

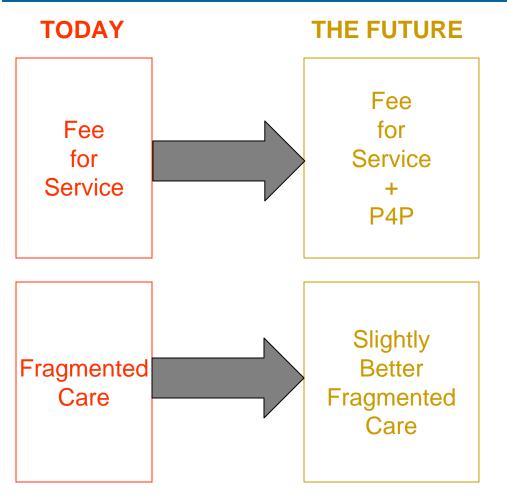


FROM VOLUME TO VALUE: Overcoming the Challenges to Meaningful Payment Reform and True Accountable Care

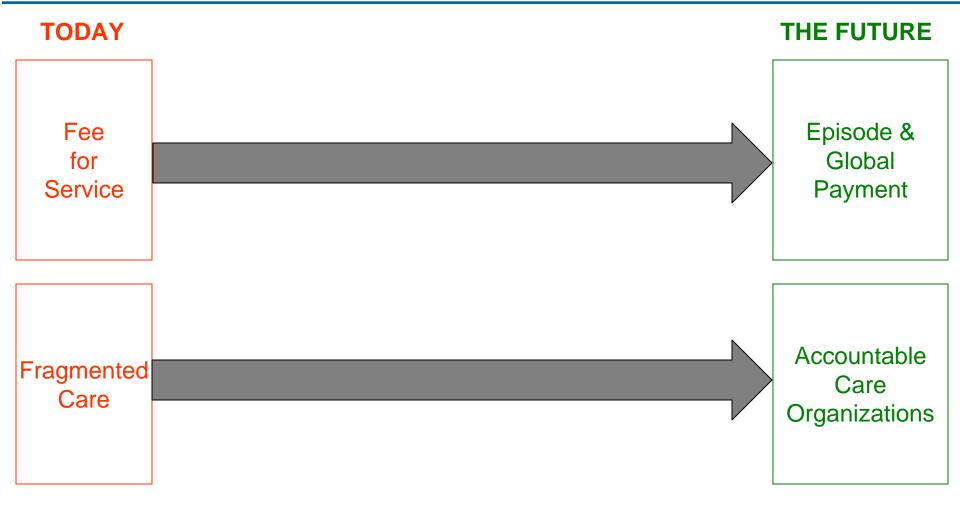
Harold D. Miller

Executive Director Center for Healthcare Quality and Payment Reform and President and CEO Network for Regional Healthcare Improvement

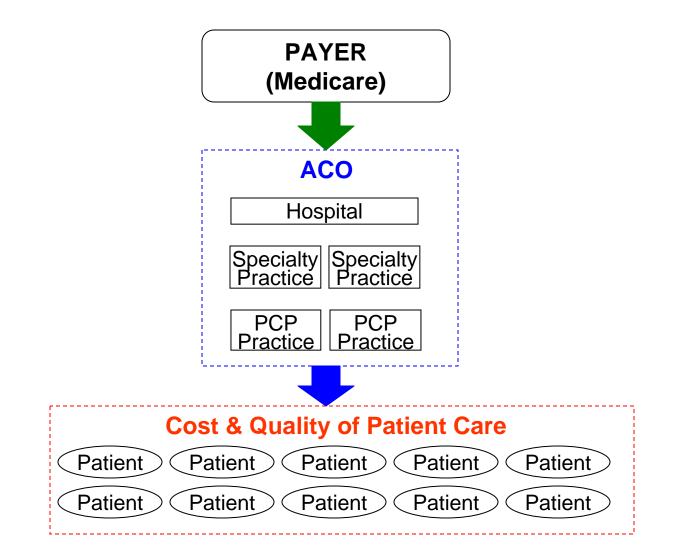
Just 3 Years Ago, Everyone Was nrhi Thinking Very Small...



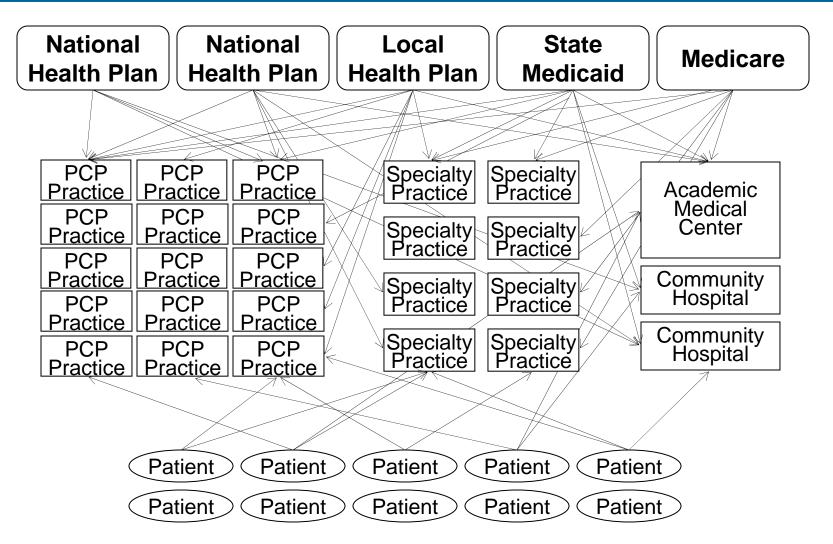
...Today, We're Thinking Bigger,nrhi But The Future is a BIG Jump



If You Only Think About Medicare, **nrhi** It Seems Easy to Create ACOs

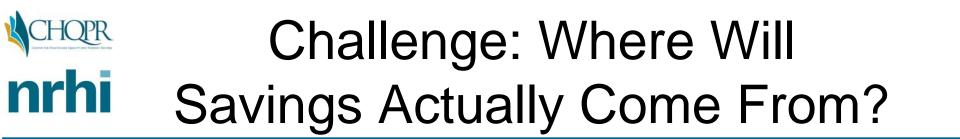


But Real Communities Are Much Nore Complex

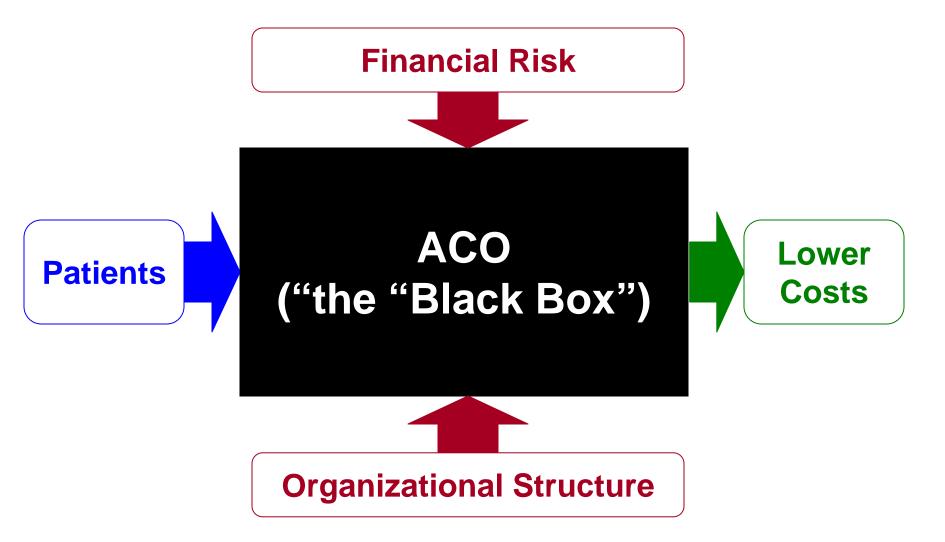




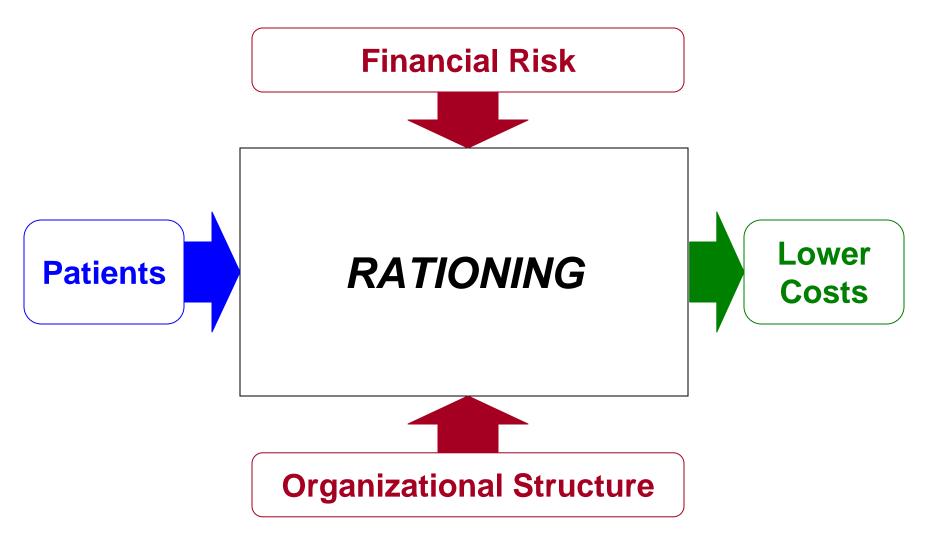
10 Strategies for **Successfully** Implementing **Payment Reform** and Accountable **Care Organizations** in the Real World



Most Discussions About ACOs nrhi Focus on "Risk" and "Structure"



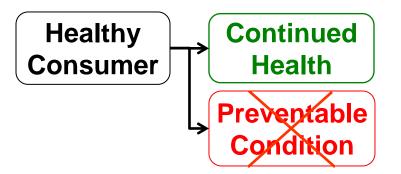
What's In That Black Box Can't Be **nrhi** Good For Consumers, Can It?



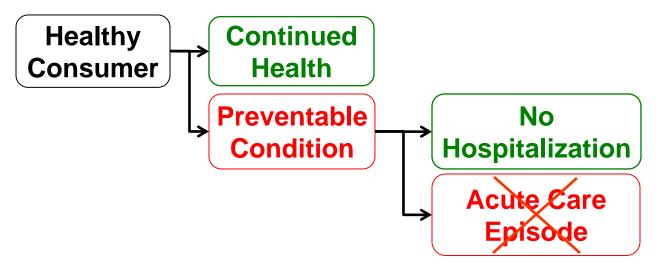
Strategy #1: Focus on **nrhi** How Patient *Care* Will *Improve*



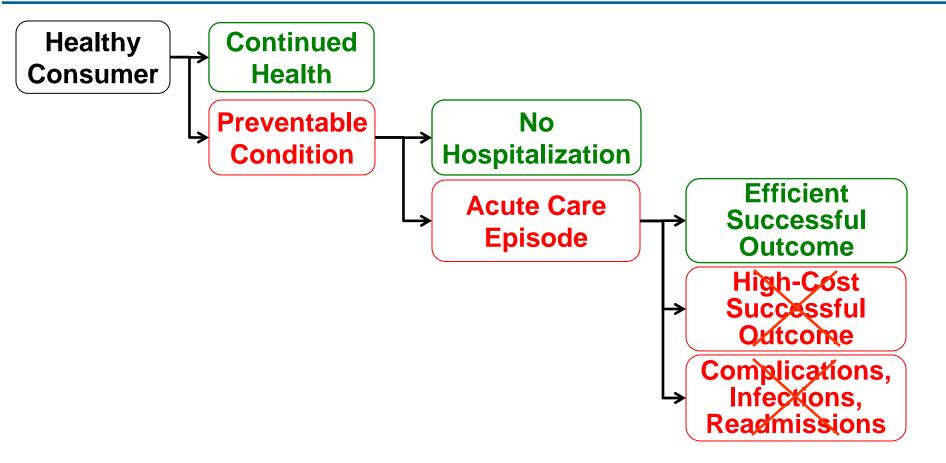
Reducing Costs Without Rationing: **nrhi** Prevention and Wellness



