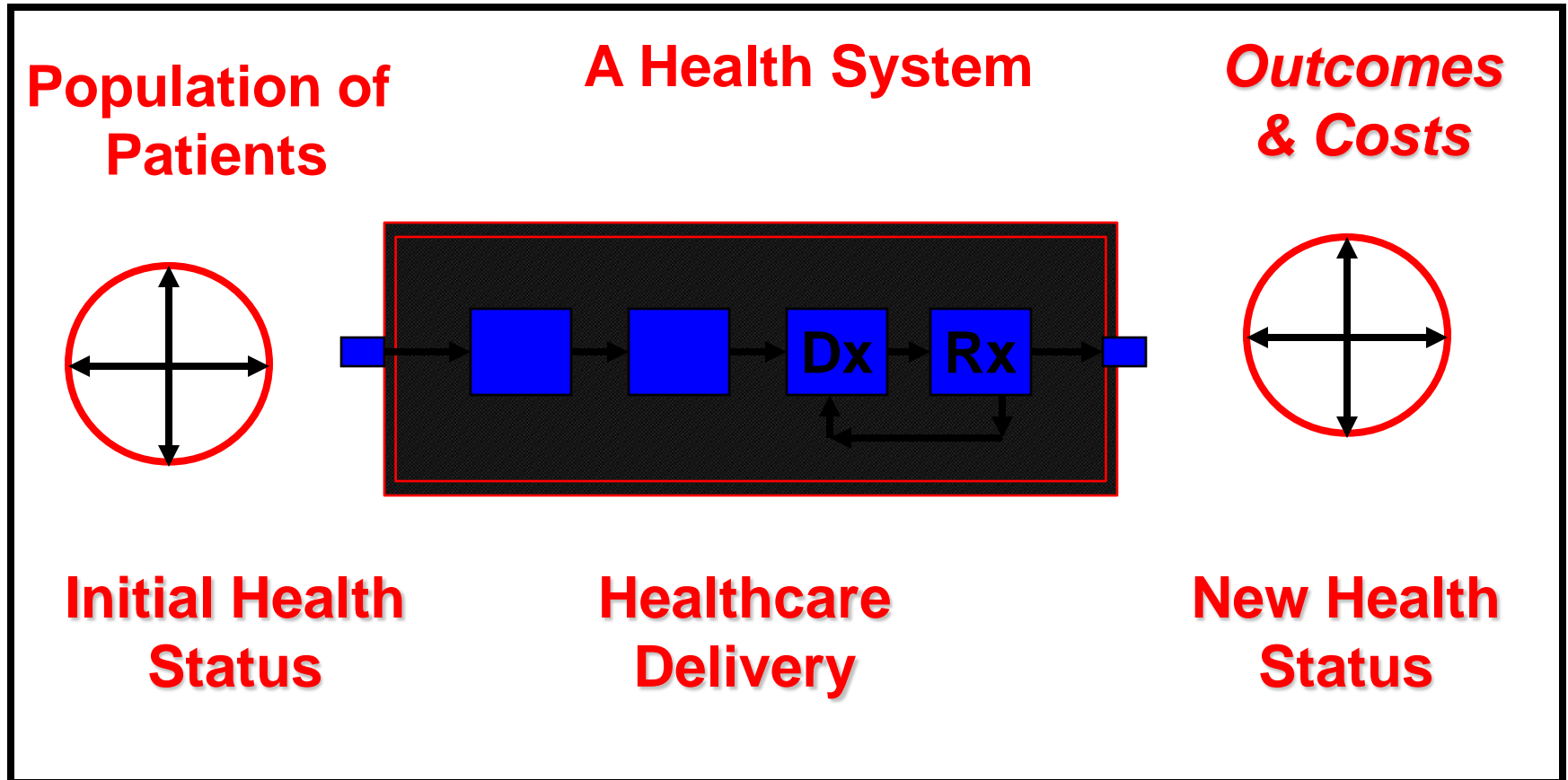
Meet Amy!





