

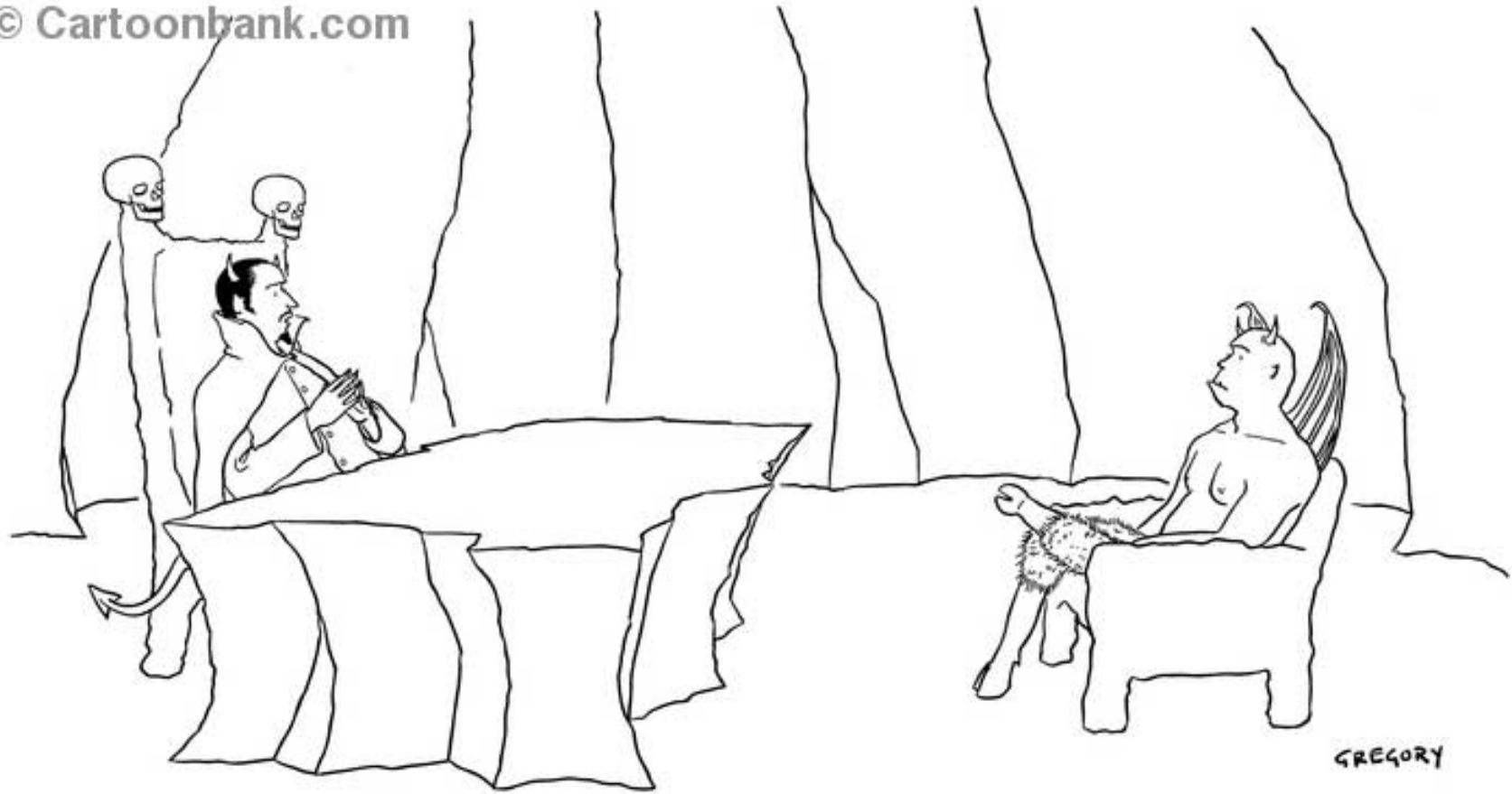


**KATHERINE S.
ROWELL  ASSOCIATES**

The Data Warehouse Institute
July 22, 2010
Boston, MA



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“I need someone well versed in the art of torture—do you know PowerPoint?”