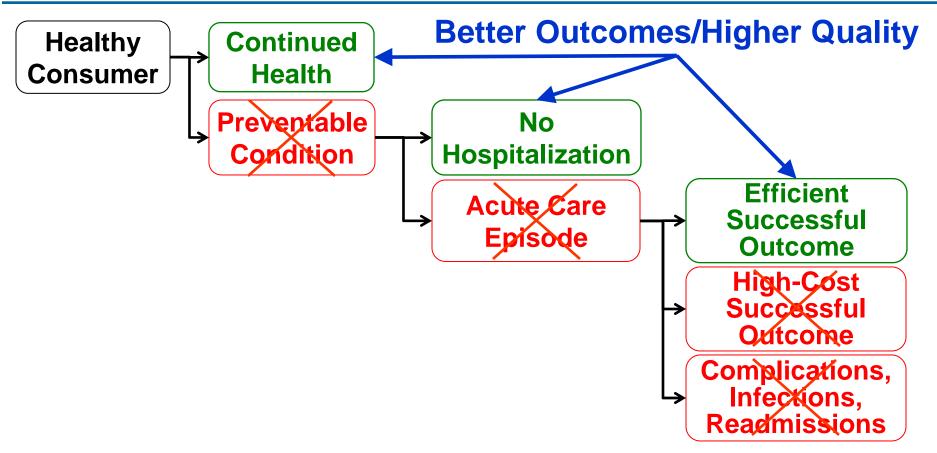
Reducing Costs Without Rationing: **nrhi** Avoiding Hospitalizations



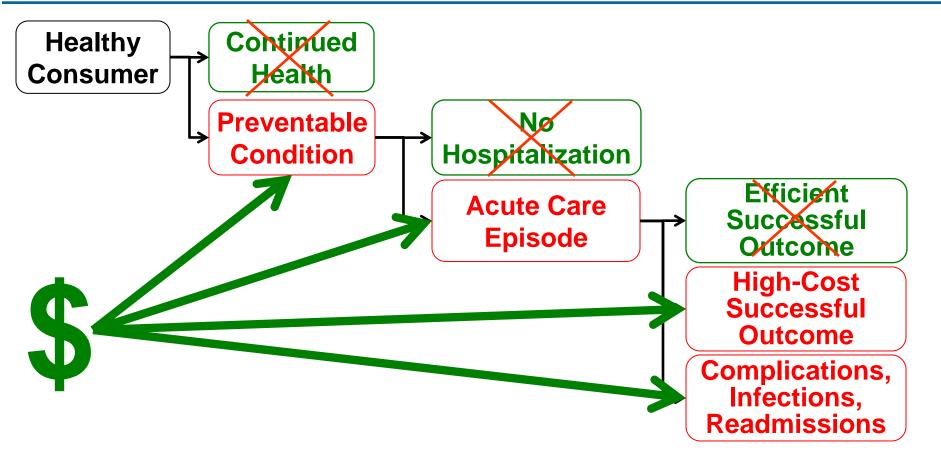
Reducing Costs Without Rationing: **nrhi** Efficient, Successful Treatment



Reducing Costs Without Rationing Is Also Quality Improvement!



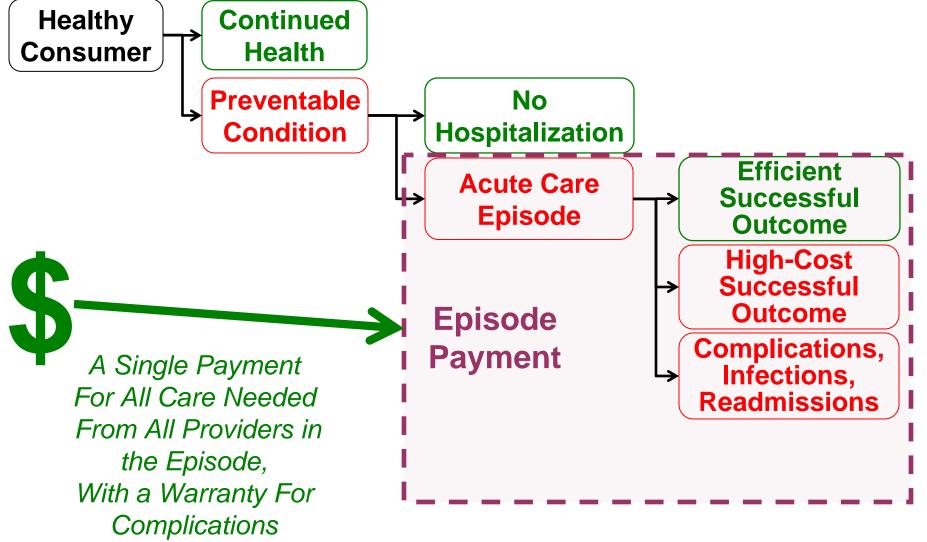
CHOR Current Payment Systems Reward nrhi Bad Outcomes, Not Better Health

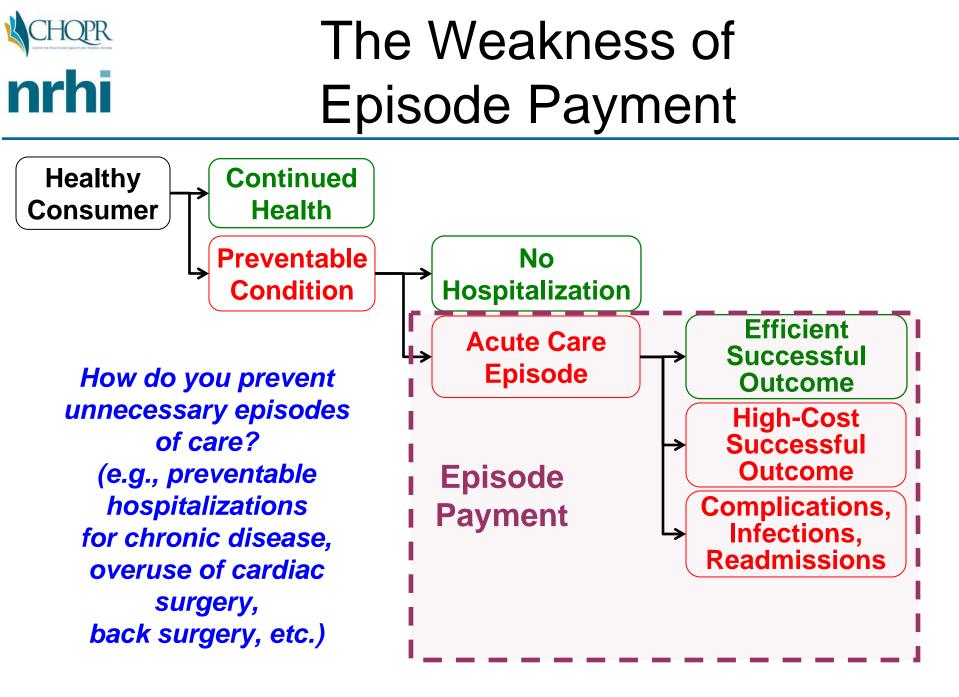


Strategy #2: Define Payment **nrhi** Reforms That Support Care Chgs

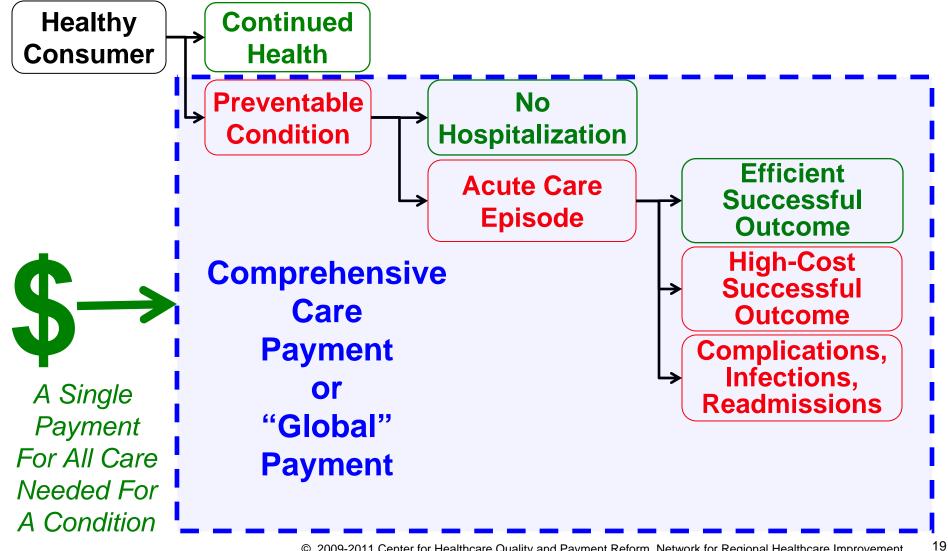
- It's not about "risk" or "incentives," it's about giving healthcare providers the *ability/flexibility* to improve outcomes and reduce costs in a way that is financially feasible
- Desired changes in care should drive payment reforms that support them, not the other way around
- Principal Tools:
 - Episode-of-Care Payment
 - Comprehensive Care Payment/Global Payment

Episode Pmt: Preventing Adverse nrhiEvents and Improving Coordination



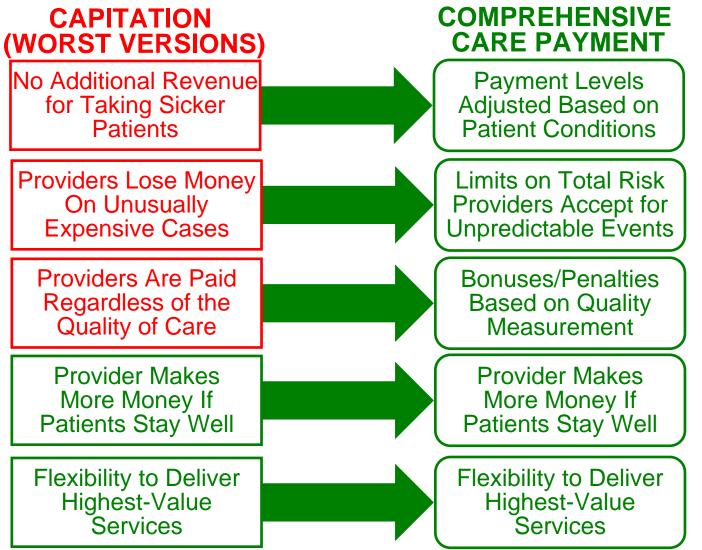


Comp. Care/Global Payments nrhi To Avoid Unnecessary Acute Care





Isn't This Capitation (Ugh)? No – It's Different



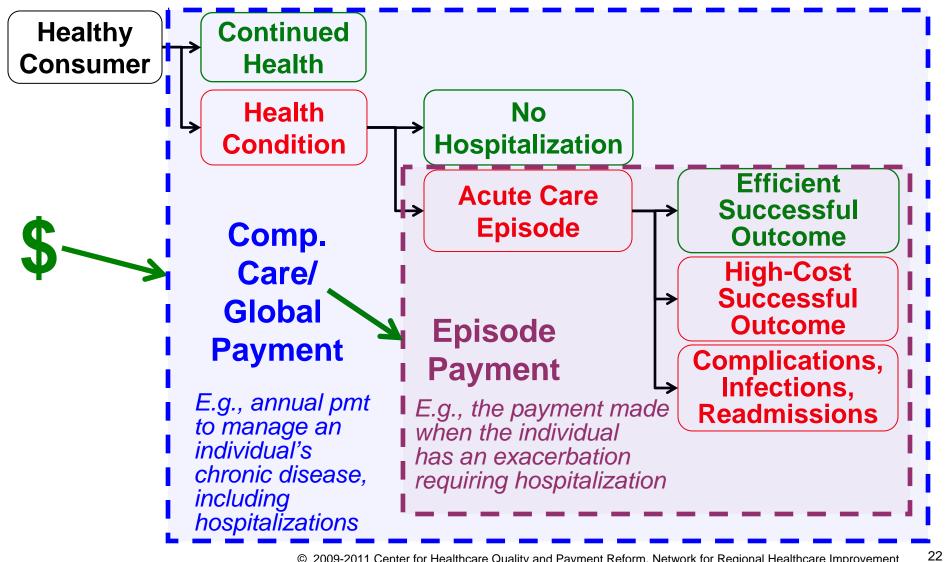
© 2009-2011 Center for Healthcare Quality and Payment Reform, Network for Regional Healthcare Improvement

