



Market Assessment and Payer Mix Modeling in an Era of Health Reform



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HRSA Webinar Series

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Agenda

- Patient Revenue Modeling - Impact of the Affordable Care Act
- Patient Revenue Modeling for a Capital Project
- How to Create a Market Assessment
 - Defining the Service Area
 - Assessing the Demographics
 - Data sources
 - Mapping sources

Affordable Care Act

- Expansion of Medicaid to individuals at or below 138% of Federal Poverty Level (FPL);
- Elimination of categorical exclusion for low-income childless adults;
- Subsidized premiums to buy health insurance from state marketplaces and federally facilitated marketplace for household income up to 400% of the Federal Poverty Level



Impact of the Affordable Care Act

- To date, 28 states (+ DC) have adopted the expansion and seven states are discussing it, 16 states are not adopting the expansion at this time
- Since October 2013, 16.4 million uninsured people gained health insurance from the Marketplace
- 12.3 newly enrolled in Medicaid and CHIP
- African American uninsured rate has dropped by 9.2 points
- Latino uninsured rates are down by 12.3 percentage points
- Uninsured women are down by 7.7 points



Times They Are a Changing

- More than half of Medicaid beneficiaries now receive all or most of their care from risk-based managed care organizations (MCO), and states are rapidly expanding their reliance on risk contracting
- Medicare PPS rate: \$156 +/- based on location

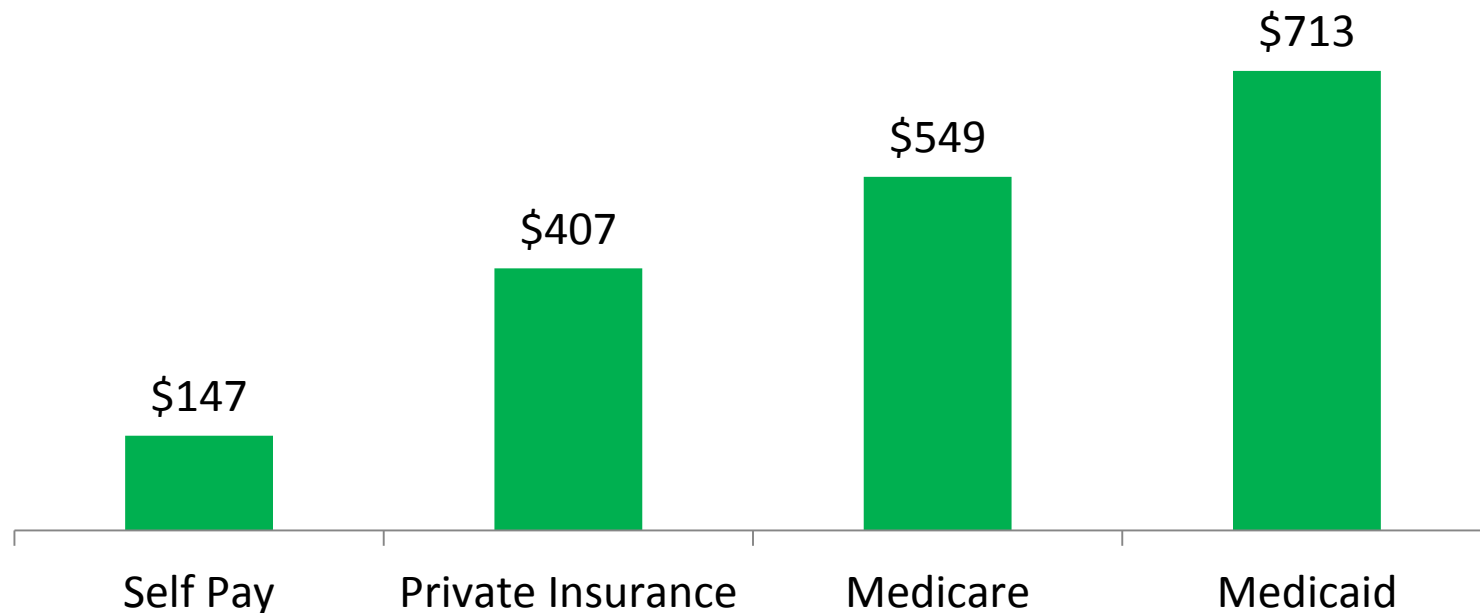


Health Center Program

	2014	2013
Users	22.9 million	21.7 million
Medicaid	10.7 million (47%)	8.6 million (40%)
Medicare	2 million (9%)	1.8 million (8%)
Private Insurance	3.6 million (16%)	3.0 million (14%)
Self-Pay	6.4 million (28%)	7.6 million (35%)

Dollars & Sense

Health Center Revenue per User* *2014 National Average*



* 2014 UDS

Average Medical Patient Service Revenue Per User

Looking Back: *Before ACA*

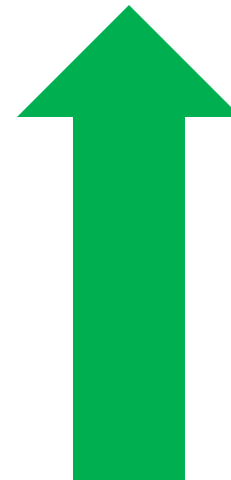
- Patient Service Revenue per User: \$441

