The Ambulatory Intensive Care Unit

Early Experiences: Progressive Partnerships for Change

May 26, 2010

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are needed to see this picture.

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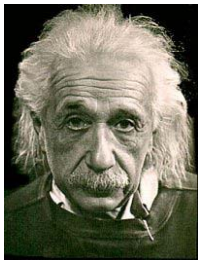


"Insanity is doing the same thing over and over and expecting different results"

-Albert Einstein

Objectives

- Highlight the imperative for care process innovation
- Describe the Ambulatory Intensive Care Unit (AICU) model as an example of high-value innovation
- Describe Boeing's Intensive Outpatient Care Program (IOCP) as one successful case study of provider-purchaser partnerships
- Describe the importance of the care manager role and provide experiential lessons

Renaissance Health Mission

Our mission is to re-imagine healthcare through an ongoing series of initiatives that enable redesigned and entirely new models of care delivery and service to dramatically improve outcomes, positively redefine patient experiences, increase physician satisfaction and provide support and spotlights for innovators. The core of our work is to enable the research, design, implementation, evaluation and adaptation of new innovations. Our process emphasizes rapid cycle innovation and sustainable business models.

The Current Model of Care

- Built around 10-15 minute visits
- Long waits to get an appointment
- "Industrial-look" physical space
- Under prioritized customer service
- Reactive care instead of proactive care
- Patient records kept on paper charts
- Physician panel size of 1800 - 2400 +
- System least well-serves the most in need - individuals with complex, chronic conditions
- Overworked, underpaid and frequently rotating staff
- Overstretched primary care, fragmented overall system
- 9.8% annual rise in healthcare spend since 1970
- Health insurance premiums rising faster than wages, resulting in increased systemic stress and 40+M uninsured

"We are carrying the 19th century clinical office into the 21st century world. It's time to retire it."

- Donald M. Berwick

Unstable and Unsustainable System

Current Approaches to Change are Inadequate

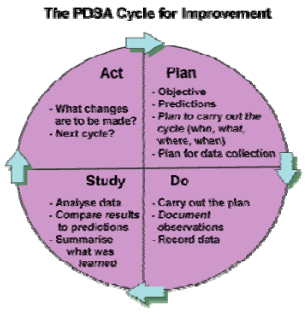
Just try harder
Small P4P

Incremental Improvement
PDSA/CQI/ Six sigma

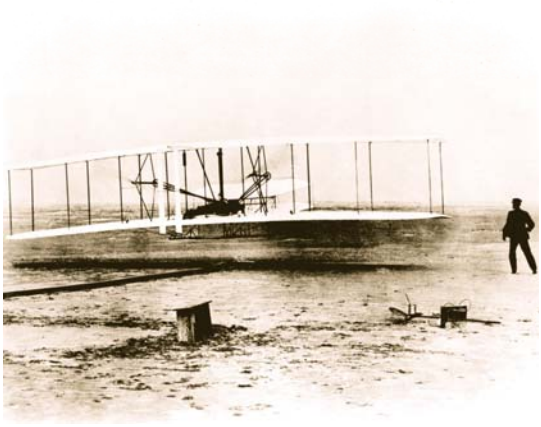
Add to the work
Group visits, Email

Just add technology
Electronic Health Records

Wrap around
Disease management, case management



A Game Changer



The Imperative to Act Boldly

- The current model of health care delivery leads to suboptimal quality, poor experience, and waste of valuable resources
- Small incremental change is wholly inadequate to make significant, sustainable improvements
- We need to go beyond tweaking benefits design, adding small bonuses, or putting band aids on the system
- We need to test completely different models of care
- Providers, Plans, Purchasers have been unwilling or unable to do this redesign alone
  - Unable to make the right changes given the current payment system
  - Do not recognize the need for change
  - Unwilling to change
  - Feel that change may hurt them
- Current environment has unique momentum and shared pain-points necessary to synchronize all stakeholders
- The key to successful, sustainable innovation is new, more rational systems of care coupled with reimbursement transformation. Can be achieved through strong payer-provider partnerships

