ACO Accelerated Development Learning Session

Baltimore, MD
November 17–18, 2011

Module 4B: Risk Sharing, Incentives, and Startup/Capital Needs

November 18, 2011
1:00–3:00 p.m.

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Agenda

- Introductory remarks (30–45 minutes)
- Managing financial risk
  - Population-based (ACO) reimbursement
    - Insurance company accounting
    - Cost models/funds flow
    - Aligning incentives
- Risk-sharing example
- Capital requirements
  - Infrastructure
  - Contingency reserves
- Group discussion/questions (75–90 minutes)

Goals

- Understand the financial risks of ACO-like contracts
- Understand some of the challenges encountered in obtaining provider buy-in to a risk-based contracting model
- Consider the financial opportunities from improved efficiency
  - Models that improve efficiency
- Consider what capital is required to start and run an ACO
  - Infrastructure
  - Contingency reserves

Proformas/Funds Flow

- Proformas—financial statement like an insurance company
  - Revenue/expense
    - Actuarial cost and utilization targets appropriate for the ACO's designated business
  - Cash flow
  - Balance sheet
- Funds flow
  - How funds get divided—physicians "versus" hospital?
  - Incentives
  - Funding for success
  - Regulatory restraints

Actuarial Cost Model—Commercial

2010 National Average—Loosely Managed			
Service Category	**Total Util Per 1,000**	**Allowed Average Charge**	**PMPM Claim Cost**
Inpatient Facility	217.1 days	$4,140.03	$74.90
Outpatient Facility	1,477 cases	$642.65	$79.10
Professional	13,820 visits/proced	$102.41	$117.94
Other	8,189 visits/proced/cases	$110.61	$75.48
Total			$347.42

Source: Milliman's 2010 Health Cost Guidelines™ calibrated to Milliman Medical Index™ (MMI).
See www.milliman.com for details.

Actuarial Cost Model—Commercial

2010 National Average—Well Managed				
Service Category	Total Util Per 1,000		Allowed Average Charge	PMPM Claim Cost
Inpatient Facility	161.0	days	$4,668.82	$62.64
Outpatient Facility	842	cases	$653.44	$45.85
Professional	11,907	visits/proced	$89.36	$88.67
Other	7,923	visits/proced/cases	$81.00	$53.48
Total				$250.64

Source: Milliman's 2010 Health Cost Guidelines™ calibrated to Milliman Medical Index™ (MMI).
See www. milliman.com for details

Actuarial Cost Model—Commercial

2010 National Average—Moderately Managed				
Service Category	**Total Util Per 1,000**		**Allowed Average Charge**	**PMPM Claim Cost**
Inpatient Facility	189.1	days	$4,407.02	$69.44
Outpatient Facility	1,162	cases	$652.98	$63.23
Professional	12,871	visits/proced	$96.64	$103.65
Other	8,057	visits/proced/cases	$96.17	$64.57
Total				$300.89

Source: Milliman's 2010 Health Cost Guidelines™ calibrated to Milliman Medical Index™ (MMI). See www.milliman.com for details

Actuarial Cost Model—Commercial

2010 National Average—Moderately Managed			
Service Category	**Tot Util Per 1,000**	**Allowed Average Charge**	**PMPM Claim Cost**
Outpatient Facility			
Emergency Room	135 cases	$1,230.96	$13.85
Surgery	86 cases	$3,326.56	$23.84
Radiology			
Radiology—General	210 cases	$298.12	$5.22
Radiology—CT / MRI / PET	45 cases	$1,261.82	$4.73
Pathology	272 cases	$142.27	$3.22
Pharmacy	83 cases	$699.36	$4.84
Cardiovascular	28 cases	$572.80	$1.34
PT/OT/ST	82 cases	$146.20	$1.00
Psychiatric	14 cases	$237.99	$0.28
Alcohol & Drug Abuse	13 cases	$183.01	$0.20
Other	194 cases	$291.16	$4.71
Total			$63.23

Source: Milliman's 2010 Health Cost Guidelines™ calibrated to Milliman Medical Index™ (MMI).
See www.milliman.com for details