Example: BCBS Massachusetts Alternative Quality Contract

- Single payment for all costs of care for a population of patients
 - Adjusted up/down annually based on severity of patient conditions
 - Initial payment set based on past expenditures, not arbitrary estimates
 - Provides flexibility to pay for new/different services
 - Bonus paid for high quality care
- Five-year contract
 - Savings for payer achieved by controlling increases in costs
 - Allows provider to reap returns on investment in preventive care, infrastructure
- Broad participation, including small, non-integrated providers
 - 14 physician groups/health systems participating with over 400,000 patients, including one primary care IPA with 72 physicians
- Positive first-year results
 - Higher ambulatory care quality than non-AQC practices, better patient outcomes, lower readmission rates and ER utilization

http://www.bluecrossma.com/visitor/about-us/making-quality-health-care-affordable.html

CHOPR **Comprehensive Care & Episode** nrhi Payment Can Be Complementary





Strategy #3: Use Data to Find Win-Win-Win Opportunities

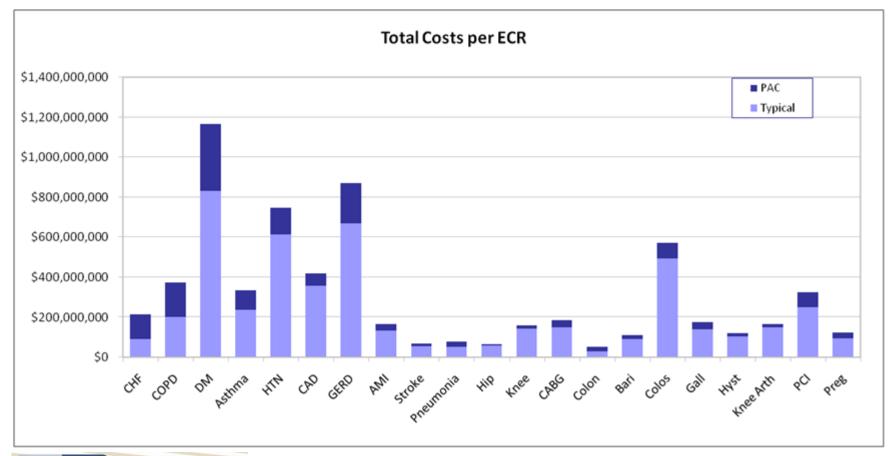
- Better Care for Patients
- Lower Costs for Purchasers/Payers
- Equal or Better Margins for Providers



Use Data for *Analysis* Not Just "Measurement"

- Measurement presumes we know what we're looking for, that we know what's desirable/achievable in all communities, and that we can legitimately rate/rank providers based on the measures
 - That's a high standard, and it's not surprising that we don't have adequate measures in many important areas, particularly outcome measures
- *Analysis*, particularly *exploratory* analysis, presumes only that we believe there are opportunities to improve value, and that more work will be needed to determine what is achievable and cost-effective

Example: Prometheus Analyses of Avoidable Complications





Fair, Evidence-based Solutions. Real and Lasting Change.

www.HCl3.org

It's Not Just Payment Method, nrhi But How Do You Set the Price?

- Improving the structure and incentives of payment systems is necessary but not sufficient
- If payment level is (too) high, there will be no savings and little incentive to transform care
- If payment level is too low, providers will be unable to deliver high-quality care and risk financial disaster



Prices for Warrantied Care May Well Be Higher



Prices for Warrantied Care May Well Be Higher

- Q: "Why should we pay more to get good-quality care??"
- A: In most industries, warrantied products cost more, but they're desirable because TOTAL spending on the product (repairs & replacement) is lower than without the warranty

Prices for Warrantied Care May Be **nrhi** Higher, But Spending Lower

- Q: "Why should we pay more to get good-quality care??"
- A: In most industries, warrantied products cost more, but they're desirable because TOTAL spending on the product (repairs & replacement) is lower than without the warranty
- In healthcare, a DRG with a warranty would need to have a higher payment rate than the equivalent non-warrantied DRG, but the higher price *should* be offset by fewer DRGs w/ complications, outlier payments, and readmissions

Example: Procedure Where **nrhi** Provider is Paid \$10,000 Today

Cost of Procedure \$10,000

© 2009-2011 Center for Healthcare Quality and Payment Reform, Network for Regional Healthcare Improvement 30



Actual Average Payment for Procedure is Higher

Cost of Procedure	Added Cost of Infection	Rate of Infections	Average Total Cost
\$10,000	\$20,000	5%	\$11,000

Starting Point for Warranty Price: **nrhi** Actual Current Average Payment

Cost of Procedure	Added Cost of Infection	Rate of Infections	Average Total Cost	Price Charged	Change in Net Revenue
\$10,000	\$20,000	5%	\$11,000	\$11,000	\$0

Limited Warranty Gives Financial nrhi **Incentive to Improve Quality**

Cost of Procedure	Added Cost of Infection	Rate of Infections	Average Total Cost	Price Charged	Change in Net Revenue
\$10,000	\$20,000	5%	\$11,000	\$11,000	\$0
\$10,000	\$20,000	4%	\$10,800	\$11,000	\$200
		Reducing Adverse	Reduce s		Improve s The

Bottom

Line

Higher-Quality Provider Can **nrhi**Charge Less, Attract More Patients

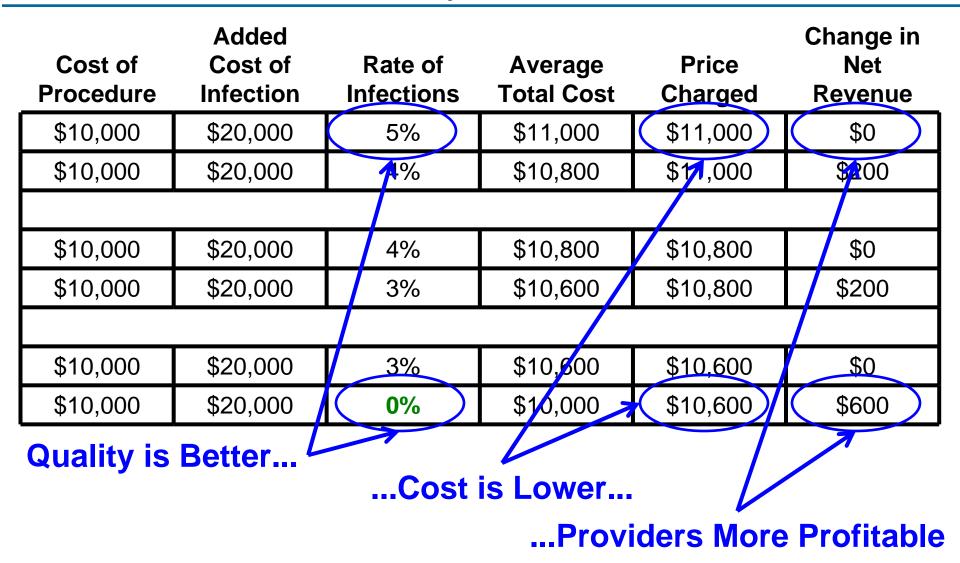
Cost of Procedure	Added Cost of Infection	Rate of Infections	Average Total Cost	Price Charged	Change in Net Revenue
\$10,000	\$20,000	5%	\$11,000	\$11,000	\$0
\$10,000	\$20,000	4%	\$10,800	\$11,000	\$200
\$10,000	\$20,000	4%	\$10,800	\$10,800	\$0
				Enables Lower Prices	



Cost of Procedure	Added Cost of Infection	Rate of Infections	Average Total Cost	Price Charged	Change in Net Revenue
\$10,000	\$20,000	5%	\$11,000	\$11,000	\$0
\$10,000	\$20,000	4%	\$10,800	\$11,000	\$200
\$10,000	\$20,000	4%	\$10,800	\$10,800	\$0
\$10,000	\$20,000	3%	\$10,600	\$10,800	\$200
		Reducing			
		Adverse	S		The
		Events	Costs		Bottom
					Line



Win-Win-Win for nrhi Patients, Payers, and Providers



In Contrast, Non-Payment Alone Creates Financial Losses

Cost of Procedure	Added Cost of Infection	Rate of Infections	Average Total Cost	Amount Paid	Change in Net Revenue
\$10,000	\$20,000	5%	\$11,000	\$11,000	\$0
\$10,000	\$20,000	5%	\$11,000	\$10,000	-\$1,000
\$10,000	\$20,000	3%	\$10,600	\$10,000	-\$600
\$10,000	\$20,000	0%	\$10,000	\$10,000	\$0
				Non- Payment for Infections	Causes Losses While Improving

The Challenge Remains: How Do **nrhi** You Set a Warrantied Price?

- If the warrantied price is higher than (total) current costs, there are no savings and no incentive to transform care
- If the warrantied price is too low, providers will be unable to deliver high-quality care and risk financial disaster

Shared, Trusted Data for Pricing Critical for Success

- **Provider** needs to know what its current utilization rates, preventable complication rates, etc. are to know whether an episode or global payment amount will cover its costs of delivering care
- **Purchaser** needs to know what its current utilization rates, preventable complication rates, etc. are to know whether an episode or global payment amount is a better deal than they have today
- Both sets of data have to match in order for both purchasers and payers to agree!



Our Standard Methods of Controlling Prices Don't Work



Our Standard Methods of Controlling Prices Don't Work

- Price Negotiations as Part of Contracting
 - Even large insurers can't demand price concessions from large/monopoly providers



nrhi

Our Standard Methods of Controlling Prices Don't Work

- Price Negotiations as Part of Contracting
 - Even large insurers can't demand price concessions from large/monopoly providers

Narrow Networks

- In theory, could steer patients to lower-cost providers and give providers greater volume to reduce prices
- In practice, prohibits patients from using the providers they prefer and creates consumer backlash
- Networks are based on providers, not services, so providers with some good services are either in or out for all services



nrhi

Our Standard Methods of Controlling Prices Don't Work

- Price Negotiations as Part of Contracting
 - Even large insurers can't demand price concessions from large/monopoly providers

Narrow Networks

- In theory, could steer patients to lower-cost providers and give providers greater volume to reduce prices
- In practice, prohibits patients from using the providers they prefer and creates consumer backlash
- Networks are based on providers, not services, so providers with some good services are either in or out for all services

• Copays, Co-insurance and High-Deductible Health Plans

- Create little incentive for consumers to choose lower-cost providers on the expensive items that make a difference
- Create significant disincentive to pursue preventive care that may prevent the expensive items in the first place



Strategy #4: nrhi **Better Ways of Controlling Prices**

- **Consumer Incentives for Value-Based Choice**
 - Understandable information on price and quality
 - Tier providers on price and quality
 - Require consumers to pay the "last dollar" of provider cost



Strategy #4: **Better Ways of Controlling Prices**

- Consumer Incentives for Value-Based Choice
 - Understandable information on price and quality
 - Tier providers on price and quality
 - Require consumers to pay the "last dollar" of provider cost
- Ensuring There Are Competitors
 - Avoiding anti-competitive consolidations
 - Avoiding creating unnecessarily high barriers to entry (e.g., requirements for EHRs, large numbers of patients, control of all services)
 - Provide technical and financial assistance to allow small physician practices to participate