KATHERINE S.
ROWELL  ASSOCIATES



**IN GOD WE TRUST;
ALL OTHERS MUST BRING
DATA**

W. EDWARD DEMING



Graduate Professional Studies: Programs and Courses

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RHIN 125 DATA ANALYSIS AND DECISION SUPPORT FOR HEALTH INFORMATICS

This course is designed to familiarize students with the different types of healthcare data, assure the quality of the data and how to understand and communicate the information provided in support of effective decision making by the various stakeholders of the healthcare system. Study and discussion topics will include how to choose the correct information for different decisions and communicate its meaning to users. Students will evaluate statistical methods and tools. The difference between research databases and operational databases will be covered along with techniques to effectively communicate quantitative healthcare data using tables and graphs. Methods for choosing the right medium will be explored in depth. Usually offered every year.
Staff

> [Direct link to course prerequisites.](#)

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The Massachusetts Health Connector



**MODEL
FOR
NATIONAL HEALTHCARE
REFORM**



Attention: Commonwealth Care and Commonwealth Choice Members, tell us your health insurance story! [Learn more.](#)

You need health insurance. The state's Health Connector can help.



Individuals & Families



Young Adults



Employees



Employers

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- Offer them comprehensive plans, many choices and a cost-effective solution to their needs.

[GET STARTED](#)

Brokers

We're your connection to good health, Massachusetts!

The Health Connector is an independent state agency that helps you find the right health insurance plan.

[Commonwealth Choice](#) offers many options from brand-name health insurance plans. They all carry our Seal of Approval for quality and value.

[Commonwealth Care](#) is low or no-cost health insurance for people who qualify.

Avoid tax penalties. Find out what's available to you.

Glad to be insured



"I was young, healthy. I always thought that I was invincible. It never even crossed my mind that I could get hurt," Andrew Hertihy, Malden.

[Hear Andrew's story and more ...](#)

Already a Commonwealth Care member?

- Register for access to your account
- Log in to choose a health plan and view account information
- Do you have a question?



*Optimize your Health Connector experience with [Internet Explorer 7.0](#) or [Firefox 3.0](#).



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The Health Connector is an independent state agency that helps Massachusetts residents find health care coverage. Read more [about us](#).

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Health Care Reform

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Find Insurance

LOOKING FOR HEALTH INSURANCE?

You have options.

The Health Connector works with insurance carriers to offer the health coverage that you need. We also work to put that health coverage within your reach.

The way you look at health insurance depends on who you are and what you need.

We can help. Let's begin.



Individuals & Families

Looking for health insurance without an employer's help.

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Young Adults

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Young Adults [SHOP NOW](#)



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Brokers

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We can help you find health insurance that is a **good value**. Explore the choices. Find the plan that is right for you. Use the **box at right** to get started.

For Coverage On:	We'll Need Your Application and Payment By:
August 1, 2010	July 23, 2010
September 1, 2010	August 24, 2010

CURRENT MEMBERS: TIME TO RENEW YOUR COMMONWEALTH CHOICE COVERAGE?

You **must** call 1-866-636-4654 if you want to change your plan at renewal time. Hearing or speech-impaired members can use our TTY line, 1-888-213-8163. Please act in time to avoid disruptions in your coverage.

EXEMPTIONS FROM THE MANDATE

Don't think that you can afford health insurance? Learn if you might be exempt from the Health Care Reform law's penalties.

[More on exemptions...](#)

DID YOUR EMPLOYER SEND YOU?

Use your employer ID number to shop for a Commonwealth Choice plan.

[Go to 'for employees' area](#)

SELF EMPLOYED?

Commonwealth Choice could be a good option for you. But if you're trying to qualify for Commonwealth Care, income

Get Started

Your family size is: 3 ([change](#))

❗ If your current gross family income is **less than \$54,936.00/yr** (\$4,578.00/mo), you may be eligible for the [Commonwealth Care program](#).

.....
If your current gross family income is **more** than this level, then...

[SHOP FOR INSURANCE NOW](#)

U.S. Department of Health & Human Service



U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES HOSPITAL COMPARE



Information Overload?