Actuarial Cost Model—Medicare

National Average						
Benefit	Annual Admits Per 1,000	Average Length of Stay	Annual Utilization Per 1,000	Average Allowed Per Service	Allowed PMPM	Paid PMPM
Total Inpatient Facility	347.0	5.55	1,925.6 days	$1,963.01	$315.00	$282.87
Skilled Nursing Facility	76.4	26.18	2,000.9 days	$447.73	$74.66	$62.57
Home Health			2,945.7 visits	$170.87	$41.94	$41.91
Outpatient Facility			5,372.7 cases	$281.84	$126.19	$94.37
Physician					$250.98	$194.20
Other					$32.93	$25.72
Total					$841.69	$701.63

Source: Data from CMS 5% Sample Claims Incurred 1/2008 through 12/2009 paid through 12/2010 Sample Member Months: 26,797,261

Actuarial Cost Model—Medicare

National Average				
Benefit	Annual Utilization Per 1,000	Average Allowed Per Service	Allowed PMPM	Paid PMPM
Emergency Room	313.1 cases	$569.00	$14.84	$10.61
Surgery	417.5 cases	1,364.29	47.47	35.76
Radiology General	683.8 cases	213.88	12.19	8.65
Radiology—CT/MRI/PET	232.4 cases	490.79	9.51	6.27
Pathology/Lab	1,718.6 cases	47.30	6.77	6.46
Drugs	232.0 cases	539.22	10.43	8.02
Cardiovascular	160.0 cases	243.74	3.25	2.41
Physical Therapy	433.3 cases	246.97	8.92	6.88
Other	1,182.0 cases	130.07	12.81	9.31
Total Outpatient Facility	5,372.7 cases	$281.84	$126.19	$94.37

Source: Data from CMS 5% Sample Claims Incurred 1/2008 through 12/2009 paid through 12/2010
Sample Member Months: 26,797,261

Utilization Efficiencies

Nationwide Average Assumptions Commercial Loosely Managed July 1, 2009				
	Annual Admissions per 1,000	Length of Stay		Annual Utilization per 1,000
Inpatient Facility—Nonmaternity				
Medical	20.4 admits	3.85		78.6 days
Medical—Other Newborn	3.7 admits	6.78		25.1 days
Surgical	20.6 admits	4.26		87.7 days
Psychiatric	3.3 admits	8.18		27.0 days
Alcohol & Drug Abuse	2.1 admits	8.10		17.0 days
Subtotal	50.1 admits	4.70		235.4 days
Inpatient Facility — Maternity				
Mother—Normal Deliveries	9.2 admits	2.09		19.2 days
Mother—Cesarean Deliveries	4.0 admits	4.03		16.1 days
Mother—Total	13.2 admits	2.67		35.3 days
Well Newborn	9.8 admits	2.03		19.9 days
Nondeliveries	1.2 admits	3.00		3.6 days
Subtotal	14.4 admits	2.70		38.9 days
Skilled Nursing Facility	0.7 admits	21.14		14.8 days
Inpatient Facility—Total	65.2 admits	4.43		289.1 days

Milliman, Inc. National Utilization Models 2009

Utilization Efficiencies

Nationwide Average Assumptions Commercial Well Managed July 1, 2009	Annual Admissions per 1,000	Length of Stay	Annual Utilization per 1,000
Inpatient Facility—Nonmaternity			
Medical	14.2 admits	2.90	41.2 days
Medical—Other Newborn	2.4 admits	5.13	12.3 days
Surgical	12.3 admits	3.37	41.5 days
Psychiatric	1.2 admits	5.42	6.5 days
Alcohol & Drug Abuse	1.1 admits	3.09	3.4 days
Subtotal	31.2 admits	3.36	104.9 days
Inpatient Facility — Maternity			
Mother—Normal Deliveries	11.2 admits	1.29	14.5 days
Mother—Cesarean Deliveries	2.0 admits	2.45	4.9 days
Mother—Total	13.2 admits	1.47	19.4 days
Well Newborn	11.1 admits	1.26	14.0 days
Nondeliveries	0.8 admits	2.00	1.6 days
Subtotal	14.0 admits	1.50	21.0 days
Skilled Nursing Facility	1.4 admits	12.00	16.8 days
Inpatient Facility—Total	46.6 admits	3.06	142.7 days

