

Partnered with thousands. Delivered millions.



Using Technology to Connect Acute Care and Community Services to Reduce Costs and Improve Outcomes for Older Americans

Howard W. Deichen, MBA

Executive Vice President

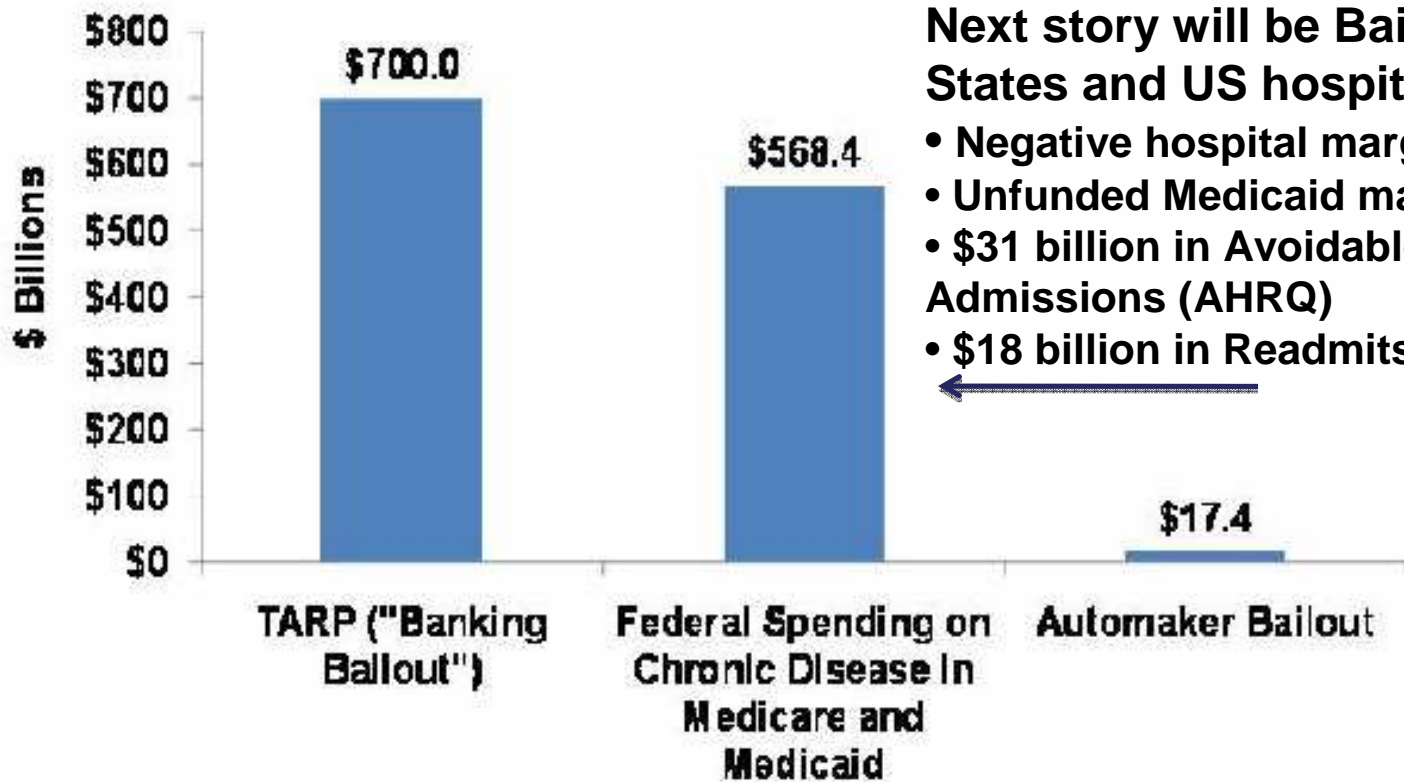
December 4, 2009

Bending the Curve in Managing Chronic Illnesses – Is It Possible?



"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

Federal Spending in Billions in 2008 TARP, Chronic Disease and Auto Bailout



Next story will be Bailout of States and US hospitals:

- Negative hospital margins
- Unfunded Medicaid mandates
- \$31 billion in Avoidable Admissions (AHRQ)
- \$18 billion in Readmits (NEJM)



Sources: CMS, Pulitzer, Associated Press

What Does It Really Take to Bend the Curve?

