The Role of the Radiologist in Population Health

25th Annual Risa and Felix Fleischner Lecture

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Learning Objectives

- Review links between patient and family centered care and population health
- Review current population health activities in Radiology
- Discuss population health opportunities for Radiologists
Outline

- PFCC
- Population Health
- What you can do
Traditional Models

- Germ theory
- Disease based
- Organ based
What do you treat?

- Disease
- Patient
- Family
- Patients genetic make-up
- Social determinants
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<th>Traditional Model vs PFCC</th>
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PFCC Definition

• An approach to healthcare delivery that emphasizes partnerships and collaborations between and among healthcare providers, patients and their families
Who is the family?

- Biological: parents, children
- Social: co-workers, classmates
- Healthcare family
- Does everyone have a family?
Other names/models

- Co-design
- Patient centered care
- Family centered care
- Patient centered design
- Person and family centered care
Biopsychosocial Model

- As opposed to Biomedical Model
- Multiple levels
- Molecular/metabolic
- Organ
- Family, Culture

Biopsychosocial Model

The Biopsychosocial model

Theoretical basis
(Engel, 1981)

http://www.chester.ac.uk/~sjlewis/Presentations/APictureofHealth.htm
Limitations of Biopsychosocial Model

• How do you implement?
• How much information do you need to make a decision?
• Is information from all levels needed to make every decision?
Head CT on Trauma Patient

• Do you need to understand the culture of the patient to determine if there is a subarachnoid hemorrhage or an epidural hematoma?
• Is an understanding of the molecular structure of hemoglobin needed to tell the Trauma Surgeon and the family that there is an epidural hematoma?
Head CT on Trauma Patient

- Types of head trauma in your community
- What are common causes?
- What local programs could reduce head trauma in your community?
Family Centered Care

- Post WWII changes in maternity care
- Chronic illness in children-dependent on technology
Dr C. Everett Koop

- June 1987 Conference sponsored by American College of Pediatrics, Bureau of Maternal and Child Health and Resources Development, Department of Health and Human Services
- Recommended collaboration and role of family in providing care
- Pediatrics 1989; 83; 1055-1060
Through the Patient’s Eyes 1993

- Picker Institute and Harvard School of Medicine
- Summarized five years of work by Picker-Commonwealth Program for Patient Centered Care
- **Respecting** patients' values and preferences; **coordinating** care; providing information and education; attending to physical comfort; providing emotional support; involving family and friends in care; and ensuring continuity among providers and treatment settings.
Through the Patient’s Eyes

- Respecting patients' values and preferences
- Coordinating care
- Providing information and education; attending to physical comfort
- Providing emotional support
- Involving family and friends in care
- Ensuring **continuity** among providers and treatment settings.
Harvey Picker

• “Understanding and respecting patients’ values, preferences and expressed needs is the foundation of patient-centered care.”
10 Rules for Healthcare IOM

- Care is based on continuous healing relationships
- Care is customized according to patient needs and values
- The patient is the source of control
- Knowledge is shared and information flows freely
- Decision making is evidence base
- Safety is a system property
- Transparency is necessary
- Needs are anticipated
- Waste is continuously decreased
- Cooperation among clinicians is a priority
Commonwealth Fund Report 2004

• Mirror, Mirror on the Wall; Jan 2004 Karen Davis, PhD, et al.
• Compared US healthcare to four other industrialized nations-Australia, Canada, New Zealand and the United Kingdom
• US healthcare ranked second to last on the measures of patient-centered care
Augusta University and PFCC
Patient and Family Centered Care at AU

- Childrens Hospital of Georgia Design began in 1993
- At that time, visitations limited by age, number, time, unit activities
- Visiting hours limited for parents
- Parents removed from units during rounds
- Limited family friendly environment
CHOG Design Process

• Defined Core Values
• Established Family Centered Care Committee
• Involved family in design process
• Created a position for family advisor
Childrens Hospital of Georgia: A National Model for PFCC
CHOG-The Results

- No visiting hours
- Top performer in Press Ganey Patient Satisfaction Survey
- Won 2 National awards for design
- Patient and Family Centered Care national resource
- Market Share increased 40% 1996-2003
- Volume(Discharges) increased 83% 1996-2003
- 2009 UHC ranked CHOG #1 in quality
PFCC

- Can you apply this to Radiology?
Mammography 2001

- Backlog for screening mammograms measured in months
- Mammography viewed as unfriendly environment
- Access to Mammograms a national issue for Radiology Departments
Pat Sodomka

“The way you have to teach patient and family centered care is by bringing the patient into the room.”