Milliman, Inc. National Utilization Models 2009

Utilization Efficiencies

Nationwide Average Assumptions Medicare Loosely Managed July 1, 2009				
	Annual Admissions per 1,000	Length of Stay		Annual Utilization per 1,000
Inpatient Facility—Nonmaternity				
Medical	225.4 admits	5.26		1,185.6 days
Surgical	104.6 admits	5.70		596.2 days
Psychiatric	4.8 admits	10.48		50.3 days
Alcohol & Drug Abuse	0.8 admits	5.46		4.4 days
Subtotal	335.6 admits	5.47		1,836.5 days
Skilled Nursing Facility				1,778.6 days
Inpatient Facility—Total	65.2 admits	4.43		3,615.1 days

Milliman, Inc. National Utilization Models 2009

Utilization Efficiencies

Nationwide Average Assumptions Medicare Well Managed July 1, 2009				
	Annual Admissions per 1,000	Length of Stay		Annual Utilization per 1,000
Inpatient Facility—Nonmaternity				
Medical	133.0 admits	3.98		529.3 days
Surgical	67.3 admits	4.41		296.8 days
Psychiatric	2.1 admits	5.49		11.5 days
Alcohol & Drug Abuse	0.3 admits	3.19		1.0 days
Subtotal	202.7 admits	4.14		838.6 days
Skilled Nursing Facility				872.4 days
Inpatient Facility—Total	65.2 admits	4.43		1,711.0 days

Milliman, Inc. National Utilization Models 2009

Aligning Incentives

- “That any sane nation, having observed that you could provide for the supply of bread by giving bakers a pecuniary interest in baking for you, should go on to give a surgeon a pecuniary interest in cutting off your leg, is enough to make one despair of political humanity. But that is precisely what we have done. And the more appalling the mutilation, the more the mutilator is paid. He who corrects the ingrowing toenail receives a few cents: he who cuts your inside out receives hundreds of dollars, except when he does it to a poor person for practice.”

Aligning Incentives

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"The Doctor's Dilemma," George Bernard Shaw, 1906

Financial Risk Changes Incentives and Roles

Fee For Service	Capitation
Risk: Payer	Risk: Provider
Hospital and specialists: Revenue center	Hospital and specialists: Cost center
Piece Work	Fixed Income
Provider incentive: Maximize utilization	Provider Incentive: Manage utilization
Individual	Team

Financial Risk Changes Incentives and Roles

Fee for Service	Capitation
Payer Concern: Overutilization	Payer Concern: Underutilization
Small Provider Groups	Large Integrated Groups
Primary Care Physicians: Less influence Less relative income	Primary Care Physicians: More influence More relative income

“Ideal” Systems—Characteristics

- Places “financial risk” on physician with the greatest ability to impact cost
- Providers accountable for “own” performance (with catastrophic protection)
- Prevents inappropriate outcomes (quality)
- Simple to administer

“Ideal” Systems—Administration

- Require economies of scale (a minimum of about 10,000 members)
  - Nurse phone triage system
  - On-call and 24-hour coverage
  - Facility and back office efficiency
  - Electronic medical records
  - ……

“Ideal” Systems—Quality

- Medical management
  - Consistent policies and procedures
  - Peer review
  - Peer pressure
- Member satisfaction
  - Consistent care
  - Familiarity with caregiver

“Ideal” Systems—Downsides for Physicians

- Loss of autonomy
- Accountable for outcomes
- Sometimes cannot choose associates

“Ideal” Systems—Financial Model

- PCP teams of 5 to 10 PCPs
- PCP teams financially accountable for full medical budget (with catastrophic protection)
  - Professional, hospital, ancillary, prescription drug
  - Specialist capitated or discounted FFS
  - Internal specialists capitated (budget) or discounted FFS
  - External specialists discounted FFS

Example: Background

- Integrated delivery system
  - Academic institutions, community hospitals, affiliated physician groups, and standalone IPAs
  - Common ownership for some hospitals and physician groups
- Centralized contract negotiation and administration
- Contractually committed to “risk-adjusted” budgets

Example: Global Risk Contracts

- Global risk contracts for 500,000 covered lives with multiple payers
- Risk units budgets set by health plans based on
  - Historic provider contracts
  - Member benefits
  - Age/gender
- Significant differences between risk units

Example:
Goals of New Risk Allocation Methodology

- Equal compensation for equal work
- "Some" recognition of uncontrollable costs differentials
  - Geography
  - Teaching
  - Severity
- Saleable with provider network
- Objective criteria
- Phase in over time

Example: Methodology

- Average network-wide budget less teaching assessment of 2%
  - Adjusted by 65% of the area factor
  - Adjusted by 25% age/sex factor and 75% DxCG factor
- Teaching assessment reallocated in proportion to number of residents

Example: Methodology (cont.)