Strategy #4: **Better Ways of Controlling Prices**

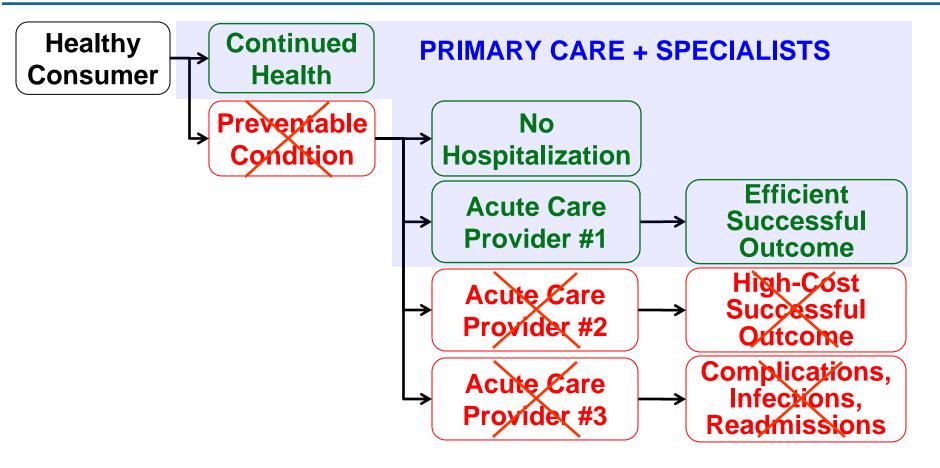
- **Consumer Incentives for Value-Based Choice**
 - Understandable information on price and quality
 - Tier providers on price and quality
 - Require consumers to pay the "last dollar" of provider cost
- Ensuring There Are Competitors
 - Avoiding anti-competitive consolidations
 - Avoiding creating unnecessarily high barriers to entry (e.g., requirements for EHRs, large numbers of patients, control of all services)
 - Provide technical and financial assistance to allow small physician practices to participate

Enabling Competitors to Compete

- Precluding all-or-nothing contracting
- Precluding provider bans on tiered insurance products

Strategy #5: Focus on Physicians, **nrhi** Not Hospitals

Strategy #5: Focus on Physicians, **nrhi** Not Hospitals



What a Single Physician Can Do

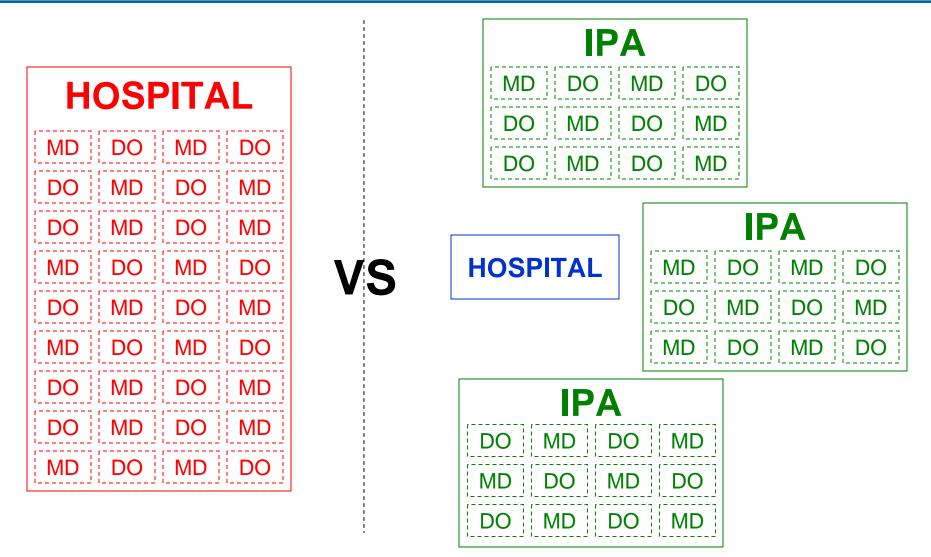
- In 1987, an orthopedic surgeon in Lansing, MI and the local hospital, Ingham Medical Center, offered:
 - a fixed total price for surgical services for shoulder and knee problems
 - a warranty for any subsequent services needed for a two-year period, including repeat visits, imaging, rehospitalization and additional surgery.
- Results:
 - Surgeon received over 80% more in payment than otherwise
 - Hospital received 13% more than otherwise, despite fewer rehospitalizations
 - Health insurer paid 40% less than otherwise
- Method:
 - Reducing unnecessary auxiliary services such as radiography and physical therapy
 - Reducing the length of stay in the hospital
 - Reducing complications and readmissions.



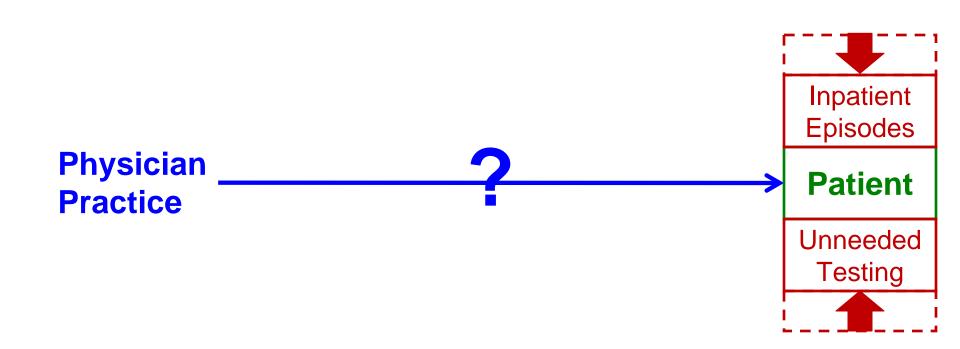
What Groups of Small, Independent Practices Can Do

- Small Primary Care Practices Managing Global Payments
 - Physician Health Partners (PHP) in Denver, CO is a management services organization that supports four separate IPAs (median size: 3 MDs/practice).
 PHP accepts capitated risk-based contracts on behalf of the IPAs with both Medicare and commercial HMOs. <u>www.phpmcs.com</u>
- Independent PCPs & Specialists Managing Global Payments
 - Northwest Physicians Network (NPN) in Tacoma, WA is an IPA with 109 PCPs and 345 specialists in 165 practices (average size: 2.4 MDs/practice).
 NPN accepts full or partial risk capitation contracts, operates its own Medicare Advantage plan, and does third party administration for self-insured businesses. <u>www.npnwa.net</u>
- Joint Contracting by MDs & Hospitals for Global Payments
 - The Mount Auburn Cambridge IPA (MACIPA) and Mount Auburn Hospital jointly contract with three major Boston-area health plans for full-risk capitation. The IPA is independent of the hospital; they coordinate care with each other without any formal legal structure. <u>www.macipa.com</u>

Which Is More Likely to Generate **nrhi** True Price Competition?



Physicians Need the Resources & Normal Skills to Take Accountability



Resources/Capabilities Needed nrhi for Docs to Take Accountability

Data and analytics to measure and monitor utilization and quality

Coordinated relationships with other specialists and hospitals

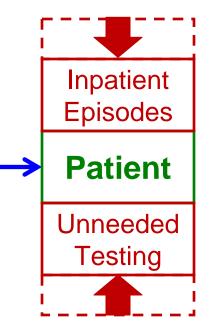
Method for targeting high-risk patients (e.g., predictive modeling)

Physician Practice

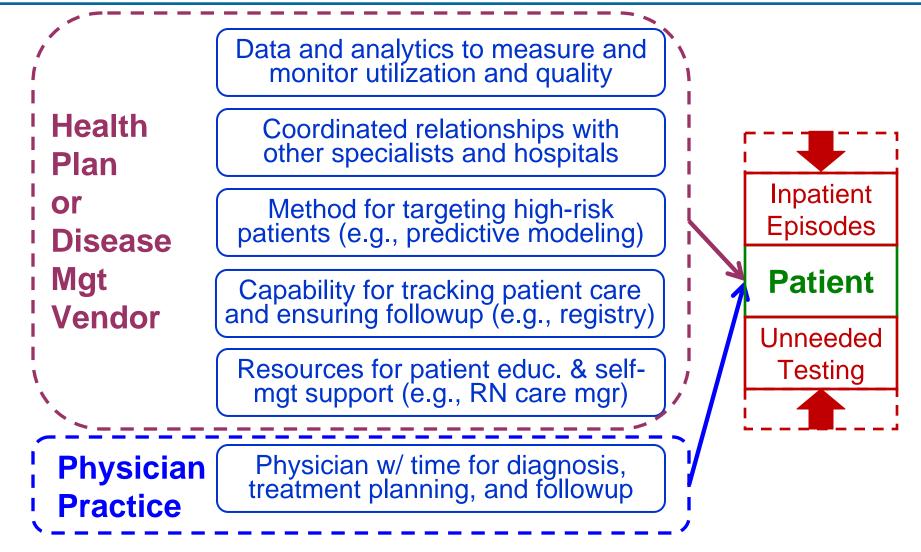
Capability for tracking patient care and ensuring followup (e.g., registry)

Resources for patient educ. & selfmgt support (e.g., RN care mgr)

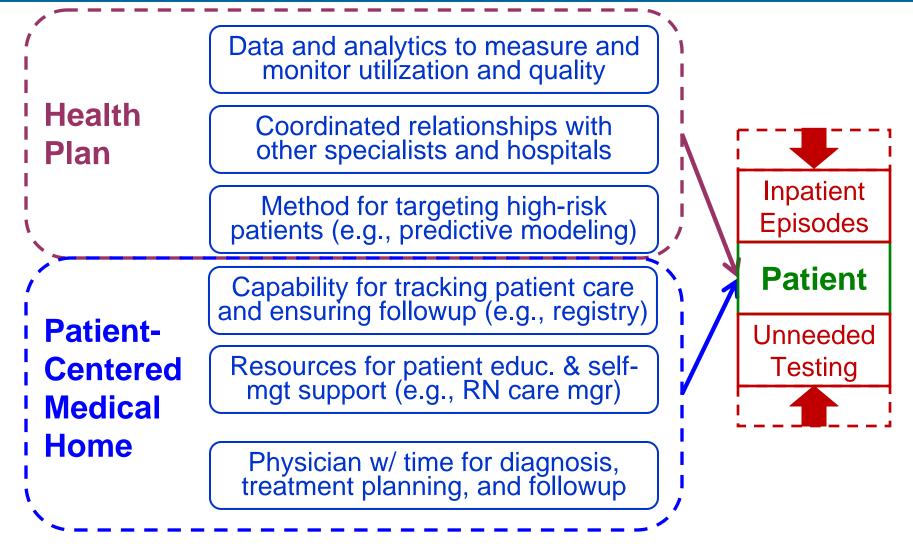
Physician w/ time for diagnosis, treatment planning, and followup



Coordinate w/ Physicians



Medical Home Initiatives Expand nrhiPractice Capacity, But Not Enough



Goal: Give Docs the Capacity nrhi to Deliver "Accountable Care" Data and analytics to measure and monitor utilization and quality Coordinated relationships with other specialists and hospitals **Physician** Inpatient Capability for tracking patient care and ensuring followup (e.g., registry) **Practice Episodes** Patient Method for targeting high-risk patients (e.g., predictive modeling) **Partners** Unneeded

Resources for patient educ. & selfmgt support (e.g., RN care mgr)

ACO

Physician w/ time for diagnosis, treatment planning, and followup

Testing



Strategy 6: Creating Effective Transitional Payment Models

- Physicians and other healthcare providers need to take accountability *in stages*, beginning with things they can control, as they redesign care and build skills in managing new payment models
- This is different than varying the percentage of risk, or the direction of risk, a provider takes on *total* cost

Significant Reduction in Rate of nrhiER Visits, Hospitalizations Possible

Examples:

 40% reduction in hospital admissions, 41% reduction in ER visits for exacerbations of COPD using in-home & phone patient education by nurses or respiratory therapists

J. Bourbeau, M. Julien, et al, "Reduction of Hospital Utilization in Patients with Chronic Obstructive Pulmonary Disease: A Disease-Specific Self-Management Intervention," *Archives of Internal Medicine* 163(5), 2003

66% reduction in hospitalizations for CHF patients using homebased telemonitoring