6 months, 14 different microsystems, 21 visits

Let's step back and look at Amy's care from a distance





Amy & people like her want data to answer key questions as care progresses over time

- **What are my chances of surviving?**
- **What are the risks of different treatments?**
- **How will I feel physically & mentally?**
- **How fast will I be able to get back to work & back to my life?**
- **What can I do to help myself to get the best results?**
- **Will I be treated the way I would like to be?**
- **Can I afford the best treatments that I want and need?**

Amy's Early Compass Points

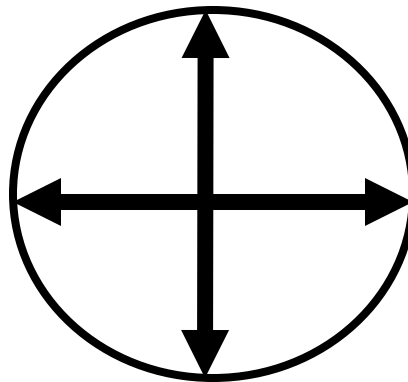
- Physical
- Mental
- Role
- Vitality
- Risk Status***

$$\text{Value} = O + E / \$$$

Function & Risk Status

Disease Status

- Mortality***
- Morbidity
- Complications



Experience vs. Need

- Health Activation***
- Health Care Delivery
- Perceived Health Benefit

Costs

- Direct Medical
- Indirect Social

2

**Am I getting the best value
care given who I am and what
health care can do?**

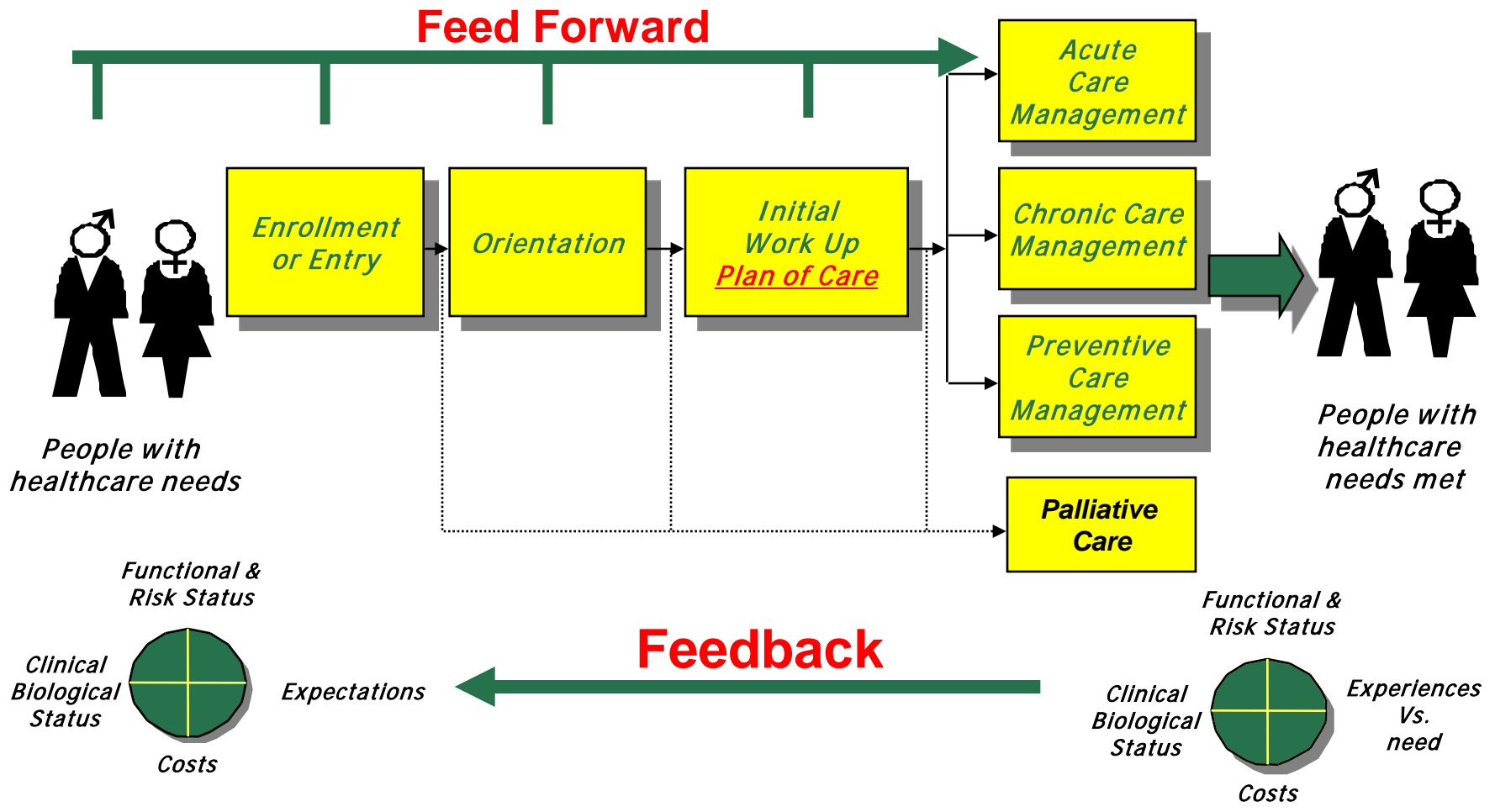
Meet Brian & Betty... New to the Dartmouth Spine Center