- Risk-adjusted budget cannot be lower than current budget trended for rate increases less downside protection limits
  - Year 1: $2.50 PMPM
  - Year 2: $5.00 PMPM
  - Year 3: $7.50 PMPM
  - Year 4: none
- Network-wide stop-loss reinsurance pool
  - Attachment points vary by risk unit membership

Example: Risk Unit Budget Allocation Year 1

Risk Unit	A	B	C	D	E	F	G	H	Total
Member Months	1,447,901	909,402	165,974	261,370	129,287	995,197	104,461	2,138,245	6,151,835
Original Budget	**$187.60**	**$167.13**	**$169.72**	**$157.14**	**$155.49**	**$156.66**	**$192.80**	**$159.91**	**$167.58**
Budget Adjustments									
Starting Budget	$165.86	$171.75	$165.11	$160.37	$163.41	$162.96	$165.42	$170.55	$167.58
Teaching Assessment 2%	$3.32	$3.44	$3.30	$3.21	$3.27	$3.26	$3.31	$3.41	$3.35
Normalized Area Factor	1.02	0.97	1.02	0.92	1.02	1.02	1.02	1.00	1.00
Applied Area Factor 65%	1.01	0.98	1.01	0.95	1.01	1.01	1.01	1.00	1.00
Normalized DxCG Factor 75%	1.10	1.07	0.98	1.00	1.02	0.90	1.30	0.93	1.00
Normalized Age/Sex Factor 25%	1.10	1.02	1.05	0.95	0.96	0.91	1.11	0.96	1.00
Applied DxCG Age/Sex Combined Factor	1.10	1.06	1.00	0.99	1.00	0.90	1.26	0.94	1.00
Composite adjustment factor	1.12	1.04	1.01	0.93	1.00	0.91	1.25	0.94	1.00
Risk Adjusted Budget	**$181.29**	**$174.26**	**$164.17**	**$146.23**	**$160.75**	**$145.94**	**$203.06**	**$157.43**	**$164.23**
Teaching Assement									
Teaching Assessment Recovery Annual	$4,137,290	$142,349	$0	$0	$0	$550,382	$56,367	$1,004,603	$5,890,992
Teaching Assessment Recovery	$10	$1	$0	$0	$0	$2	$2	$2	$3.35
Risk Adjusted Budget	**$191.29**	**$174.81**	**$164.17**	**$146.23**	**$160.75**	**$147.88**	**$204.95**	**$159.08**	**$167.58**
Downside Budget Protection									
Budget Assessment - $2.50 limit	$4.56	$5.02	$4.53	$4.32	$4.60	$4.46	$4.54	$4.90	$4.72
Budget Assessment Recoveries	$0.00	$0.00	-$9.04	-$13.03	-$6.92	-$10.74	-$9.40	-$5.40	-$4.72
Budget Adjustment	$4.56	$5.02	-$4.51	-$8.72	-$2.32	-$6.28	-$4.86	-$0.50	$0.00
Final Budget	**$186.74**	**$169.79**	**$168.67**	**$154.95**	**$163.07**	**$154.16**	**$209.81**	**$159.58**	**$167.58**
Ratio	*99.54%*	*101.59%*	*99.38%*	*98.61%*	*104.88%*	*98.40%*	*108.82%*	*99.80%*	*99.97%*

Example—Within Risk Units: Goals of Risk-Sharing Methodology

1. Market-competitive provider reimbursement
   - Attract and retain PCPs
   - Recognize PCPs as a source of "covered lives" and specialist/hospital revenues in a risk contract
2. Ensure future financial success of IDS
   - Encourage generation of surplus and improved efficiency
   - Ensure PCP's role as "manager of care"
3. Mechanism for adequate funding of deficits
4. Actuarially sound
5. Mechanism for network funding
   - Development of future new programs