HealthCare.gov and the challenge of making health-care data useful to consumers.

by [J. Lester Feder](#) July 15, 2010

Even before health-care-reform measures mandating the largest changes to the industry go into effect, the Obama administration is hoping a little sunshine will start clearing up our confusing and fragmented system. On June 30, Health and Human Services Secretary Kathleen Sebelius unveiled [HealthCare.gov](#), a site designed to provide information about health insurers and providers so Americans can make better health-care decisions and create a market incentive for offering better care at lower cost. "HealthCare.gov helps consumers take control of their health care and make the choices that are right for them, by putting the power of information at their fingertips," Sebelius said in a statement. But how much information is too much?

More information is definitely needed. Patients have little data about their options in the current system, which leads them to make decisions about their care that do not always make them healthier and often cost them—and the insurance system—more than it should. Though various government agencies already collect a range of data on providers, it is often inaccessible to the public. Private insurers have been able to keep information about their practices hermetically sealed. The hope is that educating Americans to become better health-care consumers will create market pressures to provide high-quality care and bring down costs.

The current tools, while a step in the right direction, underscore the challenge of providing medical information to citizens who don't have specialized health-care knowledge. The backbone of the site will ultimately be the portal through which people enroll in insurance when the exchanges come online in 2014. A forerunner to that resource is in place now, [guiding people to existing insurance options in their state](#). Healthcare.gov also provides two other important tools: a resource with [information on preventive services](#) and a [Hospital Compare Tool](#), with data about the quality of care provided at 4,725 facilities.

But the tools are also a reminder of how difficult it will be to make health information accessible and usable to those who are not health professionals. While persevering users will be able to glean some useful information from these resources, much of it may be confusing and overwhelming; most Americans are not equipped to decipher complicated information about health care. This will get easier on the insurance side once the exchanges are in place, and people can compare plans side by side. The quality side presents a bigger challenge, since patients do not always understand what treatments are most likely to make them well. Even doctors have limited information about what makes one treatment better than another, and the system has a bias toward treatments that use the newest (and most expensive) interventions. The one category that may mean the most to nonexperts—patient satisfaction—is not always a good indicator of how skilled at treating illnesses a doctor or hospital may be.

Medicare.gov

Manage Your Health

Medicare Basics

Resource Locator

Help & Support

Help For Consumers For Professionals

Medicare.gov Hospital Compare Home

Hospital Compare

Where do you want to find a hospital?

Search Information

Location - ZIP Code or City, State

e.g. 10009 or New York, NY

Search type [What is this?]

- General
- Medical Conditions
- Surgical Procedures

Find Hospitals



Hospital Spotlight

Are You a Hospital Inpatient or Outpatient?

Hospital Compare now includes information that will help consumers compare the quality of information available in hospital outpatient departments.

For more information about the differences between inpatients and outpatients, read our fact sheet, [Are You a Hospital Inpatient or Outpatient?](#)

Additional Information

- View a list of Hospital Compare Contacts
- Download the Hospital Compare Database

General Information

Quality of Care

Medicare Payment & Volume Data

Currently viewing 31 hospitals available within 25 miles of ZIP Code 02445.

✓ Data is available.

Compare

Select up to three hospitals to compare.

⊘ Data is not available.

Your results are currently sorted by Distance.

	Hospital name, address	Survey of Patients' Hospital Experiences ^a [What is this?]	Process of Care Measures [What is this?]	Outcome of Care Measures [What is this?]	Use of Medical Imaging [What is this?]
<input type="checkbox"/>	CARITAS ST ELIZABETH'S MEDICAL CENTER 736 CAMBRIDGE STREET BRIGHTON, MA 02135 (617) 789-3000 Add to My Favorites	✓	✓	✓	✓
<input type="checkbox"/>	VA BOSTON HEALTHCARE SYSTEM - JAMACA PLAIN 150 S. HUNTINGTON AVENUE JAMAICA PLAIN, MA 02130 (617) 232-9500 Add to My Favorites	⊘	✓	⊘	⊘
<input checked="" type="checkbox"/>	BRIGHAM AND WOMEN'S HOSPITAL 75 FRANCIS STREET BOSTON, MA 02115 (617) 732-5500 Add to My Favorites	✓	✓	✓	✓
<input checked="" type="checkbox"/>	NEW ENGLAND BAPTIST HOSPITAL 125 PARKER HILL AVENUE	✓	✓	✓	✓

Done



Internet

100%

Hospital Compare

[Back To Results](#)

Search Type [What is this?]