“Systems which have features that build in patient participation can help change cultures.”
Breast Health Awareness Team

- Enterprise not Department process
- Initially focused on backlog in mammography (backlog – several months in 2001)
- Changed focus to total breast care
- Evolved into mothers/daughters approach and PFCC
- A journey…
Breast Health Team

- Physicians (Radiologists, Surgeons, Oncologists)
- Technologists
- Nurses (Clinic staff)
- Patients (Cancer survivors, Women who had never gotten Mammogram or had normal Mammograms)
- Educators
- Administrators
Changes

• No Mammo equipment replaced
• Started as a coat of paint and became a change in culture
• Change in people vs change people
• New workflow, new patient flow
• New “spa-like” environment
Biopsy and Recovery
Results

- Press Ganey Patient Satisfaction Score improvement from 40th percentile to 74th percentile—now over 90th percentile
- Instead of avoiding Mammogram appointment, patients found environment welcoming and kept appointments
Roles of Patients

- Member of project team for renovation
- Patient Advisory Council
- Member of committee
What if patients were on the equipment selection teams or the renovation project teams?
Portable X-ray Units for Children

www.radiologyonesource.com
RSNA 2009
What is your favorite color?
Remaking American Medicine 2006

- RWJ Grant
- Four Part PBS Series
- “Silent Killer”
- “First, Do No harm”
- “The Stealth epidemic”
- “Hand in Hand”
RadiologyInfo.org 2010

- ACR and RSNA
- On-line information for patients
- English/Spanish
- 1.4 million visits per month
Imaging 3.0 Beyond Image Interpretation 2012

http://www.acr.org/Advocacy/Economics-Health-Policy/Imaging-3
RSNA 2012

- 2012 RSNA Theme: Patients First
- #Patientsfirst
Patient and Family Centered Care

- All Radiology equipment projects have had patient advisors at the design table for 17 years
- AU Radiology 2013 & 2015 Recipient of Patient Centric Imaging Award
ACR PFCC Commission

- Formed in 2015
- Initially four Committees—all with patients
- Added RSNA ACR public relations website committee
- Added Education Committee
- Over 100 active members
- 2 patients added to JACR Editorial Board
- JACR December Special Issue PFCC
What can you do?

• How does PFCC change the way you practice Radiology?
• Does your practice style involve the patient and their family?
• How/when do you interact with patients and their families?
Excuses

- I am not in a leadership role
- I don’t have staff
- I don’t have a budget
- I don’t know how
Learned Helplessness

- Real or perceived absence of control over the outcome of a situation may lead to depression
- Martin Seligman
Words matter

• Patient denies
• Patient failed treatment

Moving Towards Patient Centered Care One Phrase at a Time
http://jacrblog.org/patient-centered-care-language-reports
Andrea Borody Kitts
Waiting

• “Waiting is not a healthcare function.”

• Pat Sodomka
Waiting room

http://images.travelpod.com/users/sales_family/2.1269396486.mumbai-bus-station-crowded-huh.jpg
Patient Lounge at AUMC Cancer Center
Patient Lounge at AUMC Radiology
Is there anything else I can help you with today?
• Improve patient satisfaction
• Improve patient compliance
• Improve provider–patient rapport
• All of which are known factors in decreased litigation, decreased lengths of stay, decreased costs, and improved clinical outcomes.
Sit down

- Improve patient satisfaction
- Improve patient compliance
- Improve provider–patient rapport
- All of which are known factors in decreased litigation, decreased lengths of stay, decreased costs, and improved clinical outcomes.

Involve patients in

• Decisions in their own care
• Recruitment
• Project management
• Departmental and institutional committees
• National Committees
IPFCC

- Institute for Patient and Family Centered Care
- November 2017 Leadership Circle
- Discussed adding a third C
- Community
- Institute for Patient, Family and Community Centered Care
Population Health

• The health outcomes of a group of individuals, including the distribution of such outcomes within that group.


Population Health

• Health outcomes
• Patterns of health determinants
• Policies and interventions

Kindig D, Stoddart G (Mar 2003). "What is population health?"
http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.93.3.380
Radiology and Population Health

- Screening for Lung Cancer, Breast Cancer, AAA
- Informatics, Big Data
- Artificial Intelligence
Population Health

• Zip code is a better predictor for mortality and health outcomes than genetic code.