- **Brian 45 years old with herniated disk & good insurance**
- **Betty 64 years old with spinal stenosis & no insurance**

Dartmouth Spine Center

- **Motto**
 - back to work back to play 1 person at a time
- **Methods**
 - one stop shopping, interdisciplinary, shared decision making, outcomes tracking, collaborative learning & research
- **Founder**
 - Jim Weinstein, DO, MS & President D-HC
 - An innovative green fields program of care

Spine Center: feed forward data for developing/monitoring care plan, coordinating care, & feedback data for improving care & measuring & researching value of care





Brian & Betty & people like them want data to answer key questions as care progresses over time

- **What are my chances of becoming pain free?**
- **What are the risks & benefits of different treatments?**
- **How will I feel physically & mentally?**
- **How fast will I be able to get back to work & back to my life?**
- **What can I do to help myself to get the best results?**
- **Will I be treated the way I would like to be?**
- **Can I afford the best treatments that I want and need?**

Touch Pad or Web Technology



Patient provides self-report data when visiting provider or at home using web-enabled system

Patient Summary Report: Dartmouth Spine Center

“I can’t be a good doctor without this data.”

Function

Appointment: Spine Clinic; RHW; 09/19/2006
Survey Group: Spine Followup; completed on 09/19/2006; 19 mins.
Reason for visit:

Personal Summary (as of 09/19/2006)
Demographics: Female; 80 yrs old; Married; Some college or technical school
Working Status:
Social: Lives alone

Work Disability (as of 09/19/2006)
Legal action: None - I am not considering any legal action

Health History (as of 09/19/2006)
Current conditions:
Condition history: High blood pressure; Uterine cancer; Other chronic pain
Previous Surgeries: Uterine cancer; Not sure - pain
Hospitalizations, Cancer: 1
Family history: Asthma; Cancer; Penicillin allergy; Stroke; Uterine cancer; Breast cancer (One sister or brother)
Medications: Anti-hypertension; Cholesterol; Other prescription
Medication allergies: None known
Physical Events:

Health Habits (as of 09/19/2006)
BMI: 28.3 (Overweight); 155 lbs
Smoking: Never smoked
Alcohol AUDIT: 0; low risk

Review of Systems
Symptoms Indicated:
Const:
ENT, Eyes:
Resp:
Cardio:
GI:
Uro-gyn:
M/S:
Neuro:
Hemo/lymph:
Psych:
Endo:
Skin/Hair:

History of Present Illness (as of 09/19/2006)
Chief complaint: Groin, Right leg above the knee
Initial Visit: 01/18/2005
Prior treatments: Physical/Occupational Therapy, Surgery

Red Flags / Considerations

Worsening scores: MCS
Clinical protocols / measures

Patient-reported scores (see graphs on next page)
ODI: 24 (lower = better)
AUDIT:
Physical Function: 45 (Norm: 38)
Role Physical: 32 (Norm: 40)
Bodily Pain: 55 (Norm: 45)
General Health: 46 (Norm: 47)
Vitality: 46 (Norm: 48)
Social Function: 40 (Norm: 47)
Role Emotional: 56 (Norm: 44)
Mental Health: 50 (Norm: 51)
MCS: 52 (Norm: 51)
PCS: 41 (Norm: 40)

	Expectations	Expectation met
Symptoms Relief:		Definitely yes
More Activities:		Not sure
Sleep Better:		Probably yes
Return to job:		Not applicable
Exercise / Rec:		Not sure