General
 Medical Conditions
 Select a Condition
 Surgical Procedures
 Neck, Back, Arms & Legs
 Multiple Joint (hip, knee, ar

[Modify Results](#)
View All Measures

Process of Care Measures

Outcome of Care Measures

Use of Medical Imaging

Survey of Patients' Hospital Experiences

Medicare Payment and Volume

Survey of Patients' Hospital Experiences

HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) is a national survey that asks patients about their experiences during a recent hospital stay. Use the results shown here to compare hospitals based on ten important hospital quality topics. [Read more information about survey of patients' hospital experiences.](#)

[View Graphs](#)

[View Tables](#)

	BRIGHAM AND WOMEN'S HOSPITAL	NEW ENGLAND BAPTIST HOSPITAL	MASSACHUSETTS GENERAL HOSPITAL
	75 FRANCIS STREET BOSTON,MA 02115 (617) 732-5500 Acute Care 2 miles Map & Directions Add to My Favorites	125 PARKER HILL AVENUE BOSTON,MA 02120 (617) 754-5800 Acute Care 2.1 miles Map & Directions Add to My Favorites	55 FRUIT STREET BOSTON,MA 02114 (617) 726-2000 Acute Care 5.1 miles Map & Directions Add to My Favorites
Patients who reported that their nurses "Always" communicated well.	80%	83%	78%
Patients who reported that their doctors "Always" communicated	82%	84%	78%