Example Within Risk Units: Key Principles

- Basic risk units are PCP groups
  - 5 to 20 PCPs
  - Most effective model for encouraging organization efficiency and financial success
- Risk unit stop-loss protection
- Individual physician risk limited to withhold amount
  - "Significant" downside required to encourage efficiency
  - Withhold of 20% or greater on all physician services
- Rewards differ for PCPs and specialists
  - PCPs from positive risk unit financial performance
  - Specialists from increased volume (steerage)

Example Within Risk Units: Summary of Risk Allocation Model

Allocation of Surplus/Deficit[1]

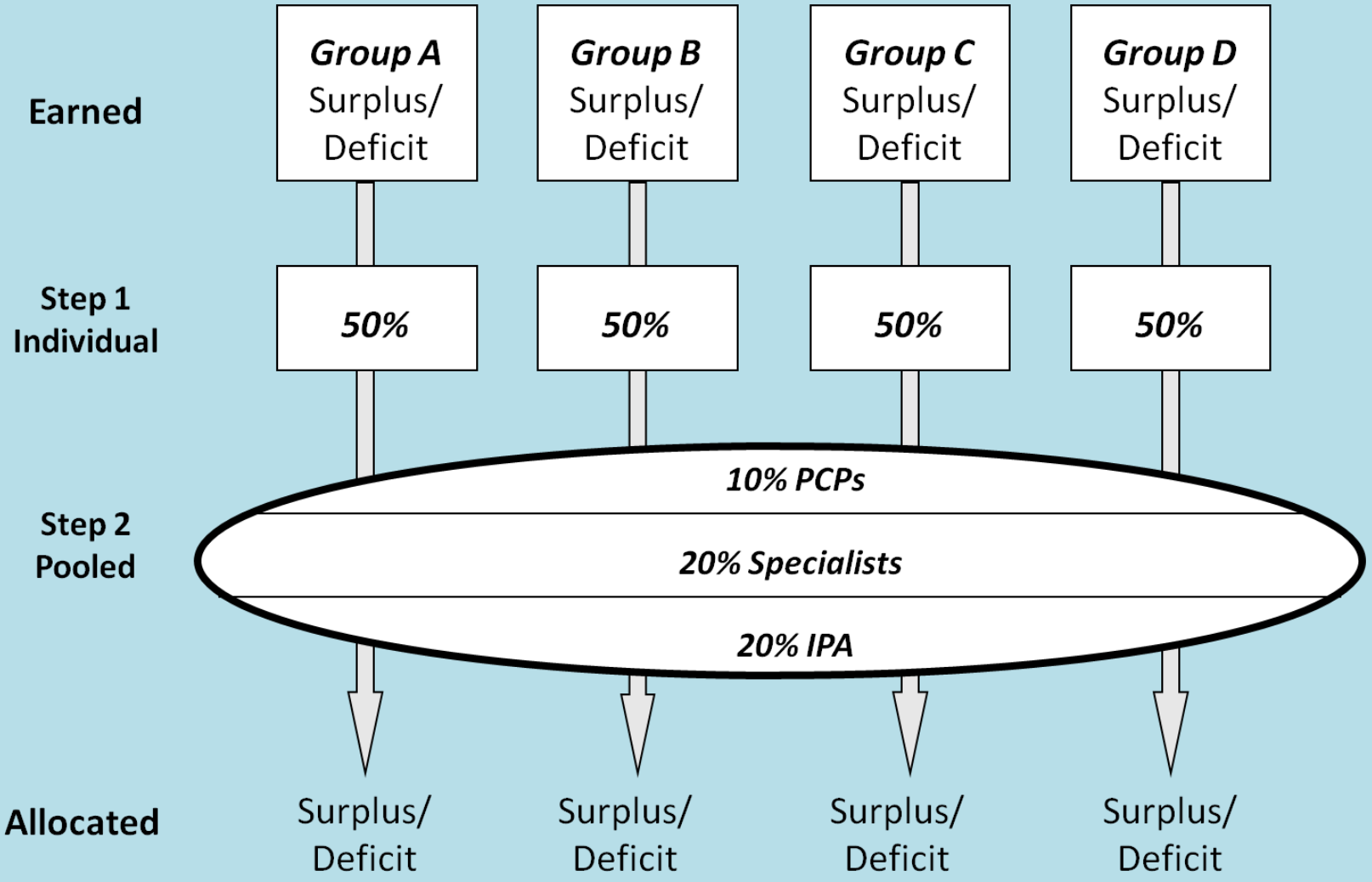
- Primary care physician groups
  - 50% of individual group's surplus/deficit
  - 10% of aggregate surplus/deficit
- Specialists
  - 20% of aggregate surplus/deficit
- Reserve fund
  - 20% of aggregate surplus (and deficit once reserves established)