- **Evidence-based Best Demonstrated Practices**
- **Strong statistically-significant data supporting better outcomes at lower cost**
- **Expert physician-to-physician interface backed by strong data**
- **Clinician behaviors must CHANGE to achieve outcomes**
- **Technology tools focused on doing the RIGHT THING for the patient at a reduced cost**
- **Success requires that physicians “buy in” to a new approach**

Lessons Learned About Changing Healthcare Costs

Kinetic Concepts (1986-1993)

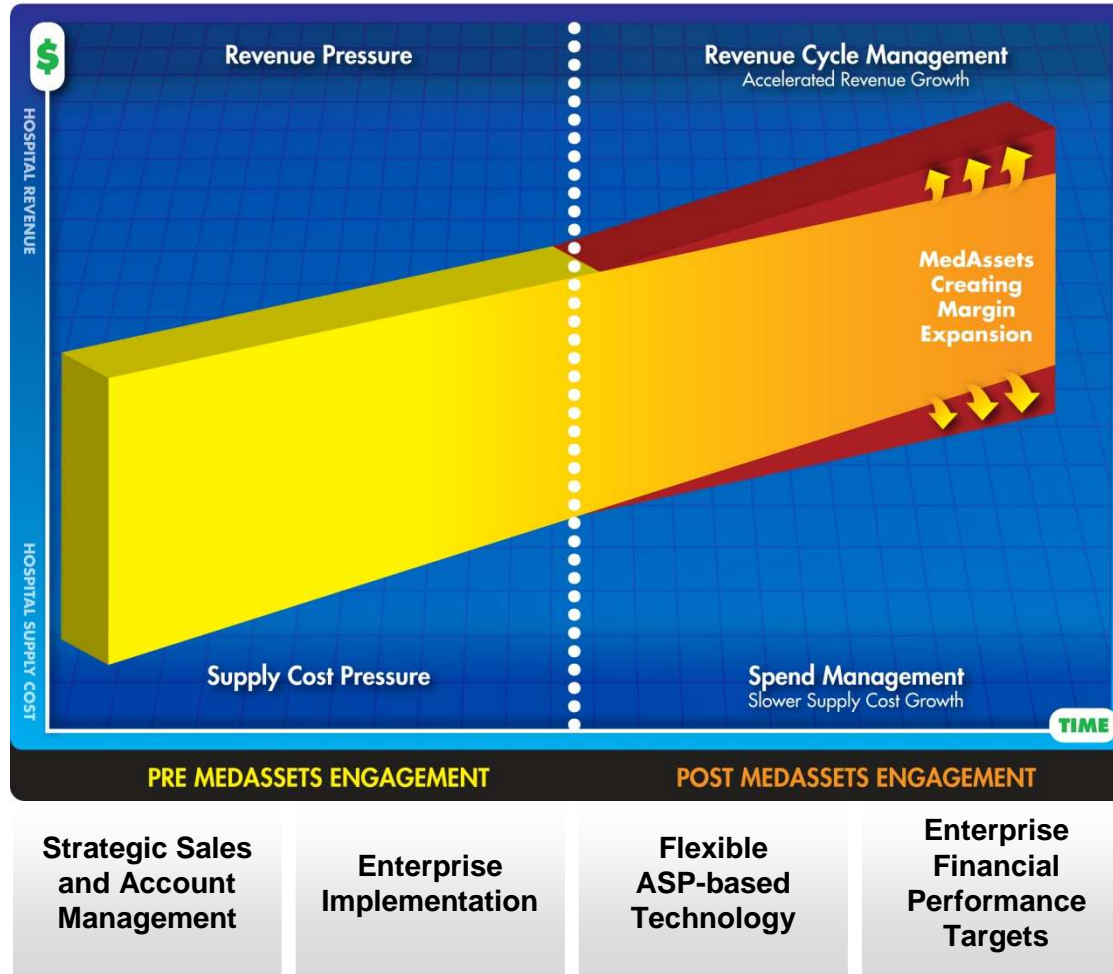
- **Rental of high tech pressure relief surfaces**
- **Pro-active prevention of pressure ulcers for at-risk patients = Improved Outcomes**
- **Interventions to significantly reduce healing time and LOS for Stage 2-4 ulcers and diabetic ulcers**
- **New approaches to prevent pneumonia in immobile patients = Improved Morbidity, Lower Cost and Reduced LOS**

Paradigm Health (93-2000)

- **Data / algorithm based modeling for catastrophic injuries**
- **At-risk single payment to deliver a specific clinical / social outcome**
- **Expert PhD Case Management following best practices and use of certified Centers of Excellence**
- **Net result = 30 - 50% reduction in total medical cost and maximized outcome for patient**

MedAssets Value Proposition

MedAssets business proposition improves customer operating margins by 1.5% to 5.0% (compared to non-MedAssets customers)



- Hospitals facing declining revenue growth / increasing supply cost growth
- MedAssets' tools successfully mitigate this trend
- Behavior change measured through financial targets
- Low-cost implementation
- Sustainable, measurable results
- Moving toward use of technology and clinical pathways to achieve better outcomes at lower costs.