Sustainability for All Stakeholders

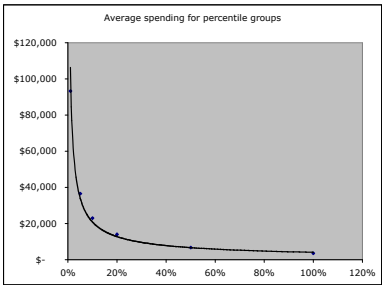
- Triple Aim "Plus":
  - Improve the health of the population
  - Enhance the patient experience of care
  - Improve the experience of our provider teams
  - Increase patient self-efficacy, motivation and productivity
  - Reduce, or at least control, the per capita cost of care*
- Quadruple Win - Patient, Provider, Purchaser, Plan
- High-Value Medical Homes start with the highest probability interventions to achieve Quadruple Wins

The Ambulatory Intensive Caring Unit (AICU) Model
Starting Point: A Focused High-Value Medical Home

- Design funded from a 2003 Grant from the California Health Care Foundation to develop disruptive new models of delivering care as a strategy for dramatically reducing premiums while maintaining or improving quality
- Effort was led by Dr. Pranav Kothari and Dr. Rushika Fernandopulle (Renaissance Health) and Dr. Arnie Milstein (Mercer and Pacific Business Group on Health)
- A core team of national and regional experts in primary care innovation, operations, and process redesign reviewed all the existing literature and data, and examined the experience of prior similar innovations
- A model was developed called the Ambulatory Intensive Caring Unit (AICU) - focused on primary care-led, high intensity care management for the highest risk part of the population
- Independent technical experts developed financial projections for costs and savings from this new model - projected potential of 25%+ overall health care utilization reduction for this targeted population
- The initial designs and financial projections were subject to peer review panel of subject matter experts and leaders of traditional and more innovative practices

Choosing the Target Wisely - High-risk, high-value populations

- Healthy- wellness programs, lifestyle modification
- Acute minor issues- worksite clinics, retail kiosks, after hours urgent care
- Simple chronic conditions- protocol based disease management
- **Complex patients- AICU**
  - High cost, serious, multiple chronic conditions
  - Highest probability of early achievement of Triple Aim

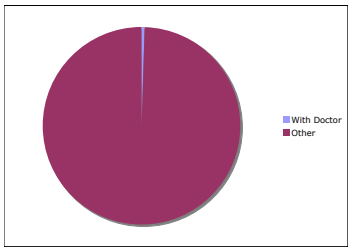


Cost %ile	Percent Spending
1%	26%
5%	52%
10%	65%
20%	79%
50%	95%
100%	100%

Source: Large West-coast self-insured employer PPO data, 2005. n=147K

Paradigm Changes

- Our job is to meet the needs of our patients
- We cannot manage people's health. The patient and their family need to manage the illness, we need to provide them with the tools to do so
- We won't get it right the first time, so build in the ability to adapt



Even if a patient sees us for an hour every week of the year, they are spending 99.4% of their life not with us!

How Care is Different in the AICU

Making care more affordable through comprehensive redesign for the most complex (and costly) patients

New Principles

- Increase affordability by delivering care in a more rational way
- Not incremental change, but comprehensive redesign
- Focus efforts on the sickest patients
- Change the paradigm for managing chronic conditions

New Processes

- Jointly created strategic health plans
- In depth education and motivational interviewing
- Unfettered access to help
- Proactive management
- Integrate across the usual boundaries
- Continually adapt and improve the model

New Structures

- Work with the right people
- Really work as a team
- Robust Information Technology Platform
- Physical Design
- **Payment model that rewards the right thing**
- Culture of service, evidence-based conservatism, improvement

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Case Study: The Boeing Company's Intensive Outpatient Care Program (IOCP)

- World's leading aerospace company and the largest manufacturer of commercial jetliners and military aircraft
- More than 159,000 employees in 49 state and 70 countries
- Annual revenue 2007: $ 66.4 billion
- Primarily self-insured, large, stable, geographically concentrated workforce
- 2007: $ 1.9 billion spent on health and welfare benefits
- Control of high and rising healthcare costs necessary to maintain competitive advantage
- Implementing AICU model as the Intensive Outpatient Care Program to test savings potential while improving health status and quality of care delivered to members