Application of Withholds[2]

1. PCP withhold[3]
2. Specialist withhold[3] ***after*** PCP withhold is exhausted
3. IPA reserve fund ***after*** specialist withhold is exhausted

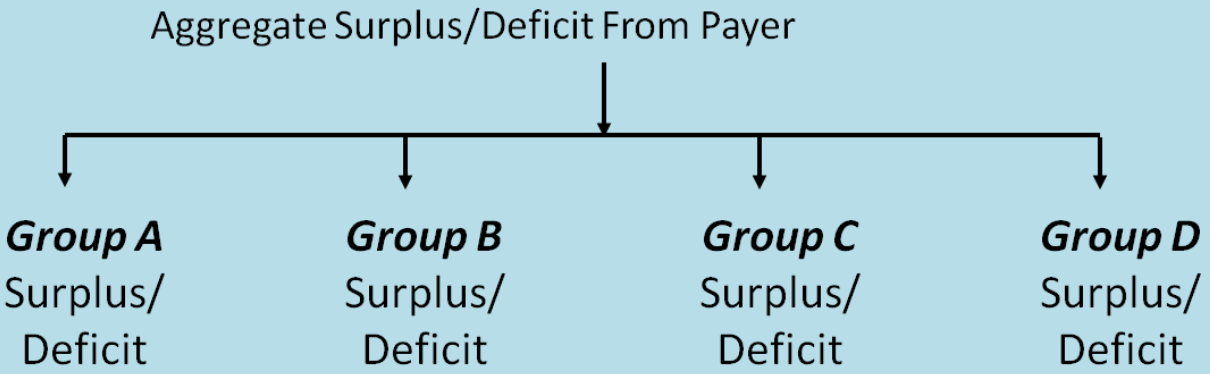
[1] Total of hospital and physician fund shares after IDS-wide sharing
[2] Reconciliation performed separately for each group
[3] 10% withhold