Starting Point – There's No Option Other than Change

- **Acute-care hospitals cannot make money treating chronic diseases of old age**
- **Hospitals are not compensated to provide convalescent care**
- **Community providers lack the resources to provide a clinical standard of care at home:**
 - Limited access to specialized dietetic meals
 - Lack tools and expertise to support medication synchronization
 - No comprehensive strategy to educate, screen and diagnose ailments

Chronic Ailments are Driving Medicare Costs – and Medicaid Waiver (Community Care)

DRG Group codes	Volume	Avg Charge	Avg. Medicare Reimburse	Self-care Discharge	Discharge Status to Selfcare%	Percentage of Home-Delivered Meal Recipients with Ailment
Hypertension	5,611,079	\$ 25,376	\$ 7,690	3,139,874	56.0%	63%
Diabetes and Related	3,574,430	\$ 27,288	\$ 8,010	1,867,475	52.2%	38%
CHF	2,755,685	\$ 32,479	\$ 9,039	1,134,363	41.2%	52%
Pneumonia	1,674,356	\$ 36,911	\$ 9,993	597,014	35.7%	NA
Arthritis	1,484,887	\$ 26,950	\$ 8,017	669,819	45.1%	62%
Malnutrition and Related	1,480,895	\$ 31,787	\$ 9,022	654,305	44.2%	70%
COPD and Asthma	757,435	\$ 20,808	\$ 5,867	493,569	65.2%	35%
Total US Hospitals	17,338,767	\$28,496	\$8,255	8,556,419	49.3%	

- Seniors are 12% of population and 53% of hospital costs
- Chronic ailments are 35% of discharges
- Malnutrition and medication errors are leading causes of re-admissions

Source: MedPar data 2007; Administration of Aging Survey of MOW Recipients, 2005

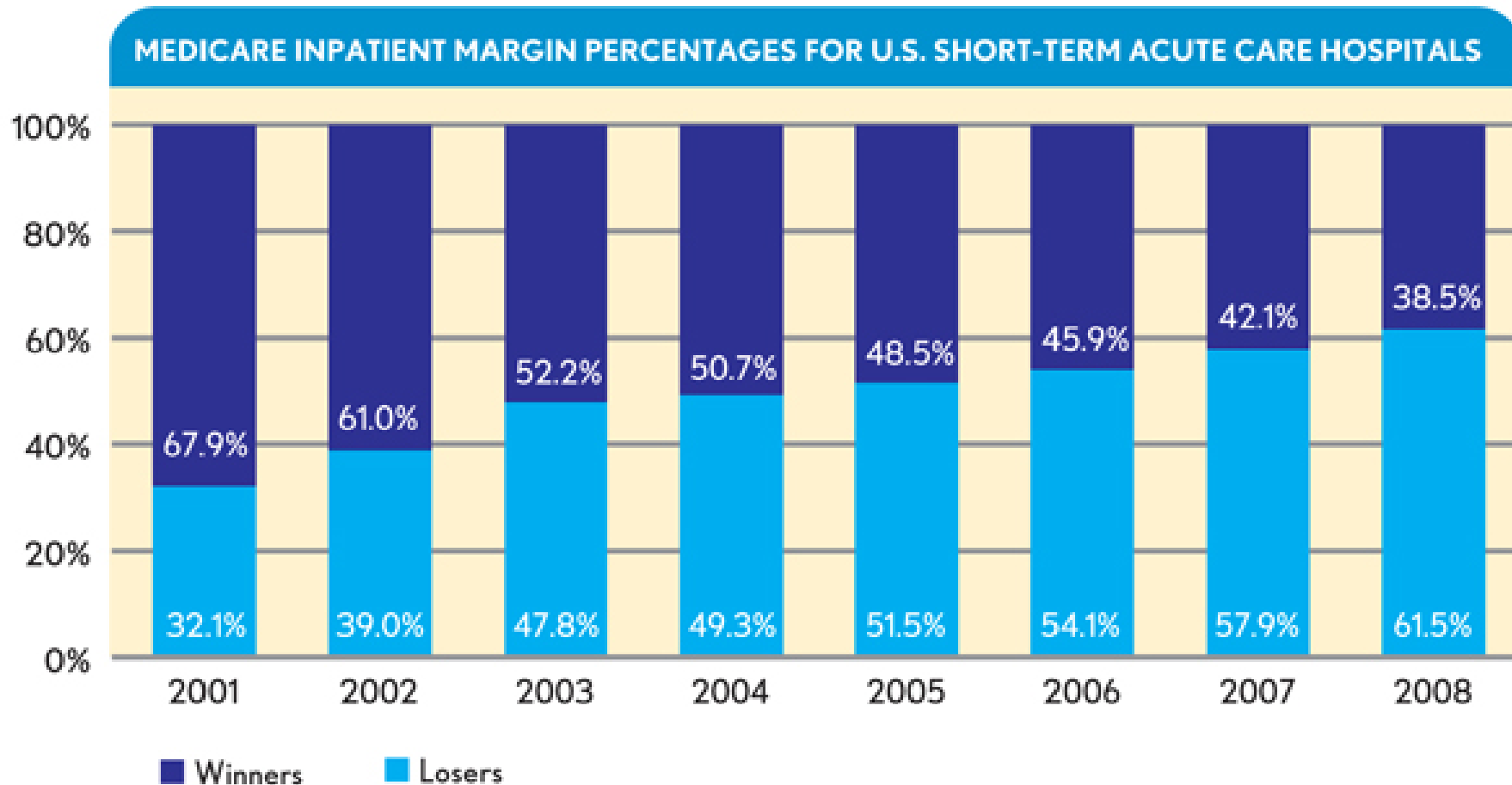
Operating Profitably with Medicare, Medicare-Like Reimbursement Rates is Key to Survival