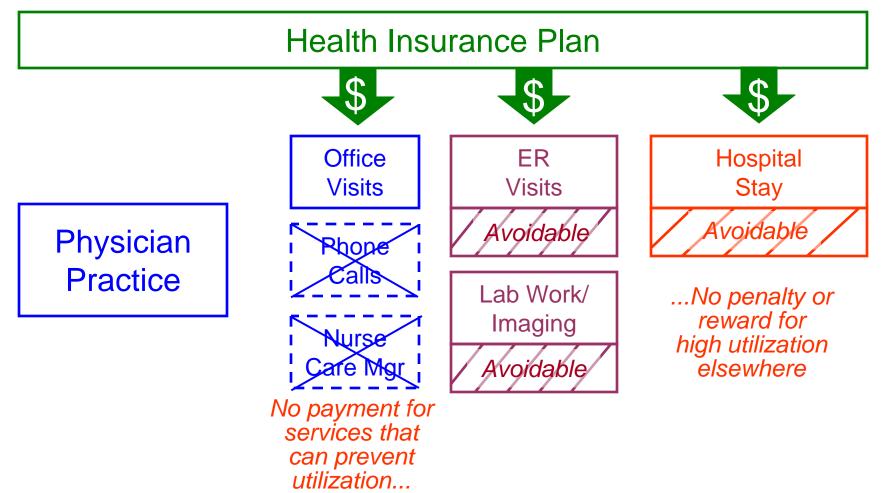
M.E. Cordisco, A. Benjaminovitz, et al, "Use of Telemonitoring to Decrease the Rate of Hospitalization in Patients With Severe Congestive Heart Failure," *American Journal of Cardiology* 84(7), 1999

27% reduction in hospital admissions, 21% reduction in ER visits through self-management education

M.A. Gadoury, K. Schwartzman, et al, "Self-Management Reduces Both Short- and Long-Term Hospitalisation in COPD," *European Respiratory Journal* 26(5), 2005

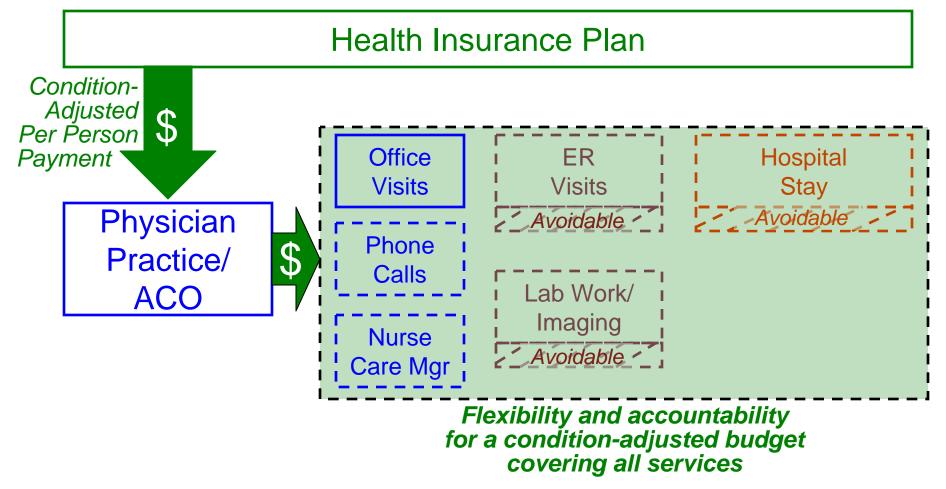
We Don't Pay for the Things That Will Prevent Overutilization

CURRENT PAYMENT SYSTEMS



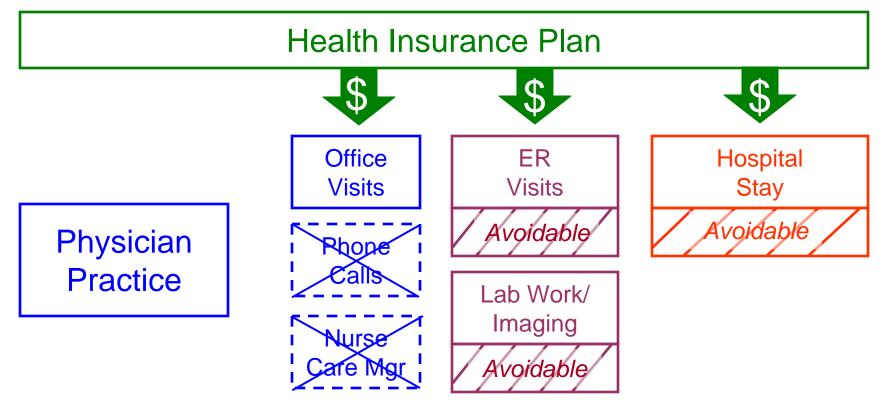
Episode/Global Pmt Solves That, But It's a Big Jump from FFS

FULL COMP. CARE/GLOBAL PAYMENT



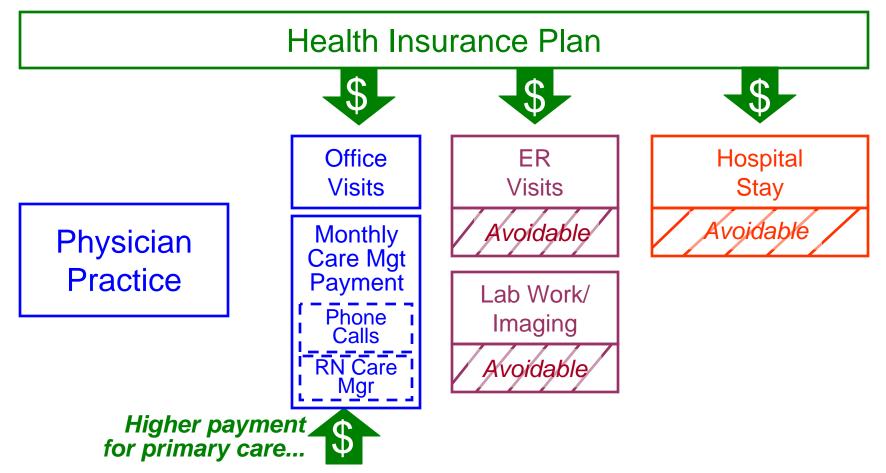
What Might a Transitional Payment Nrhi System Look Like?

CURRENT PAYMENT SYSTEMS



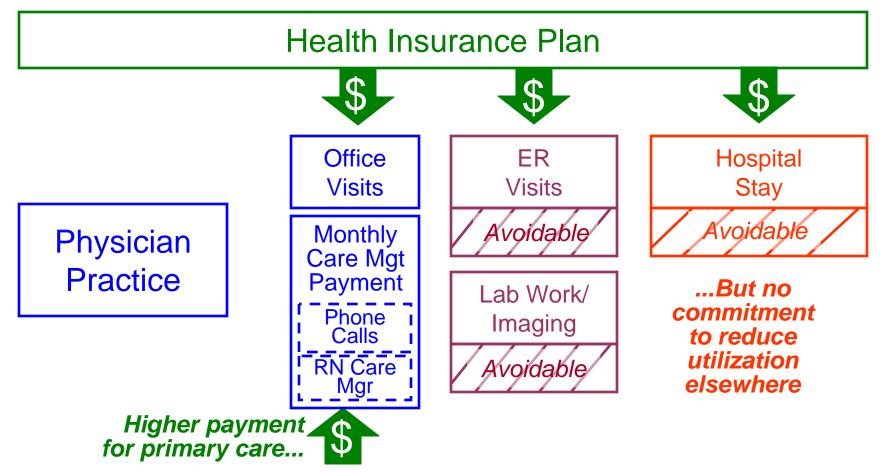
Typical Medical Home "Solution": **nrhi** Pay More for Physician Services

(TYPICAL) MEDICAL HOME PROGRAM



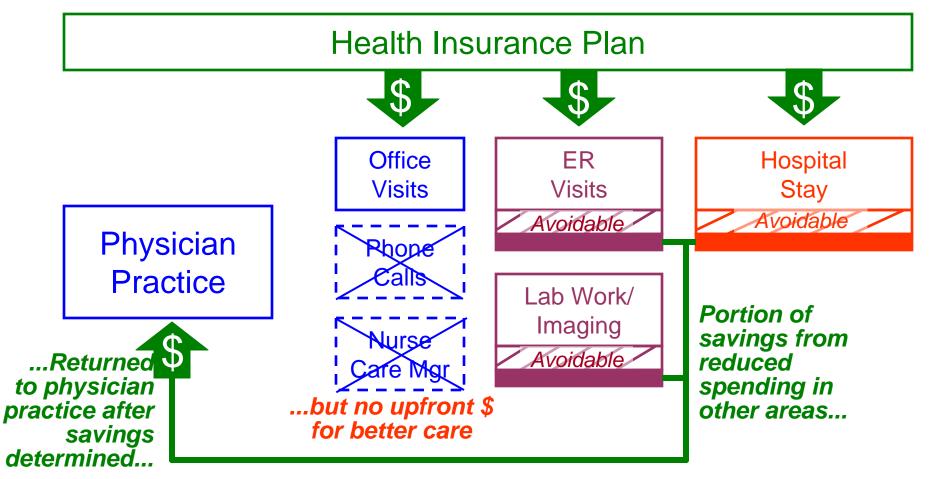
Weakness: More \$ for Physicians, **nrhi** But Any Savings Elsewhere?

(TYPICAL) MEDICAL HOME PROGRAM





SHARED SAVINGS MODEL

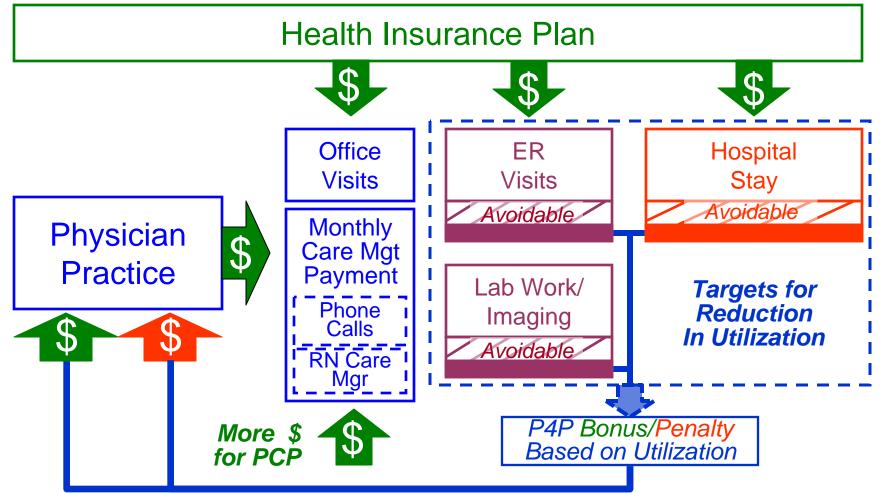


nrhi Weaknesses of "Shared Savings"

- Provides no upfront money to enable physician practices to hire nurse care managers, install IT, etc.; additional funds, if any, come years after the care changes are made
- Requires TOTAL costs to go down in order for the physician practice to receive ANY increase in payment, even if the practice can't control all costs
- Gives more rewards to the *poor* performers who improve than the providers who've done well all along
- The underlying fee for service incentives continue; losing less (via shared savings) is still losing compared to FFS
- I.e., it's not really true payment reform

Better Approach: Simulate **nrhi** Flexibility/Incentives of Global Pmt

CARE MGT PAYMENT + UTILIZATION P4P

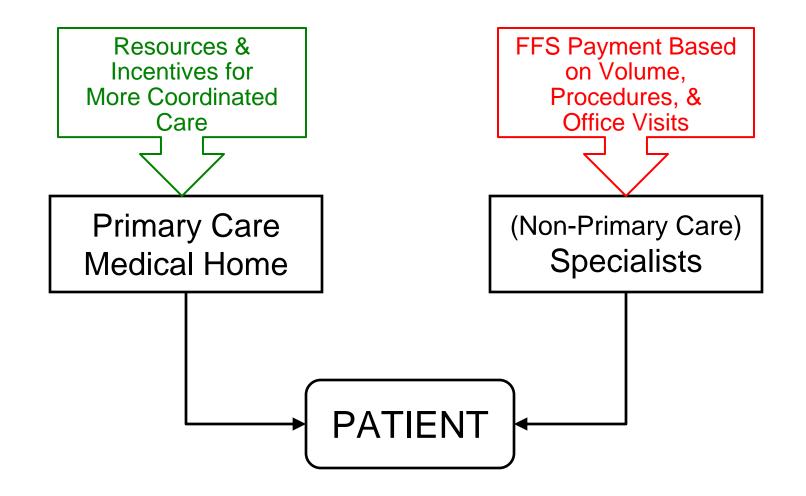


^{© 2009-2011} Center for Healthcare Quality and Payment Reform, Network for Regional Healthcare Improvement 66