Example Within Risk Units: Allocation of Surplus/Deficit



Example Within Risk Units: Allocation of Surplus/Deficit

Primary Care Physician Group Example



Sample Calculation - Group A

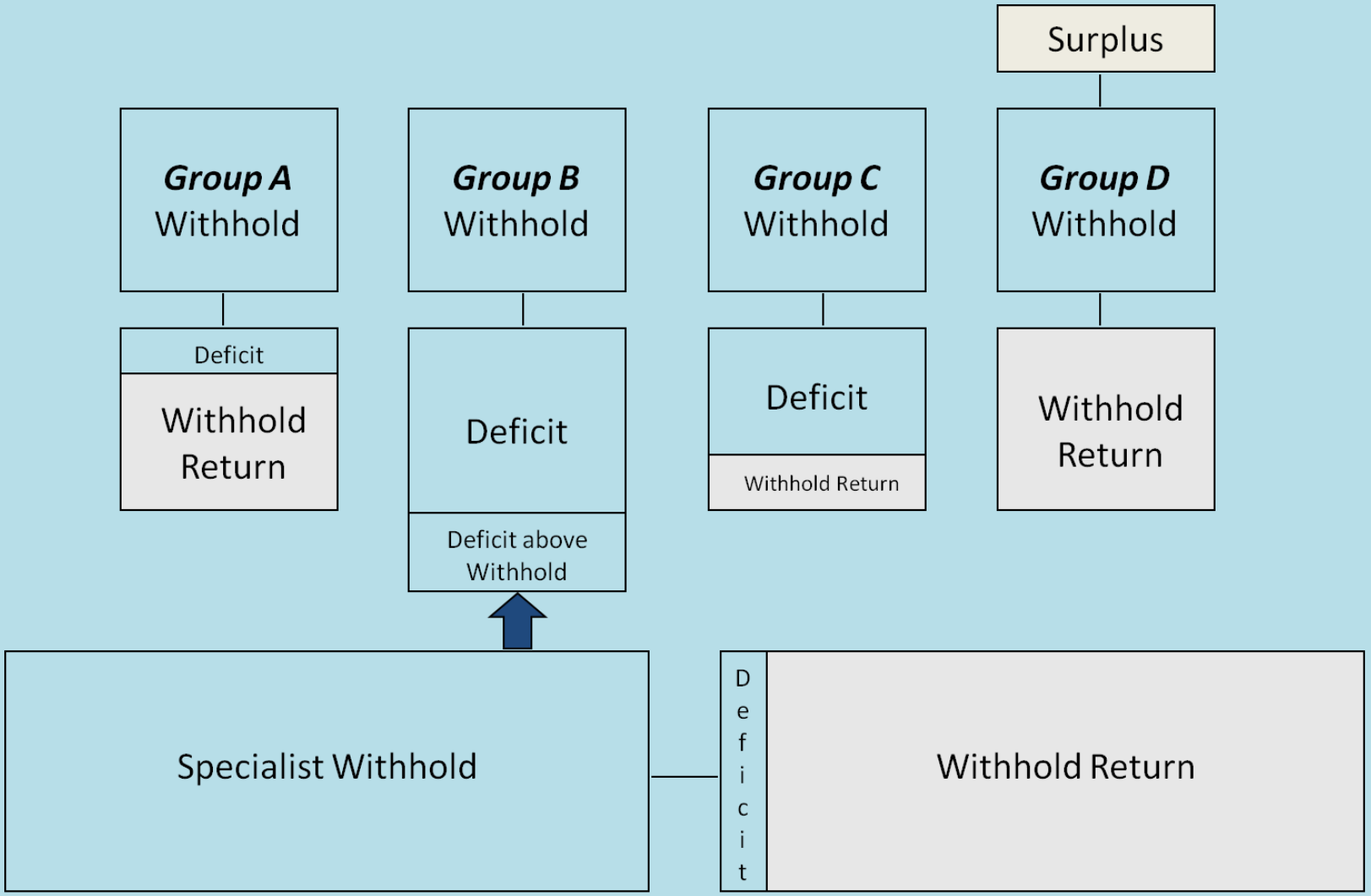
[50% Group A Surplus/Deficit]

\+ [10% Aggregate Surplus/Deficit]*[3,000 / 15,000]

Allocated Group A Surplus/Deficit

Assume 3,000 members in Group A
Assume 15,000 members in all groups

Example Within Risk Units: Withhold Return



Capital Requirements

- Infrastructure
- Contingency reserves
  - Risk-based capital
  - California risk-based organizations

Expenses (Millions)
1,200-bed, 5-hospital System; 250 PCPs; 500 Specialists

	Startup	Ongoing
Network Development	$2.9	$5.7
Care Coordination, Quality, and Utilization	0.8	3.9
HIT (primarily EHR)	7.7	3.9
Data Analytics	0.6	0.7
Total	$11.8	$14.1

"The work ahead: Activities and Costs to develop an Accountable Care Organization" American Hospital Association and McManis Consulting www.aha.org/aha/content/2011/pdf/aco-white-paper-**cost**-dev-aco.pdf

Capital Requirements—Infrastructure Example

Impact on Claim Costs and Costs of Infrastructure Investments						
Service Category	Loosely Managed PMPM	Inpatient UM	Outpatient UM	Case/Disease Mgmt	Physician Office Support	Post Interventions PMPM
Inpatient Facility	$74.90	($8.42)	$0.00	$0.00	($1.39)	$65.09
Outpatient Facility	$79.10	$0.63	($1.24)	$0.00	($1.28)	$77.21
Professional	$117.94	$0.01	($1.20)	$0.00	$0.12	$116.87
Other	$75.48	$0.00	($0.48)	$0.00	$0.00	$75.00
Medical Cost	$347.42	($7.78)	($2.92)	$0.00	($2.55)	$334.17
Cost of Interventions		$0.13	$0.29	$0.87	$2.95	$4.24

Source: "ACOs beyond Medicare," A Milliman Healthcare Reform Briefing Paper
See www.milliman.com.