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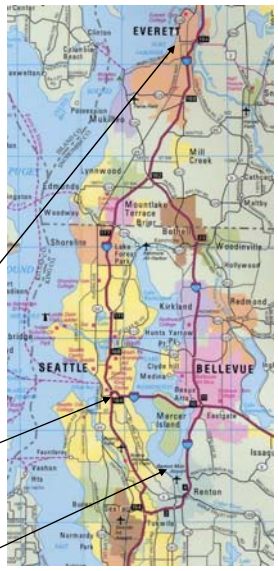
Intensive Outpatient Care Program

- Focused on Puget Sound/Seattle area market
- Two major manufacturing plants for commercial airplanes, many other sites; total of >150K lives
- Partnering with three well respected, progressive providers to build AICU model for 700 predicted high cost Boeing employees and their dependents
- AICU framed as a specialty practice, patients are not asked to give up their current primary care physician
- **Sites paid a case rate PMPM plus the usual FFS payment**
- Pilot launched Q1 2007
  2-year pilot



The Everett Clinic
For the whole you.

TEAM MEDICINE

Valley Medical Center

Model in Brief

- **Relationship-based risk/care management** - *Intensive upstream risk reduction via in-person/phone/web contact with personal care support team*
- **Highly efficient MD visits** - *IT and MA-enabled cost-efficient MD/NP visits using principles of continuous flow manufacturing*
- **Supply chain mgmt** - *Top decile-based selection and management of the balance of the health care supply chain* (This downstream management implementation challenging due to open benefit design, data limitations and collaboration with multi-specialty provider groups. Downstream service agreements created when possible)
- **Patient Selection, Intake and Stratification**
  - Patients selected based on predictive model generated risk score for future utilization
  - Patients invited to voluntarily enroll, with no incentive (positive or negative)
  - All enrollees are provided a dedicated RN Care Manager. At two sites, an IOCP specific MD was also introduced serving in a capacity similar to traditional specialists.
  - Each enrollee is provided a comprehensive intake interview and evaluation, generating a specific care plan (short and long term)
  - Enrollees are risk tiered and accordingly stratified for follow-up interventions with the IOCP. Members are contacted as necessary, but at least once per month.

Outcomes

- **High Levels of Employee Satisfaction:** Testimonials show exceptional reception on the part of patients, and surveys confirm improvements in virtually all measures of care and patient experience including access, communication, provider relationship, and care coordination
- **Functional Status:** Surveys document self-reported improvements in functional scores and productivity
- **Clinical Quality:** Lab data demonstrated objective improvements for key clinical measures
- **Provider satisfaction**: Physicians and nurses provided testimonials in support of the better care they were able to provide
- **Cost savings**
  - 20% annual savings per enrollee as compared to a propensity-matched control group, net of supplemental fee to medical group – primarily due to reduced ER visits, hospital admissions and inpatient days
  - Financial model created by independent biostatistician using data from our Medstat database – methodology separately validated by prominent Harvard researcher and Rand research analyst

IOCP - Linking Payment Change with Clinical Redesign

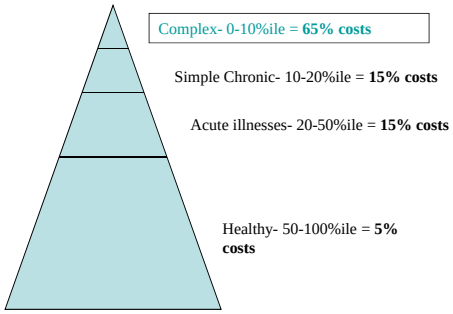
- Each site creates a new ambulatory intensivist practice for the predicted highest cost 5-20% of members
- Practices are staffed by specially identified MD, RN “health coach”, and other support
- Sites implement shared care plans, increase access, proactively manage care
- No benefit changes, so sites continue to bill fee-for-service for MD visits
- Copays for 1st intake visit is waived, rest continue as usual
- Sites are paid a case rate pmpm (roughly 2.5% of total spending) to cover non-traditional services
- Consideration will be given to a shared savings model if expanded in future

IOCP - Choosing The Right Patients

Continuing- Patients whose conditions are ongoing. This includes conditions that are typically thought of as chronic conditions (e.g., diabetes, heart failure, chronic lung disease) as well as other serious, ongoing medical problems like rheumatoid arthritis, chronic pain, and lupus.