- HFMA Study has found that U.S. hospitals shift the unreimbursed costs of caring for Medicare inpatients to other payers.
- Hospitals have found other sources of revenue to offset negative margins from patient care, but unlikely with Healthcare Reform measures.
- The number of states in which hospitals were enjoying positive Medicare margins was found to have dropped from 44 to 13 during the study period.

Source: HFMA www.hfma.org, "How Long Can Hospitals survive with Negative Margins?"
Thomas M. Schuhmann.

Percentage of Hospitals Breaking-Even on Medicare is Dropping Quickly



Scope of the Problem

• Medicare Expenditures for Readmissions

- 18-20% (1/5th) of Medicare Beneficiaries readmit within 30 days of discharge
- 33% (1/3rd) readmit within 90 days
- Readmissions have a 0.6 day longer LOS than other patients in the same DRG
- Medication, Nutrition, Instruction Compliance causes dominate readmissions
- Estimated cost to Medicare: \$15 to \$18.3 billion in annual spending

Jencks, S., Williams, M., & Coleman, E. (2008). "Rehospitalizations among Medicare fee-for-service patients". Unpublished Manuscript.

Medpac (June 2007). "Report to the Congress: Promoting Greater Efficiency in Medicare", pp 103-120.



Partnered with thousands. Delivered millions.

Finding the Solutions Our Customers Need to Manage the Cost and Risk of Chronic Ailments



Start with Portfolio of Suppliers Around a Business Model That Works

- **In-Patient Stay Cost Management**
 - Supply chain cost-management and analytical tools to control costs
 - Working with Suppliers to bring new products to improve outcomes
- **Care Path for Patient Discharges**
 - Aspen Healthcare Metrics (MedAssets Subsidiary) develops a 360-degree Care-Path for integrated discharges of patients being sent home
- **Address Readmission Drivers – Meds, Nutrition, Adherence to Instructions**
 - Partnering with HCBS providers to deliver a higher standard of care in Post-Discharge trial programs:
 - Specialized diets for chronic ailments
 - Monitoring and adherence
 - Medication synchronization
 - Socialization and physical activity
 - Coordination of Benefits, Third-party billing and EMR

Put “Take-out” Clinical Nutrition Solutions into Hands of Community Nutrition Providers