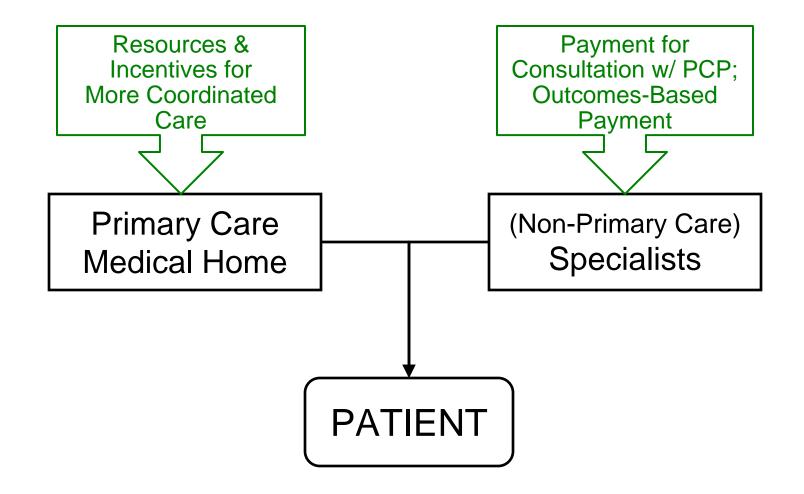
Example: "Accountable Medical **nrhi** Home" Pilot Program in WA State

- Payers will pay the Primary Care Practice an upfront PMPM Care Management Payment for all patients (\$2.50 first year, \$2.00 future years)
- Practice agrees to reduce rate of non-urgent ER visits and ambulatory care-sensitive hospital admissions by amounts which will generate savings for payers at least equal to the Care Management Payment (targets are practice specific)
- If a practice reduces ER visits and hospitalizations by more than the target amount, the payer shares 50% of the net savings (gross savings minus the PMPM) with the practice
- If a practice fails to meet its ER/hospitalization targets, the practice pays a penalty via a reduction in its FFS conversion factor equivalent to up to 50% of Care Management Payment

Not Just PCPs, But The Medical Neighborhood, Too



Pay Both PCPs & Specialists for Outcomes & Coordination



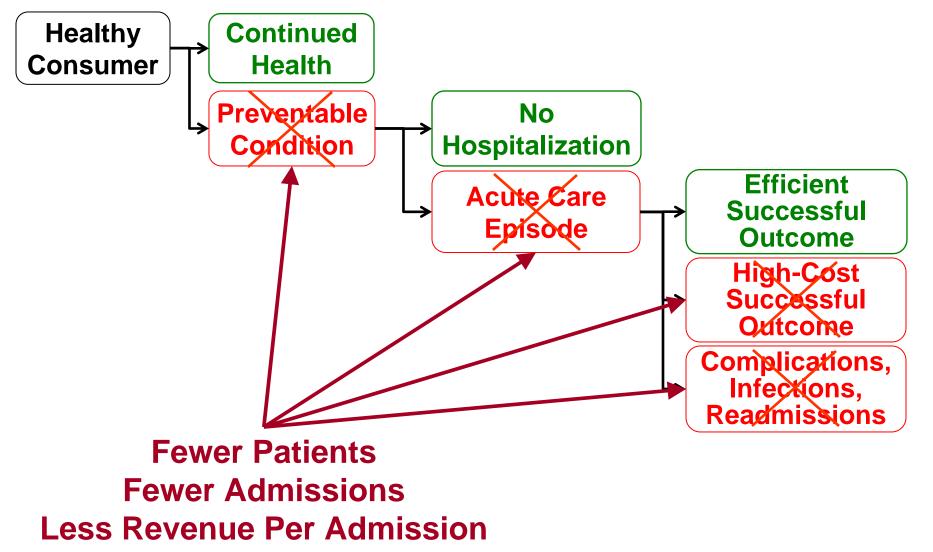


Minnesota's DIAMOND Initiative

- Goal: improve outcomes for patients with depression
- Convened all payers in Minnesota (except for Medicare) to agree on common payment changes for PCPs & specialists
- Payment changes:
 - Support for a care manager in the primary care practice
 - Psychiatrists paid to consult with PCP on how to manage patient's care comprehensively, rather than patient having to see psychiatrist separately
- Result: Dramatic improvement in remission rate

http://www.icsi.org/health_care_redesign_/diamond_35953/

Reducing Costs Without Rationing Reduces Hospital Revenues



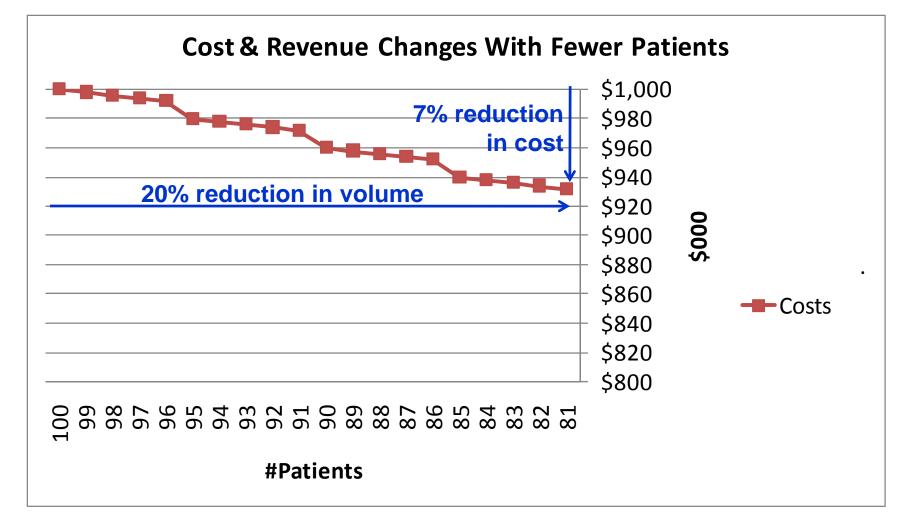


How Will Hospitals Have to Change?

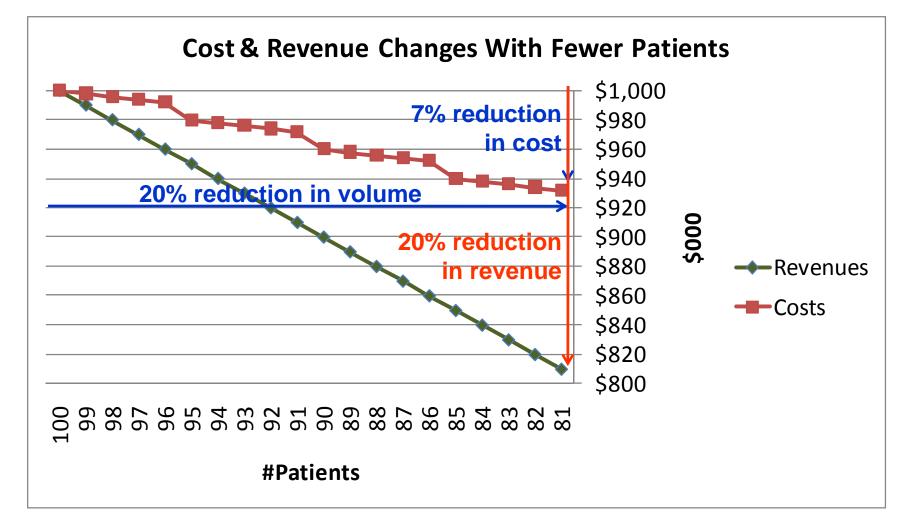
- Answer: Smaller and higher-priced
- Huh???? Higher priced??
- In most industries, we want volume to go up, and when it does, prices go down.
 Why? Fixed costs are spread more broadly.
- In the health care industry, we don't want it to sell more products/services in total.
- In hospitals, most costs are fixed costs
- Implication: lower volume means higher unit cost (just like every other industry), although total spending should still be lower



Hospital Costs Are Not Proportional to Utilization

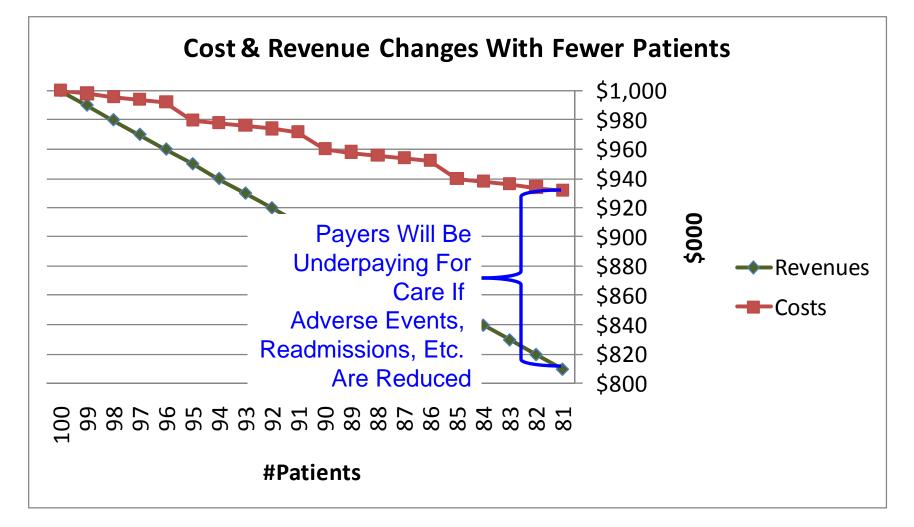


Reductions in Utilization Reduce **nrhi** Revenues More Than Costs



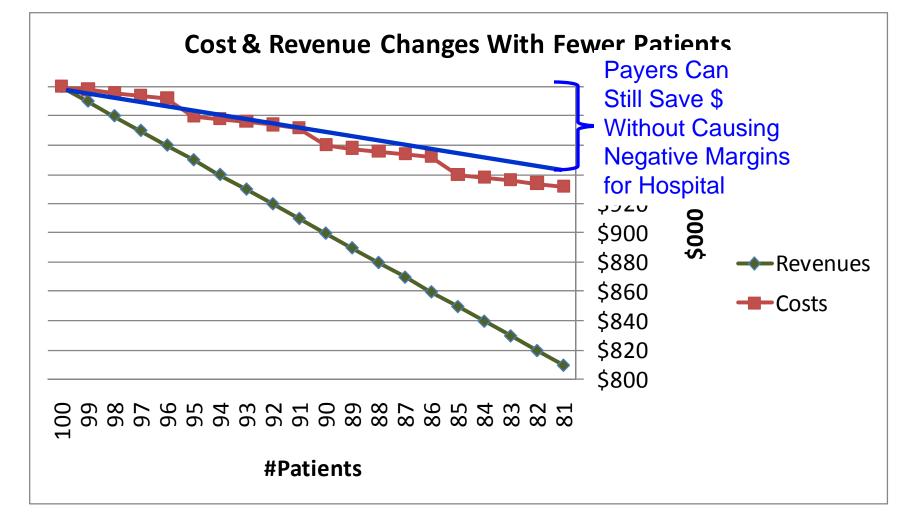


Causing Negative Margins for Hospitals





So Prices Need to Be Re-Set Under Payment Reform



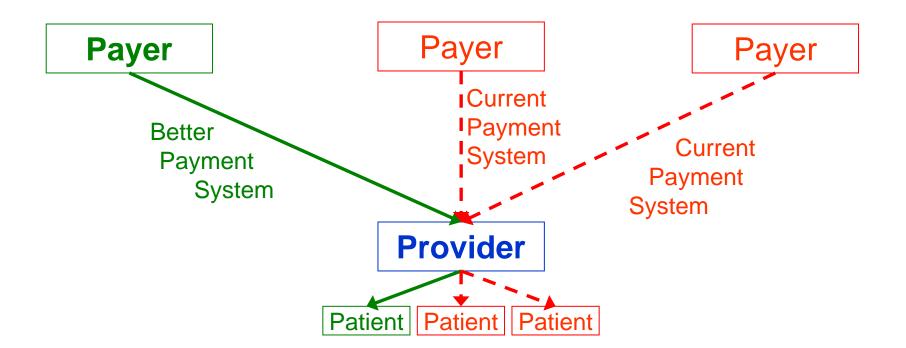
Strategy #7: Create a **nrhi** Feasible Glide Path for Hospitals