Experience

SF-36v2

Longitudinal MCS/PC

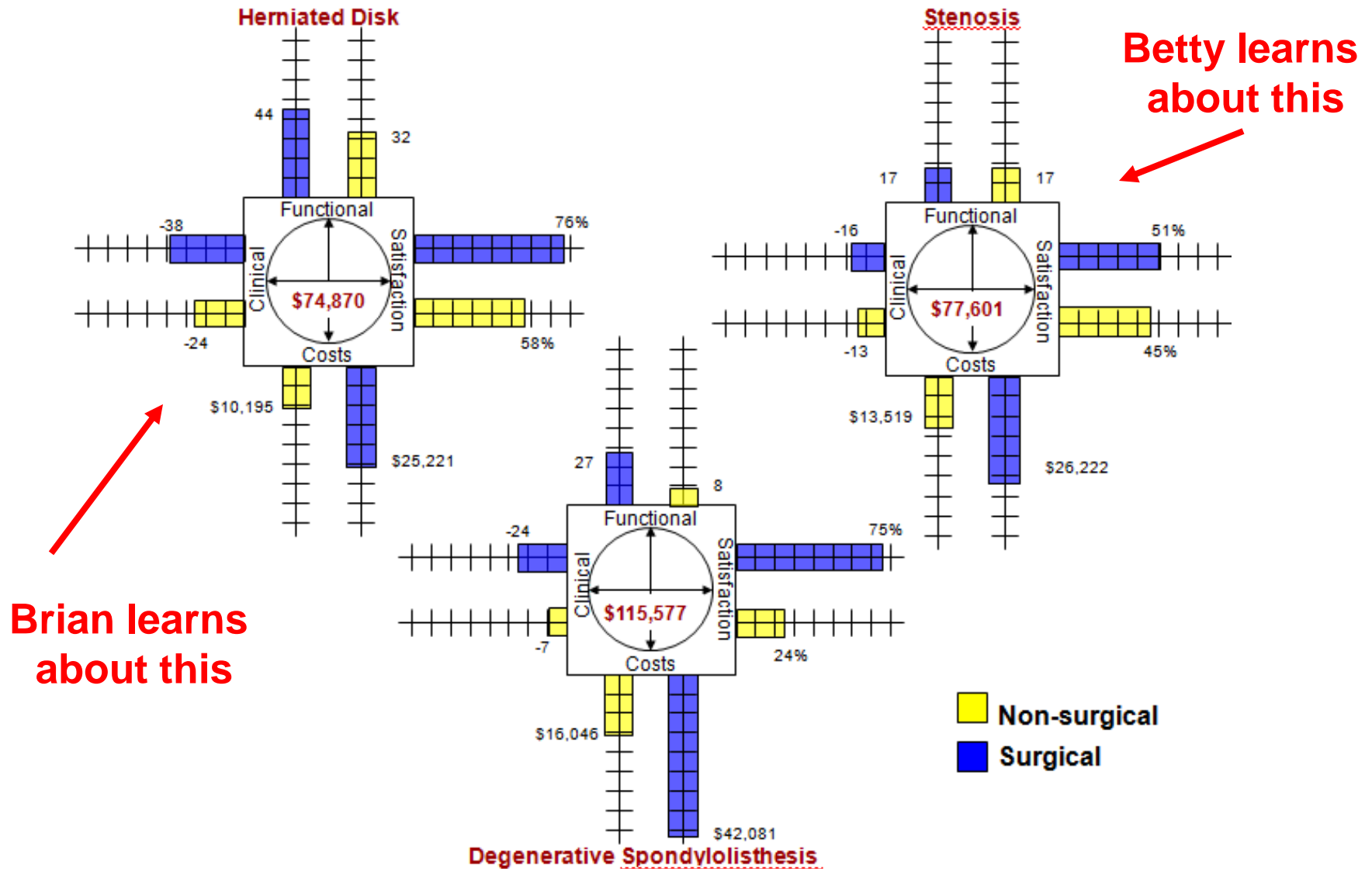
Oswestry Disability Index

Activity	Initial Survey (01/18/2005)	This Survey (09/19/2006)
Dressing	no response	1-none
Lifting	no response	4-substantial
Walking	no response	5-severe
Sitting	no response	2-slight
Standing	no response	2-slight
Sleeping	no response	1-none
Social life	no response	4-substantial
Sex life	no response	1-none
Travel	no response	1-none

Longitudinal ODI

Disease

MEASURING VALUE: SPORT* trial, patient-reported data combined with cost data to compare effectiveness & value of treatments



* NIH-sponsored *Spine Patient Outcomes Research Trial*; publications in *JAMA*, *NEJM*, *Spine*, etc.

3

Recommendations

What data & measures do consumers need as patients & as purchasers?