Product Group	Chronic Ailment Focus
Cardio-Respiratory	Heart Failure, hypertension, Pneumonia, COPD, Asthma
Diabetes / Renal	Diabetes, Kidney function, hyperglycemia, hypoglycemia, Bowel disorders, auto-immune disorders
Cancer	Pre-chemo, post-treatment. recovery
Weight Management	Obesity, malnutrition, anorexia, Unintentional weight loss
Wound and Joint Healing	Fractures, Osteoporosis, Arthritis, Post-surgery, prevent infections
Dysphasia / Periodontal	Swallowing problems, dental issues

MedAssets' Relationship with Community-based Services Creates Seamless Link to Over 9,000 Nutrition Sites

- *“Proper nutrition is the key to controlling the cost of chronic disease.”* Sen. Tom Harkin
- Nutrition programs are preferred supplier for Medicaid waiver
- Meals On Wheels supplies 10-day meal supply to over 100,000 seniors under a discharge pilot with Humana
- MedAssets bringing new resources:
 - Supply Chain reduces costs
 - Product Development
 - Clinical dietary support for special diets

Rank	Chain Name	(\$ Billions)		% Change
		US Sales	Purchasing	
1	McDonalds	30.025	9.008	4.4%
2	Yum Brands	16.575	4.973	1.7%
3	Subway	9.600	2.880	17.1%
4	Burger King	9.125	2.738	6.6%
5	Starbucks	8.750	2.625	6.9%
6	Wendy's	8.110	2.433	3.7%
7	Meals On Wheels	4.777	2.222	1.2%
8	Dunkin' Donuts	5.105	1.532	3.9%
9	Applebees	4.503	1.351	3.0%
10	Chili's	3.960	1.188	6.2%
	All US Hospitals	9.720	4.464	2.1%
	Long-Term Care	6.502	2.899	1.5%

- **Links to acute and LTC providers**

Source: Technomic Annual Survey of US Food Service, 2007.



Reducing Readmission Rate by 3.7%, Funds Full cost of Medical Nutrition Therapy for 100% of Chronic Ailment Patients

Condition Name	Discharges	Average Charge	Average Re-Imburs.	Sent Home (No Care)	Discharge Status to Self care%	30-day Re-Admit Rate	Cost to treat 100%with MNT @ \$500	Break-even Pct in Reduced Re-admissions (Provider Basis)	Break-even Pct in Reduced Re-admissions (Payer Basis)
Hypertension	5,611	\$ 25.4	\$ 7.7	3,140	56.0%	26.9%	\$1,569,937	7.3%	24.2%
Diabetes	3,308	\$ 26.9	\$ 7.9	1,763	53.3%	25.6%	\$ 881,561	7.3%	24.7%
Heart Failure	2,756	\$ 32.5	\$ 9.0	1,134	41.2%	26.9%	\$ 567,182	5.7%	20.6%
Pneumonia	1,674	\$ 36.9	\$ 10.0	597	35.7%	20.1%	\$ 298,507	6.7%	24.9%
Obesity	544	\$ 27.0	\$ 7.9	335	61.6%	19.2%	\$ 167,557	9.6%	33.1%
COPD	395	\$ 18.1	\$ 4.7	252	63.7%	20.1%	\$ 125,965	13.8%	52.4%
Asthma	362	\$ 23.8	\$ 7.1	242	66.7%	20.1%	\$ 120,820	10.5%	35.1%
Malnutrition	387	\$ 46.1	\$ 12.2	78	20.1%	24.6%	\$ 38,849	4.4%	16.6%
Hyperglycemia	87	\$ 25.7	\$ 7.7	51	58.4%	25.6%	\$ 25,494	7.6%	25.3%
Diabetic Foot Ulcer	165	\$ 37.2	\$ 10.6	47	28.1%	25.6%	\$ 23,270	5.2%	18.4%
Total or Weighted Avg	14,675	\$ 27.3	\$ 8.1	7,299	49.7%	25.4%	\$3,649,558	4.3%	14.6%
BREAK EVEN IF AVERAGE RE-ADMISSION RATE FALLS TO:								24.3%	21.7%

Break-even calculation assumes that 60% of patients have two or more co morbidities which will be favorably impacted by nutrition management during convalescence.

Summary

- **MedAssets' #1 priority is to generate positive operating margins for our customers on Medicare services**
- **No “margin for error” on re-admissions, HACs or other non-reimbursed costs**
- **Hospitals, physicians, home-health and community-services must develop seamless capacity to deliver care for chronic illnesses**
- **Initial programs have high ROI – but reimbursement is not clear**
- **No solution will work without technology that connects the patient to the care-givers**



MedQ Assets®