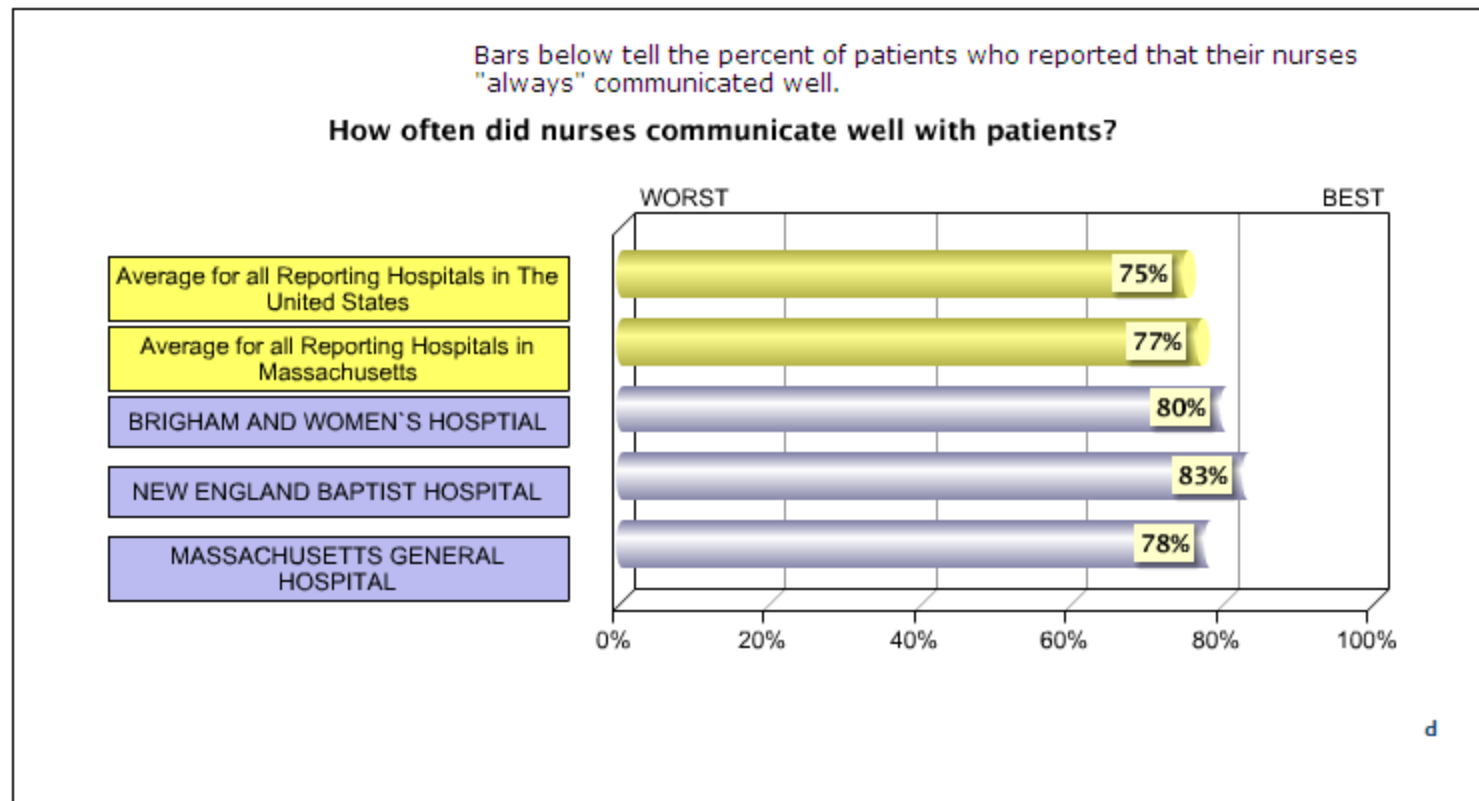
Graph 1 of 10

Hide Information

How often did nurses communicate well with patients?

These results are from patients who had overnight hospital stays from October 2008 through September 2009.

Patients reported how often their nurses communicated well with them during their hospital stay. "Communicated well" means nurses **explained things clearly, listened carefully** to the patient, and treated the patient with **courtesy and respect**.



d

[Back To Results](#) ↶

Search Type: (What is this?)

General

Medical Conditions

Select a Condition ▼

Surgical Procedures

Neck, Back, Arms & Legs ▼

Multiple Joint (hip, knee, an) ▼

↻ Modify Results

Process of Care Measures

Outcome of Care Measures

Use of Medical Imaging

Survey of Patients' Hospital Experiences

Medicare Payment and Volume

Surgical Care Improvement Project Process of Care Measures

Hospitals can reduce the risk of infection after surgery by making sure they provide care that's known to get the best results for most patients. Here are some examples:

- Giving the recommended antibiotics at the right time before surgery
- Stopping the antibiotics within the right timeframe after surgery
- Maintaining the patient's temperature and blood glucose (sugar) at normal levels
- Removing catheters that are used to drain the bladder in a timely manner after surgery.

Hospitals can also reduce the risk of cardiac problems associated with surgery by:

- Making sure that certain prescription drugs are continued in the time before, during, and just after the surgery. This includes drugs used to control heart rhythms and blood pressure.
- Giving drugs that prevent blood clots and using other methods such as special stockings that increase circulation in the legs.

Read more information about how to prevent wound infection. Learn why Surgical Care Improvement Project Process of Care Measures are Important.

View Graphs

View Tables

BRIGHAM AND WOMEN'S HOSPITAL	NEW ENGLAND BAPTIST HOSPITAL	MASSACHUSETTS GENERAL HOSPITAL
75 FRANCIS STREET BOSTON, MA 02115 (617)732-5500	125 PARKER HILL AVENUE BOSTON, MA 02120 (617)754-5800	55 FRUIT STREET BOSTON, MA 02114 (617)726-2000
Acute Care 2 miles	Acute Care 2.1 miles	Acute Care 5.1 miles
Map & Directions	Map & Directions	Map & Directions
Add to My Favorites	Add to My Favorites	Add to My Favorites

Surgery patients who were taking heart drugs called beta blockers before coming to the hospital, who were kept on the beta blockers during the period just before and after their surgery

94% ²

99% ²

90% ²

Hospital Compare

[Back To Results](#) ↶

Search Type (What is this?)