Complex- Patients who have multiple conditions, often which interact, or complicate social situations, mental health conditions, or other co-existing issues.

Costly- Patients who have complex, continuing conditions of a serious enough nature to put the patients at high risk for costly utilization, in particular hospitalization, emergency room (ER), or high cost procedures over the subsequent year.



IOCP - Clinical Profile (first 118 patients)

Height	66 inches	
Weight	209 pounds	
BMI	36	
Depression	65	55%
HTN	58	49%
Pain	55	46%
Obesity	48	40%
GI dx	43	36%
CAD	37	31%
Diabetes	31	26%
Other Psych Dx	28	24%
Asthma/COPD	18	15%
Cancer	6	5%
Neuro	6	5%
Renal Dx	3	3%
Liver Dx	1	1%

IOCP - Multiple Complex Conditions

# Conditions	# Patients
1	8
2	24
3	33
4	18
5	15
6	6
7	6

Avg patient has 3.5
tracked conditions

IOCP Team Key to Success

Successful models have implemented dedicated care managers (care partners, health coaches, etc.) embedded within the practice as the core staffing element. In general, RNs have been most effective in this role. The role is not meant to be ad hoc within the care process, but rather a deliberate, continuous care manager-patient healing relationship, maintaining a specific panel of patients. The care manager is the primary partner for the patient and coordinates all care aspects, working closely with the patient and the PCP.

- Care management (some key responsibilities):
  - Lead for care plan partnership with patient
  - Rules based interactions – frequent high-touch
  - Pre-PCP visit planning, Pre-specialist visit planning, pre-order tests, "pre-packaging"
  - Post-visit follow-up for clear directives
  - Post-ED, hospitalization, specialist, etc. follow-up

  ** Where volume of patients appropriate, staffing available and financially viable - use of Health Coaches to leverage RN working at top of license
- PCP, Physician Extender
- Clinic leadership with support and oversight over program
  - –Identified champions

IOCP - Strategic Action Plan

A written, living document agreed to by both doctor and patient setting out priorities, plans, and clear goals for the patient

- Biological, Environmental, Physical, Behavioral Eval
- Thought questions - goals, fears
- Review of past records
- Physical exam
- Labs, other tests as necessary

→ Negotiate ranked list of issues →

Create clear plans for each, give current status, and set goals (by quarter and year)

IOCP - Patient Access

In person- Advanced access, minimize wait times

Phone- direct access

Email- secure vs. regular

Observations

- About half of provider's time will be non-visit
- Build in time throughout the day (RN becomes buffer)
- The more access you give, the less you will be called

IOCP - Customization of Care

True customization

- Particular disease
- Stage of illness/issue
- Language
- Sophistication
- Appetite
- Stage of Change
- Style

A variety of modes

- Telephonic
- Web- based, email
- One on one, in person
- Videos
- Group visits
- Peer mentors
- Access to records

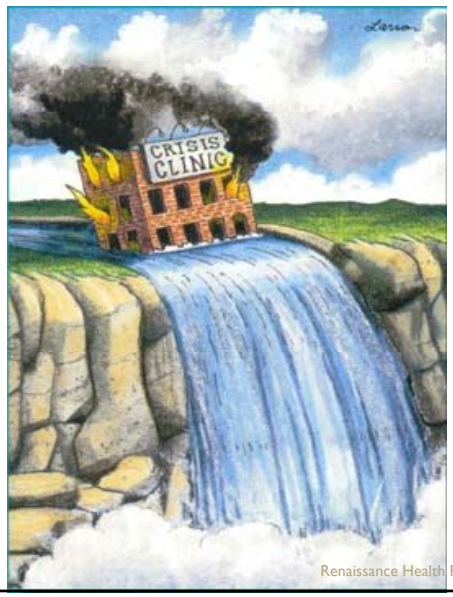
IOCP - Ongoing Evaluation and Adaptation