• Social determinants of health the United States are responsible for 60% of avoidable mortality.
  McGinnis JM, Williams-Russo P, Knickman JR. 2002, "The case for more active policy attention to health promotion" Health Affairs 21 (2) pp.78–93
  http://content.healthaffairs.org/content/21/2/78-long
Excuses

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Integrated care models
Co-ordination of care services for defined groups of people (e.g., older people and those with complex needs)

Population health (systems)
Improving health outcomes across whole populations, including the distribution of health outcomes

Individual care management
Care for patients presenting with illness or for those at high risk of requiring care services

‘Making every contact count’
Active health promotion when individuals come into contact with health and care services

Improving population health requires multiple interventions across systems

Focus of intervention
Care services
Health improvement

https://www.kingsfund.org.uk
Medicare and Radiology

- Among the 56 unique physician specialties, Radiology serves the most unique Medicare Beneficiaries

- JACR 2018:15:734-739
Think Globally
Act Locally
Case Study: Opioid Epidemic

- Opioids death 42,000 in 2016 (40% involving prescription opioid)

https://www.cdc.gov/drugoverdose/index.html
Where do we focus?

• Treatment of addicts?
• Decrease mortality of overdoses?
• Prevent addiction?
• Arrest drug suppliers?
• Restrict Access to opioids?
Drop box

RCMS placed Drop Box at Richmond County Health Department
July 2017
Needham Drug Take-Back Day

Date:
10:00 am on April 29th, 2017 – 2:00 pm on April 29th, 2017

Location:
Needham Town Common (Drive through drop-off on Garrity Way)

Don’t let your unwanted or expired drugs fall into the wrong hands! On Saturday, April 29, safely dispose of your unwanted, unused and expired drugs to avoid improper use.

https://www.bidneedham.org/events/needham-drug-take-back-day
Beth Israel Deaconess Hospital-Plymouth Installs Kiosk to Safely Dispose of Unwanted Prescription Medications

Beth Israel Deaconess Hospital-Plymouth (BID-Plymouth) recently installed a kiosk for individuals to place personal prescriptions that are no longer needed or wanted. No needles, liquids in quantities greater than four ounces, and no illegal drugs may be submitted. Individuals suffering from substance abuse addiction may begin their addiction by helping themselves to opioids from old prescriptions left in their family’s medicine cabinet,” says BID-Plymouth Pharmacy Director, Kristine L. McGill, MS, RPh. “It’s vital for individuals to clean out their medicine cabinets and dispose of old or unwanted prescriptions. BID-Plymouth now offers another opportunity for people to do that.”

National Prescription Drug Take-Back Days urge people to participate and safely get rid of their unwanted or unused prescription medications. However, they only take place once or two days per year. BID-Plymouth’s MedSafe kiosk provides those who want to rid their homes of unneeded prescriptions with the option to do so, immediately. The medical waste disposal company Sharp Compliance will collect and safely destroy medications collected.

Kiosks like MedSafe can normally be found in local police departments. “Going to the police department can be intimidating or uncomfortable for people. This is a great public service we are offering for patients, families and visitors to rid their homes of unwanted prescriptions,” adds McGill.

http://www.bidplymouth.org/medsafe
Community Health Needs Assessment

- Required for not-for-profit hospitals by Affordable Care Act
COMMUNITY HEALTH NEEDS ASSESSMENT

Final Report

Approved by the 
Beth Israel Deaconess Medical Center 
Board of Directors

September 20, 2016
Priority Area 4: Behavioral Health

Goal 1: Promote behavioral health (BH)/ primary care integration
Goal 2: Reduce burden of opioid use
Goal 3: Increase Access to Quality Behavioral Health Care Services
Goal 4: Identify those at risk for BH condition and provide enhanced care management
Summary

• Patient and Family Centered Care
• Population Health
• You
What is the hardest thing to change?

- Your mind
What can you do?

• Change your vocabulary?
• Sit down when talking to patients and families
• Is there anything else I can do for you today?
• Clean out your medicine cabinet
• Get engaged-community, organized medicine
What can you do?

- Change your vocabulary?
- Sit down when talking to patients and families
- Is there anything else I can do for you today?
- Clean out your medicine cabinet
- Get engaged-community, organized medicine
We are afraid

Our deepest fear is not that we are inadequate.
Our deepest fear is that we are powerful beyond measure.

Marianne Williamson
Thank you

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