General

Medical Conditions

Select a Condition ▼

Surgical Procedures

Neck, Back, Arms & Legs ▼

Multiple Joint (hip, knee, ani) ▼

 Modify Results

Process of Care Measures

Outcome of Care Measures

Use of Medical Imaging

Survey of Patients' Hospital Experiences

Medicare Payment and Volume

Hospital Death (Mortality) Rates Outcome of Care Measures

"30-Day Mortality" is when patients die within 30 days of their admission to a hospital. Below, the death rates for each hospital are compared to the U.S. National Rate. The rates take into account how sick patients were before they were admitted to the hospital. [Read more information about hospital mortality measures.](#)

Outcome of Care Measures may be available for your selected hospitals. However, these measures are not currently related to the medical condition or surgical procedure you selected. Please modify your search and select "General Search" or "View All Measures" to view Outcome of Care Measures for your hospitals.

Hospital Readmission Rates Outcome of Care Measures

"30-Day Readmission" is when patients who have had a recent hospital stay need to go back into a hospital again within 30 days of their discharge. Below, the rates of readmission for each hospital are compared to the U.S. National Rate. The rates take into account how sick patients were before they were admitted to the hospital. [Read more information about hospital readmission measures.](#)

Outcome of Care Measures may be available for your selected hospitals. However, these measures are not currently related to the medical condition or surgical procedure you selected. Please modify your search and select "General Search" or "View All Measures" to view Outcome of Care Measures for your hospitals.

KATHERINE S.
ROWELL  ASSOCIATES



**A GLIMPSE OF THE FUTURE
(I HOPE)**

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"Never, ever, think outside the box."

Venous Thromboembolism (VTE) Risk Score & Comparison Data

Patient Name: Democase, Jane

DOB/Age: 06/17/1942 67

Gender: Female

Planned Date of Surgery: 4/5/2010 7:00:01 AM

Planned Surgery: CPT 35301 thromboendarterectomy, including patch graft, if performed, carotid, vertebral, subclavian, by neck incision

Risk Score calculated per (date) of Information in the system VTE: 6

Surgeon James Sullivan

VTE Risk Factors	Points	Value
Age	2	67 y/o
Obesity (BMI > 25)	1	27.76 BMI
Swollen Legs (Current)	1	
Malignancy (Present or Previous)	2	
Score	6	

VTE Occurrence Rates For CPT 35301	
Total Cases in Comparison Database	4686
VTE	0.15%
Pulmonary Embolism (PE)	0.09%
Deep Vein Thrombosis (DVT)	0.1%

VTE Occurrence Rates by Procedure						
CPT	PROCEDURE	# OF CASES WITH POST-OP PE	# OF CASES WITH POST-OP DVT	# OF CASES WITH POST-OP VTE	TOTAL # OF CASES FOR CPT	VTE OCCURRENCE RATE (%)
21935	radical resection of tumor (eg, malignant neoplasm), soft tissue of	0	1	1	236	0.42

Informed Consent for Surgical Procedure

Patient Name: June Smith

Date of Birth: June 10, 1939

Diagnosis or reason for procedure:

Colon cancer or tumors in the colon

Procedure description:

This procedure involves removal of the entire colon using a laparoscope and other instruments. A laparoscope is a thin tube through which structures within the abdomen and pelvis can be seen by the surgeon. Your doctor may need to perform this procedure through a larger cut, if needed.

Proposed benefits:

This procedure may delay or treat the progression of cancer.

General Risks:

- Anastomotic leak
- Anastomotic narrowing or obstruction.
- Bleeding. You may need blood transfusions or other treatments.
- Blood clot which may travel to the lung.
- Bowel injury requiring a colostomy. This may be discovered during the procedure, or later.
- Bowel obstruction.

Your Risk Profile:

Diagnosis: ICD9 153.6 Malignant Neoplasm of Descending Colon	
Planned Procedure: CPT 44160 Colectomy, Partial, w/ Removal of Terminal Ileum w/ Ileocolostomy	
Your Risk Factors for a Post-Operative Complication or Death	Predictive
ASA IV = Severe Systemic Disease	Y
Partially Dependent	Y
Diagnosis	Y
BMI = 26/Overweight	Y
Albumin Level = 3.2 / Normal	N
Type of Procedure	Y
Yes COPD	Y
PTT = 28.2 Normal	N
Your Risk For:	
Any Post-Operative Complication	ABOVE AVERAGE For VTE
A Serious Post-Operative Complication	AVERAGE For VTE
Post-Operative Death	AVERAGE

INFORMEDMEDICALDECISIONS.ORG

The care you need and no less. ■ The care you want and no more.