- Build Slack into the system for intentional learning
- Continually learn from others - patients, team, sponsors, market
- Be accountable and transparent

Focus on Care Management Role and Experience at The Everett Clinic

Joleen Rodgers RN, BSN
Care Manager IOCP
Advanced Care Coordination
The Everett Clinic

Primary Care Current State



WHAT IS A CARE MANAGER

Definition

- "Care management is a set of activities designed to assist patients and their support systems in managing medical conditions and related psychosocial problems more effectively, with the aims of improving patients' functional health status, enhancing the coordination of care, eliminating the duplication of services, and reducing the need for expensive medical services.

-Bodenheimer, T., and Berry-Millett, R. Follow the Money: Controlling expenditures by improving care for patients needing costly services. *NEJM,* (2009). *361*, 1521-1523.

Care Manager Responsibilities

- Manage assigned high risk population:
  - Assess the risks and needs of each individual.
  - Collaborate with PCP, client and their support systems to create a patient centered care plan.
  - Teaching about diseases and medications
  - Coaching and advocating
  - Managing to evidence based targets

Care Manager Role

- Build a trusting relationship with clients
- Provide access
  - The right care at the right time by the right provider.
- Have awareness of the services our patients are utilizing
- Intervene and educate patients and families on how to respond to worsening symptoms in order to avoid emergency department visits and hospitalizations

Care Manager Role

- Activate and engage the appropriate extended care team
- Monitoring of treatment adherence and outcomes.
- Willing to hold providers and patients accountable.
- Optimize self management and increase self-efficacy.
  - Patient is an active participant, not a passive recipient

THE PATIENT CENTERED CARE PLAN

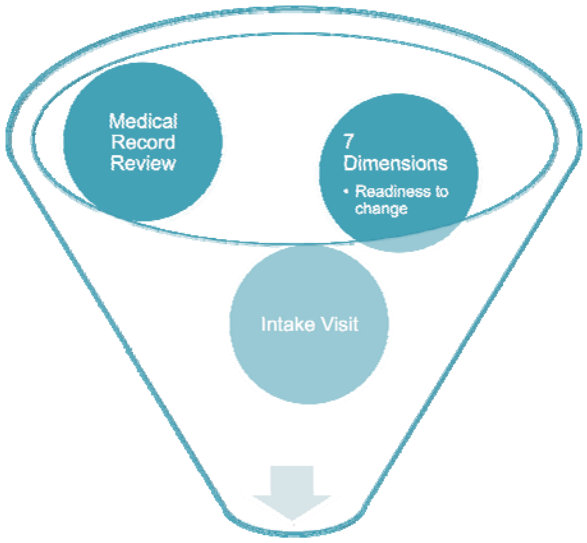
"It is much more important to know what sort of patient has a disease than what sort of disease a patient has."

-Sir William Osler

Assessment

- Seven Dimensions
  - Medical
  - Mental Status
  - Functional Ability
  - Social Support
  - Nutrition
  - Transportation
  - Advanced Directives

Assessment ⟷ Care Plan



Patient Centered Care Plan

- The Care Plan is the result of collaboration of PCP, Care Manager and the Patient.
- Individualized is key because clients differ in
  - Preference and willingness
  - Medical and Psychiatric co-morbidities
  - Prior treatment history
  - Current treatment
  - Response to treatment

STAFF AND PATIENT EXPERIENCE WITH CARE MANAGEMENT

RN experience as Care Managers

- "We have the opportunity to practice at the top of our scope and truly use the nursing process to care for our patients."
- "Previously, I felt like a glorified receptionist, taking messages and passing them along and calling the patients back. Very seldom did I feel like I had time to teach or be pro active with a patient"

Care Manager Experience

- "By being proactive I am able to get to patients before their symptoms get worse. This decreases the volume of incoming crisis management calls."
- "I get to deal with all aspects of the patient's healthcare instead of several RN's handling the same issues and not really knowing what is going on with the patient."