- For a hospital that's constantly full and growing, a reduction in chronic disease admissions may be welcome, particularly since they may be less profitable than elective surgery cases
- But for small community hospitals with empty beds, and hospitals with narrow operating margins, reductions in chronic disease admissions and readmissions could cause serious financial problems, particularly in the short run
- In the long run, with sufficient reductions in admissions, a hospital could restructure to reduce its fixed costs (close units, etc.), but it will take time
- Consequently, payers and hospitals will need to renegotiate payment levels to enable hospitals to remain solvent
- Maryland's Total Patient Revenue (TPR) system may provide a model for helping small community hospitals transition

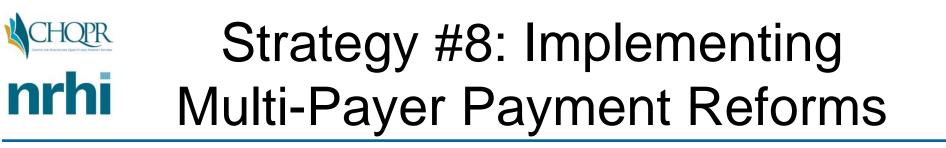
Shared Savings Forces Hospitals **nrhi** To Consider Hiring Physicians

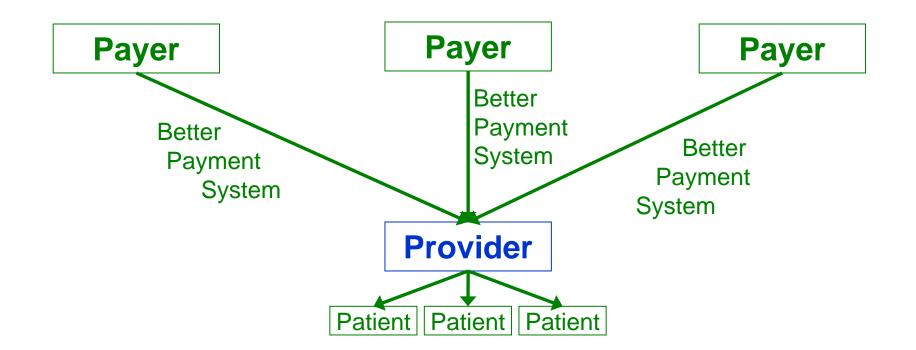
- Hospitals are not directly eligible for shared savings; all savings are attributed to primary care physicians
- Even if the hospital reduces readmissions, infections, complications, etc., it may receive no reward for doing so
- Reducing hospitalizations, ER visits, etc. will reduce the hospital's revenues, but the hospital may receive no share of the savings to help it cover its stranded fixed costs
- Consequently, hospitals may feel compelled to own physician practices, either to capture a portion of the shared savings revenue, or to prevent there from being any savings!

One Payer Changing **nrhi** (Even Medicare) Is Not Enough



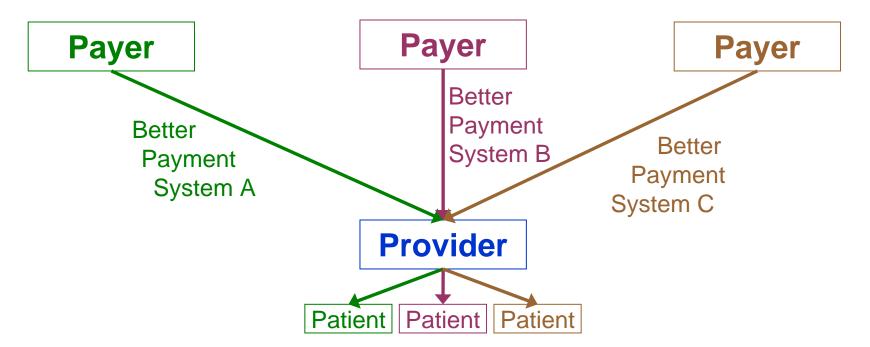
Provider is only compensated for changed practices for the subset of patients covered by participating payers





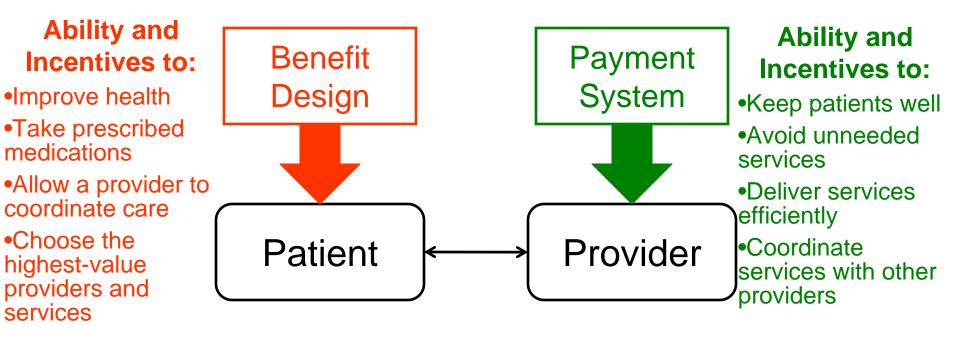


Payers Need to Truly Align to Allow Focus on Better Care

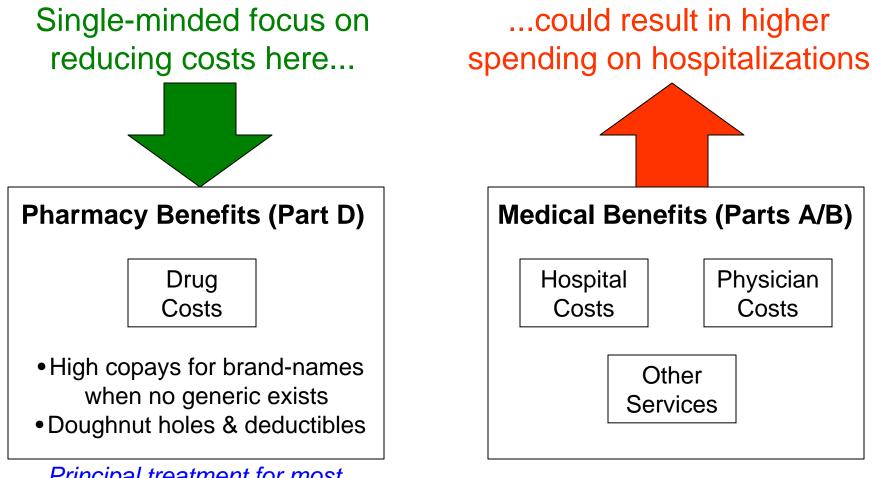


Even if every payer's system is *better* than it was, if they're all *different*, providers will spend too much time and money on administration rather than care improvement

Strategy #9: Benefit Changes to **nrhi** Complement Payment Reforms

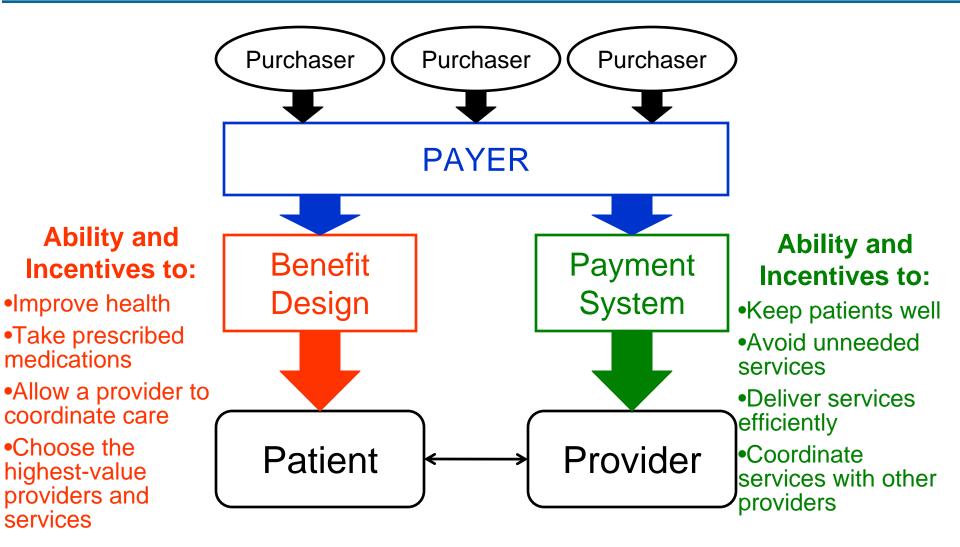


Example: Important to Coordinate nrhi Pharmacy & Medical Benefits

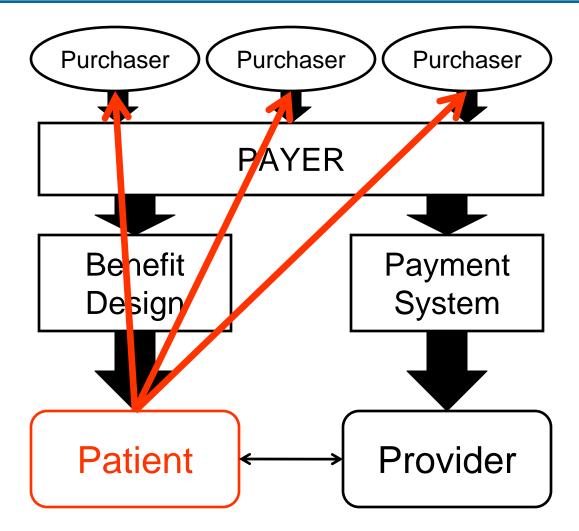


Principal treatment for most chronic diseases involves regular use of maintenance medication

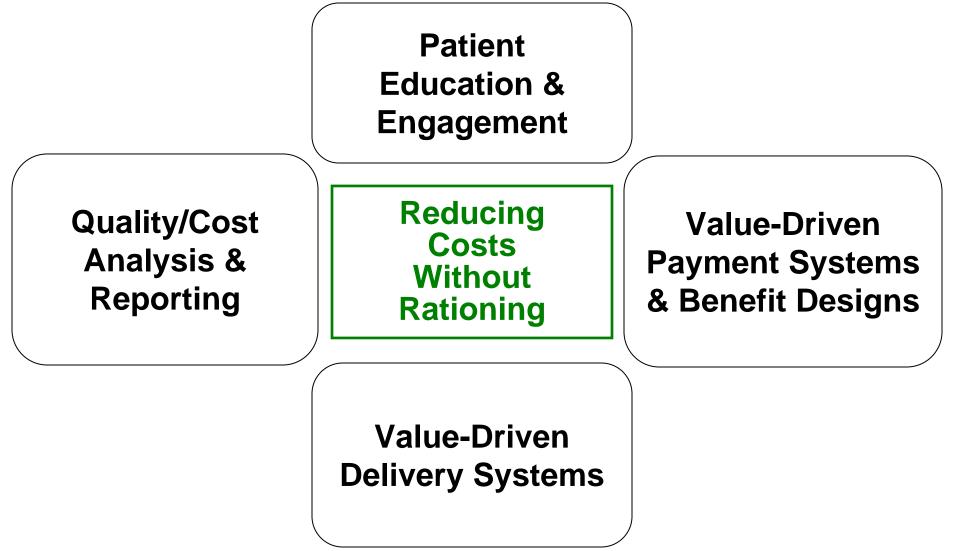
Purchaser Support is Needednrhi Particularly for Benefit Changes