Solvency Requirements (Contingency Reserves)—Risk-Based Capital "Rule of Thumb"

Category	Managed Care Credit Categories Description	Factor
0	Fee-for-service, discounted fee-for-service, and other nonmanaged care arrangements.	0.00
1	Payments made under contractual arrangements such as per diems, physician fee schedules, DRG-based payments, case rates, and other contractual arrangements that would not apply to Category 0.	0.15
2	Payments made subject to withholds and bonuses. The managed care credit factor is a range based on the proportion of the withholds returned and bonuses paid. The minimum factor is the managed care credit factor for Category 0 or 1, depending on the reimbursement method to which the withhold pertain. The maximum managed care credit factor is 0.25.	0.00 – 0.25
3	Capitation payments made directly to providers of medical care and capitations paid to intermediaries, such as an IPA, who, in turn, make payments to providers who contract independently with the intermediary (not including employment contracts). This includes payments to physicians and nurses for utilization review.	0.60
4	Owned facility expenses and salaries paid directly to medical care providers and noncontingent salaries or aggregate cost payments to licensed providers.	0.75

California Solvency Requirements for Risk-Based Organizations (RBOs)

- Positive tangible net equity
- Positive working capital
- Minimum cash-to-claims ratio (minimum 0.75 requirement)
- 95% claims timeliness
- Positive response to whether the RBO estimates and documents their IBNR claims liability (on a monthly basis)
- Positive response that the RBO's IBNR estimate is reflected as an accrual on the financial survey reports
- All RBOs required to submit annual audited financial statement

Source: Financial Solvency Standards Board Meeting November 3, 2010
http://www.hmohelp.ca.gov/library/reports/news/Balmer-FSSB_110310a.pdf.

Important Caveats

- Political alignment of physicians and hospitals will NOT ensure success
  - Recognize “perverse” incentives
- Improving quality is NOT enough
  - Supply side—“distasteful” referral management, precertification, utilization review generates immediate savings

Important Caveats

- Realistic utilization targets
  - Plan for surplus (don't overpay yourself)
  - Reasonable interim payments
- Success in FFS and risk-based worlds require different business models
  - Volume versus value
    - Managing the conflict?
    - Current infrastructure oversupply?

Tools/Resources

- Premier: Accountable Care Implementation Collaborative/ACO Financial Tool
  - http://www.premierinc.com/about/news/11-mar/accountablecare030711.jsp
- CHQPR: "Transitioning to Accountable Care"
  - http://www.chqpr.org/downloads/TransitioningtoAccountableCare.pdf
- Milliman: "ACOs: Beyond Medicare"
  - http://insight.milliman.com/article.php?cntid=7611&utm_source=healthreform&utm_medium=web&utm_content=7611&utm_campaign=Milliman%20On%20Healthcare
- "Calculated Risk :A Provider's Guide to Assessing and Controlling the Financial Risk of Managed Care" Bruce S. Pyenson, FSA, MAAA, Editor Milliman &Robertson Inc. American Hospital Publishing Inc.
- "Managing Risk: A Leaders Guide to Creating a Successful Managed Care Provider Organization" Bruce S. Pyenson, Editor Milliman &Robertson Inc. Published in Cooperation with AHA Center for Health Care Leadership.
- The work ahead: Activities and Costs to develop an Accountable Care Organization" American Hospital Association and McManis Consulting
  - www.aha.org/aha/content/2011/pdf/aco-white-paper-cost-dev-aco.pdf

Questions/Discussion

- Why are you involved in ACO-like contracts?
  - Discuss the environment in which you operate
  - Discuss any setbacks since engaging in risk
    - How did you overcome them?
  - Discuss the major changes within your organization since engaging in "risk"
    - Financial impact on different participants?

Questions/Discussion

- How have you quantified the financial risks associated with your ACO-like contracts?
  - Do you have “benchmarks”?
    - How do you update them?
  - What are your key risks?
    - How are you addressing them?
  - What are your major opportunities?
    - What are you doing to access the opportunities?
  - How do you monitor performance?
    - How do you address variances from budget?

Questions/Discussion

- What infrastructure do you have in place for managing “risk”?
  - How did you fund for the infrastructure costs?
    - Startup?
    - Ongoing?
  - What are the major gaps in your current capabilities?

Questions/Discussion

- How do you share risk within your organization?
  - Discuss the process followed to obtain provider buy-in?
  - What contingent reserves have you established?
  - Describe your reinsurance arrangements
    - Internal and external

Questions/Discussion

- Describe your governance structure
  - Who are (or will be) the winners and losers among your providers?
  - How are you addressing “excess capacity” within your system?

Module 4B: Risk Sharing, Incentives, and Startup/Capital Needs

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