Physician Experience

- "I have uncovered many details about my patients (some whom I have known for years) that I never knew and am able to treat the whole individual."
- Taking a step back from the "rat race" has allowed me to develop a meaningful relationship with my patients.
- "Previously, I used my MA as a nurse and treated our office nurses like clerical staff. I was not aware how much they (RN's) could help with the care of complex patients"

Patient Perspective of Current State

After IOCP…

Patients Say…

- "I have been helped more in the last six months than years of seeing multiple doctors."
- "Being a patient in the IOCP has been a life-changing event for me. I have learned to change the way I live and think. I finally stopped smoking. Somebody actually listens to me and is giving me the help I need."
- "My BP is now normal after being high for many years. I am getting good advice about my prescriptions. I am able to take walks and hope to be swimming again soon. I am feeling positive now, I once felt doomed. I feel like a new person."

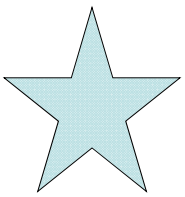
Boeing IOCP Evaluation Highlights

Health Costs

Sign. reduction in ED and hospital utilization, overall 20%+ lower spend

Functional status

Sf12 gains of 20% and significant improvement in self-reported absenteeism and presenteeism



Quality

Achieved ~90th percentile Quality Compass metrics for A1c, LDL, BP

Staff Satisfaction

High level of MD and RN satisfaction in IOCP model

Patient Experience

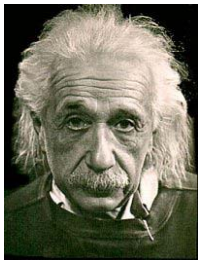
ACES - significant increase in overall care experience, highlighted by improved relationships

High Value Medical Homes
Early Lessons Learned

- Patients and providers love the program. Care manager is the critical success element.
- Early results optimistic for achieving Triple Aim "Plus"; true quadruple win with focused high-value innovations. Consistent results reported from Geisinger and Hopkins with similar models of care.
- Requires partnership between payer and provider, in order to align incentives
- Different than current care processes in many ways; requires intentional approach, sensible roll-out and support from key providers
- Relationship is the key to engagement of the patient. Hence, recruitment/enrollment requires dedicated effort. Even in early stages, however, we are getting recruitment rates far above traditional telephonic commercial DM program engagement rates
- While can be done wrapped around many providers, initially at least it may be smarter to focus this with small dedicated teams
  - Critical to choose the right people; culture, flexibility, motivations - need "believers"
- Intensive planning, collaboration and oversight key to successful pilots. Pilot sponsor role must be more than financial sponsorship to avoid regression to usual care processes.
- Capable registry or disease tracking and follow-up systems are key
- Good and ongoing data is critical
  - Selecting patients, creating profiles, physician data

Closing Thoughts

- The only real way to improve the performance of our current health care system is through fundamental redesign of the care process
- Providers alone have not been able to impact necessary change; Employers and health plans partnering with providers have a critical role to play in catalyzing and leading this redesign. Unique opportunity to leverage health care process innovation momentum and to build care models and partnerships that are a Payer - Provider "Win-Win"
- Collaboration amongst the 4Ps is critical in catalyzing and leading this redesign
- The Intensive Outpatient Care Program model provides one evidence- based, peer reviewed method of working with an existing or new delivery system to provide better and cheaper care for the sickest members of any population
- The potential cost savings are huge - over 20% reductions in overall spending might be achievable while improving quality and the experience of care
- The only way to see if we can provide higher quality more efficient care is to build and test models
  - PBGH California-based Ambulatory ICU demonstration 2011
  - Oregon Health Leadership Council Statewide High Value Medical Home late 2010
  - Washington expansion of Boeing IOCP
  - Geisinger, Hopkins, others



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