And Consumer Support is Critical nrhi for Purchaser/Plan Support

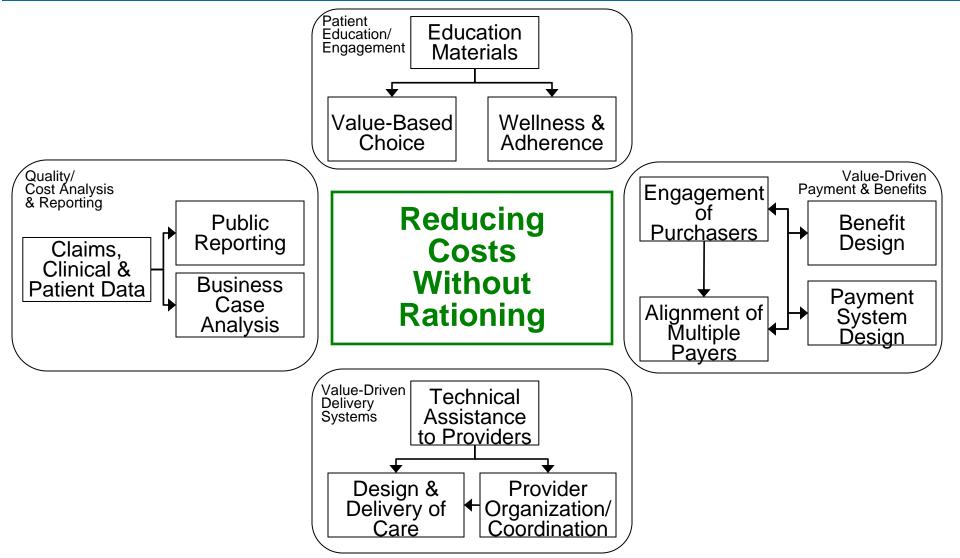


Payment Reform Is Necessary, nrhi But Not Sufficient





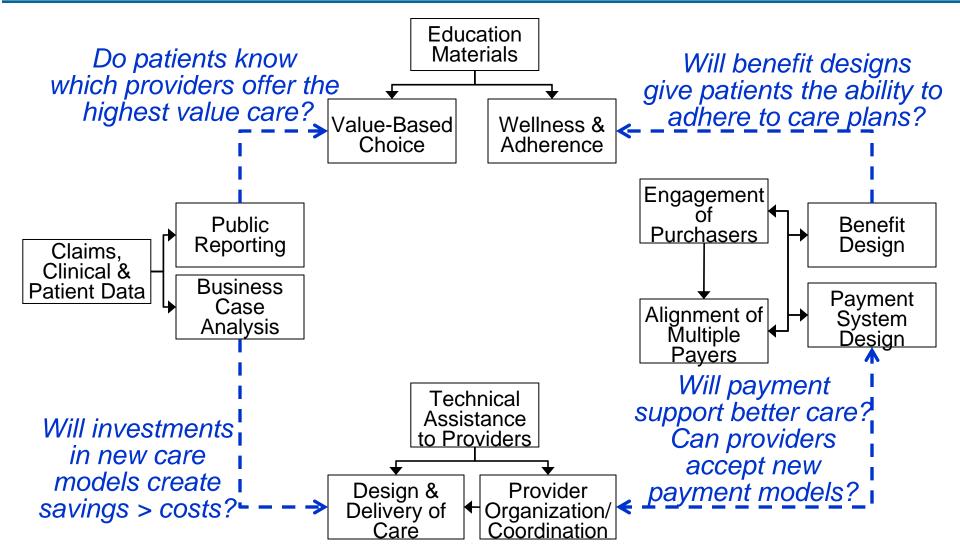
Many Specific Activities in Each Area...



© 2009-2011 Center for Healthcare Quality and Payment Reform, Network for Regional Healthcare Improvement 87

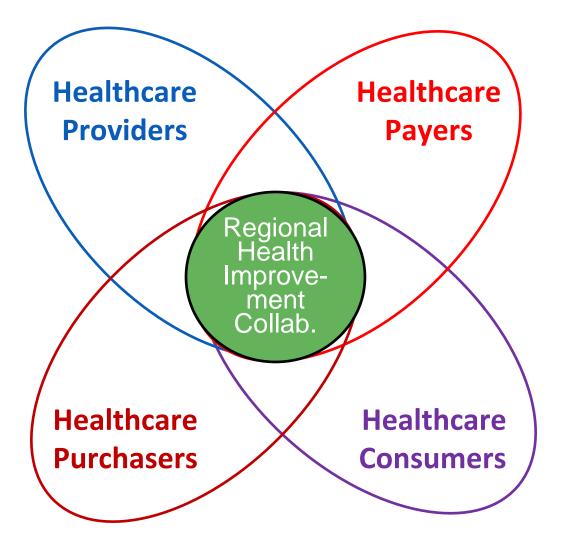
CHOPR nrhi

...All of Which Need to Be Coordinated to Be Successful

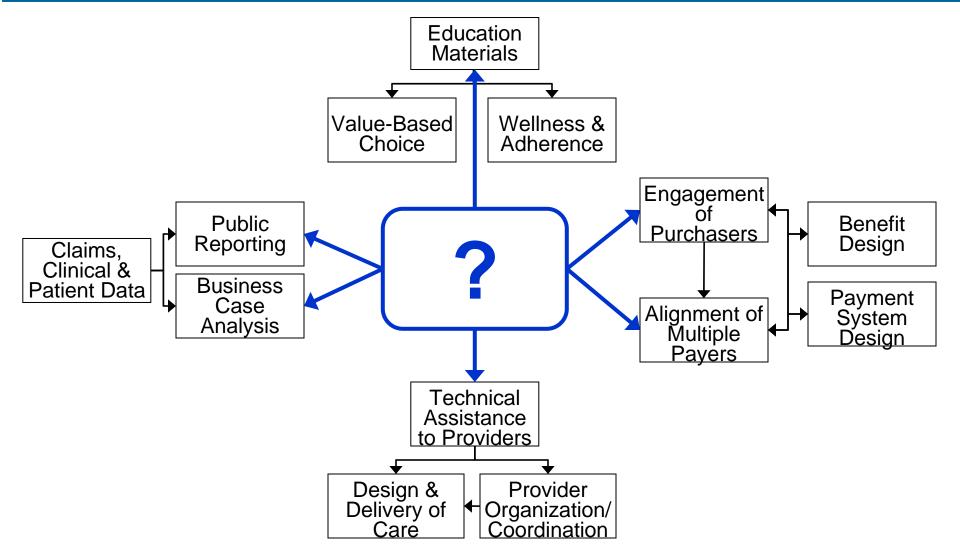




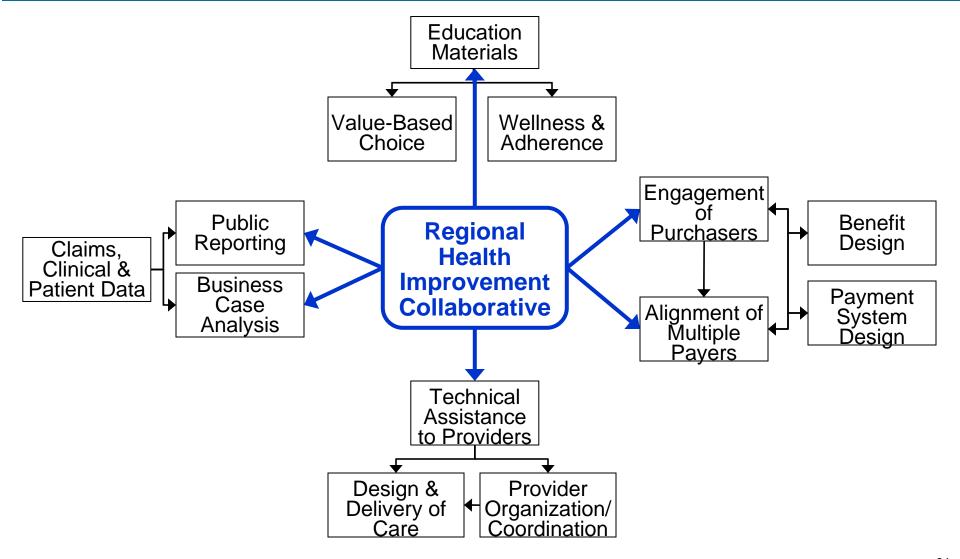
...With Active Involvement of All Healthcare Stakeholders



Who Can Deliver All of These **nrhi** Functions in a Coordinated Way?



Strategy #10: Support Regional **nrhi**Health Improvement Collaboratives



Growing Network of Regional nrhiHealth Improvement Collaboratives

- Albuquerque Coalition for Healthcare Quality
 Aligning Forces for Quality South Central PA
 Alliance for Health

- -Better Health Greater Cleveland
- -California Cooperative Healthcare Reporting Initiative
- California Quality Collaborative
 Finger Lakes Health Systems Agency
 Greater Detroit Area Health Council
- -Health Improvement Collaborative of Greater Cincinnati
- Healthy Memphis Common Table
- -Institute for Clinical Systems Improvement
- Integrated Healthcare Association
 Iowa Healthcare Collaborative
- -Kansas City Quality Improvement Consortium
- -Louisiana Health Care Quality Forum
- Maine Health Management Coalition
 Massachusetts Health Quality Partners
- Midwest Health Initiative
- Minnesota Community Measurement
- -Minnesota Healthcare Value Exchange
- -Nevada Partnership for Value-Driven Healthcare (HealthInsight)
- -New York Quality Alliance
- Oregon Health Care Quality Corporation
 P2 Collaborative of Western New York
- -Pittsburgh Regional Health Initiative
- -Puget Sound Health Alliance
- -Quality Counts (Maine)
- -Quality Quest for Health of Illinois
- -Utah Partnership for Value-Driven Healthcare (HealthInsight)
- -Wisconsin Collaborative for Healthcare Quality
- -Wisconsin Healthcare Value Exchange



www.NRHI.org



Don't Wait for Washington

- There is no one-size-fits-all solution to reform
 - Each region will need to make it happen in its own unique environment
 - The best federal policy will support regional innovation
- Communities should educate their stakeholders and build consensus on the multi-payer payment & delivery reforms appropriate for their community
 - Organize Payment Reform Summits, as Regional Health Improvement Collaboratives in Colorado, Maine, Nevada, Ohio, Oregon, Washington, Wisconsin have done

• All stakeholders need to work *together* to analyze data, find win-win opportunities, design transitional payment changes, & resolve inevitable implementation problems

 Local multi-payer claims and clinical databases maintained by Regional Health Improvement Collaboratives provide a means to identify areas of poor quality care, overutilization, etc. and simulate the impacts of different payment models and prices through a neutral, trusted source

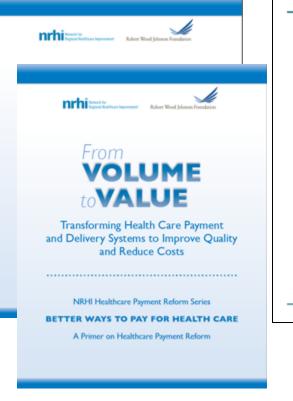
For More Information on **nrhi** Payment and Delivery Reforms

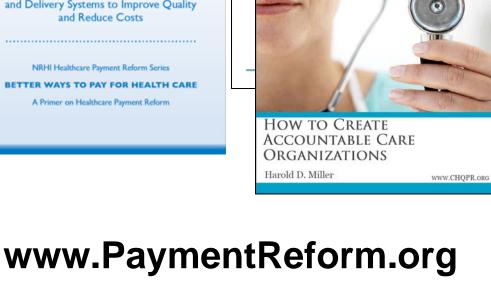
to Accountable Care

CENTER FOR HEALTHCARE

QUALITY & PAYMENT REFORM

Transitioning











For More Information:

Harold D. Miller

Executive Director, Center for Healthcare Quality and Payment Reform and

President & CEO, Network for Regional Healthcare Improvement

Miller.Harold@GMail.com (412) 803-3650

www.CHQPR.org www.NRHI.org www.PaymentReform.org