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About The Foundation

We are a non-profit organization leading changes to ensure that health care decisions are made with the active participation of fully informed patients.



<<back 1 2 3 4 next>>

Transforming the Patient Experience

Listen to the stories of four patients who took action to become active participants in their medical decisions:

Howard, who decided not to have bypass surgery for coronary heart disease.

Loretta, who made a decision about how her diabetes would be

Did You Know?

Bed rest for back pain is no longer recommended. In fact, too much bed rest can actually be harmful.

Dr. Michael Barry, Foundation President, discusses the importance of shared decision making in the PSA decision.

[Watch Video](#)

Visit [Health Dialog](#) to preview PSA Decision Aid



Expert Q&A

Mr. Schwitzer is an associate professor at University of Minnesota School of Journalism & Mass Communication and publisher



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WHAT IS AN INFORMED MEDICAL DECISION?

PROBLEMS WITH MEDICAL DECISION MAKING

IMPLEMENTING SHARED DECISION MAKING

- Primary Care Demonstration Sites
- Specialty Care Demonstration Sites
- Breast Cancer Initiative

DECISION SUPPORT

- Patient Decision Aids
- Quality Standards

RESEARCH

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Internet

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Patient Decision Aids

Decision aids are patient-based tools developed to support and streamline the medical decision-making process. Randomized clinical trials have shown that the use of decision aids improves decision quality.

Decision aids should include evidence-based information about all viable treatment options, a balanced value-neutral presentation of the advantages and disadvantages of each option, and information related to the patient perspective to help patients clarify their preferences and values about treatment.

Decision aids can be paper-based or electronic; electronic decision aids can be delivered through a variety of technology, including Internet, office-based kiosk, or recorded media.



Patient Decision Aids

Patients

If your health plan, health care provider or employer is a Health Dialog member, you may access the Shared Decision-Making programs through that process. If not, you may request a review copy from the Foundation. We ask that you complete a patient rating questionnaire and return both the questionnaire and the program to the Foundation. To request a program please complete the [Patient Decision Aid Request Form](#).

Researchers

If you are a researcher interested in learning more about the Foundation's funding programs,

Links:

[Getting the Healthcare That's Right for You \(video\)](#)

[How the Foundation Develops Decision Aids](#)



WHAT IS AN INFORMED MEDICAL DECISION?

PROBLEMS WITH MEDICAL DECISION MAKING

IMPLEMENTING SHARED DECISION MAKING

- Primary Care Demonstration Sites
- Specialty Care Demonstration Sites
- Breast Cancer Initiative

DECISION SUPPORT

- Patient Decision Aids
- Quality Standards

RESEARCH

- Evidence Base
- Research Summaries
- Foundation Research Projects
- Information for Investigators

Done, but with errors on page.

Internet

100%

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**MANAGING YOUR
CAREER TO MEET
FUTURE TRENDS**

What skills are employers looking for?



- **EXPERTISE IN THE DIFFERENT TYPES OF DATA AND THE CHARACTERISTICS OF THAT DATA.**

- **CREATIVITY ABOUT HOW TO IMPROVE THE TYPES OF DATA COLLECTED AND WAYS IN IN WHICH TO EFFICIENTLY AND COST EFFECTIVELY CAPTURE THE DATA.**



- **THE ABILITY TO APPROPRIATELY ANALYZE THE DATA TO SUPPORT DECISION MAKERS OF ALL TYPES.**

- **THE ABILITY TO DELIVER THE DATA TO DIFFERENT AUDIENCES IN A USEFUL AND MEANINGFUL WAY.**





To raise new questions, new possibilities, to regard old problems from a new angle requires creative imagination and marks real advances in science.

[Albert Einstein](#)



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