Need a “compass” to navigate the health care system

- People/patients on journey to regain or maintain health
- Health care needs evolve as health status changes
- Therefore, patients need data to answer key questions about health, care & costs as their condition changes
- Need data on health status (their own & likely outcomes given database on prior patients like them) to:
 - Match best care plan to health state & monitor impact of care on outcomes
 - Make informed decisions about best treatment options for “me given my preferences”
- Need feed forward & feedback data on care experiences & costs

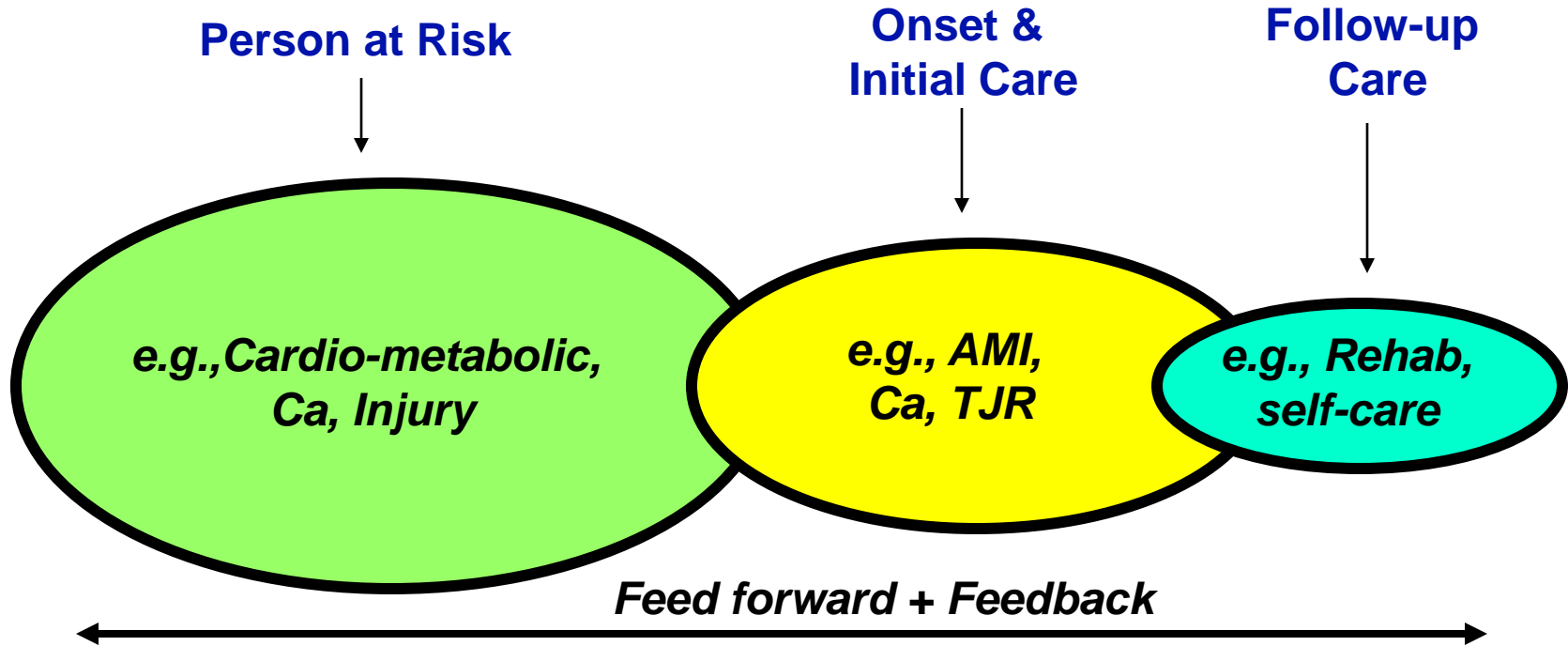
“My triple aim” compass will evolve over time as my health changes



- **Compass points**
 - **Health Outcomes**
 - Disease status
 - Functional status
 - Risk status
 - **Care Experiences**
 - Activation
 - Care (STEEEP)*
 - Perceived benefit
 - **Costs of Care**
 - Direct medical
 - Indirect social

* IOM Chasm Report quality: safe, timely, effective, efficient, equitable, patient-centered

NQF Patient-Focused Longitudinal Measures & Triple Aim Compass Points



Risk	+++	+	+++
Function	+	+	+++
Disease		+++	+
Experiences	+	+++	+
Costs	+	+	+++

Gretzky: skating where the puck is going to be

- Adopt NQF longitudinal measures framework
- Populate with triple aim measures
- Feed forward data as care is given to patients
- Feedback data on outcomes of populations of “similar” patients to support decision making & patient-centered research