Looking Forward: *After ACA*

- Patient Service Revenue per User: \$485



10% Increase



*Patient Revenue Modeling
Capital Project*

Financial Projections

- Financial Forecast: 5 to 7 Years
 - Balance Sheet
 - Income Statement
 - Cash Flow
 - Project Budget
 - Sources and Uses Statement
 - Depreciation Schedule
 - Growth Assumptions Table
 - Visits/users for each payer category
 - Reimbursement rate assumptions (FFS and/or capitation)
 - FTE assumptions per year for each employment category
 - Salary assumptions by category

Patient Revenue Modeling

	FY15				FY16				FY17			
Patient Revenue - Medical	Visits	Users	Rate	Revenue	Visits	Users	Rate	Revenue	Visits	Users	Rate	Revenue
change in rate							1.0%				1.0%	
Traditional	101,713		125.21	\$ 12,735,485	101,713		126.46	\$ 12,862,840	108,833		128	\$ 13,900,871
Managed Care		18162	687.21	\$ 12,481,108	-	18162	694.08	\$ 12,605,919	-	19,433	701	\$ 13,623,217
TOTALS				\$ 25,216,593	101,713			\$ 25,468,759	108,833			\$ 27,524,088
Patient Revenue - Mental Health	Visits		Rate	Revenue	Visits		Rate	Revenue	Visits		Rate	Revenue
change in rate							1.0%				1.0%	
TOTALS	1028		\$ 54.35	\$ 55,868	1028			\$ 56,427	1028			\$ 60,646
Patient Revenue - Dental	Visits		Rev/Visit	Revenue	Visits		Rev/Visit	Revenue	Visits		Rev/Visit	Revenue
change in rate							1.0%				1.0%	
Medicaid	14,084		144.78	\$ 2,039,082	14,084		146	\$ 2,059,472	17,182		148	\$ 2,537,682
Medicaid - Chip					-		0	\$ -	-		0	\$ -
Medicare					-		0	\$ -	-		0	\$ -
Self Pay + Sliding Fee	986		147.89	\$ 145,820	986		149	\$ 147,278	1,203		151	\$ 181,476
Public Insurance					-		0	\$ -	-		0	\$ -
Private Insurance + Other	370		106.99	\$ 39,586	370		108	\$ 39,982	451		109	\$ 49,266
TOTALS	15,440		\$ 144.07	\$ 2,224,487	15440			\$ 2,246,732	18837			\$ 2,768,423
Other				Revenue				Revenue	Visits		Rate	Revenue
change in rate											7%	
Pharmacy				\$ 2,876,094	-		0	\$ 3,054,855	-		0%	\$ 3,268,695
TOTALS	0			\$ 2,876,094	0			\$ 3,054,855	0			\$ 3,268,695

Staff Modeling

	FY15			FY16			FY17		
	FTEs	Ave. Salary	Total Salary	FTEs	Ave. Salary	Total Salary	FTEs	Ave. Salary	Total Salary
Staff Physicians	38.40	179,184	6,880,666	38.40	185,235	7,113,024	40.27	190,792	7,683,196
Midlevel (PA, NP)	6.74	124,558	839,521	6.74	128,294	864,702	7.33	132,143	968,607
Nurses (RN, LPN)	48.99	67,575	3,310,499	48.99	69,988	3,428,712	51.80	72,088	3,734,140
Provider Support	63.39	45,965	2,913,721	63.39	46,860	2,970,455	71.40	48,266	3,446,178
Mental Health Providers	1.79	26,608	47,628	1.79	26,608	47,628	1.79	27,406	49,057
Dental	8.89	66,940	595,097	8.89	73,639	654,651	10.89	75,848	825,987
Sub-Total	168.20		14,587,132	168.20		15,079,172	183.48		16,707,164
Total Medical Providers	45.14			45.14			47.60		
Other Ancillary	5.36	38,092	204,173	5.36	39,235	210,300	5.36	40,412	216,609
Sub-Total Other	5.36		204,173	5.36		210,300	5.36		216,609
Other Staff									
Enabling	18.85	11,960	225,446	18.85	12,365	233,080	19.95	12,736	254,082
Admin/Facilities/Other	97.31	60,411	5,878,594	97.31	62,294	6,061,829	99.09	64,163	6,357,894
Other	10.29	40,183	413,483	10.27	41,469	425,887	10.62	42,713	453,613
Sub-Total Other	126.45		6,517,523	126.43		6,720,796	129.66		7,065,589
TOTALS	300.01		\$21,308,829	299.99		\$22,010,268	318.50		\$23,989,362

Forecasted Income Statement

FISCAL YEAR	FY14	%	FY15	%	FY16	%	FY17	%
Net Patient Service Revenue	3,160,925	75.2%	3,983,926	81.0%	5,797,708	86.1%	7,057,807	88.3%
Total Operating Grants & Contracts	897,387	21.4%	897,387	18.2%	897,387	13.3%	897,387	11.2%
Contributions / Fundraising Income	39,426	0.9%	39,426	0.8%	39,426	0.6%	39,426	0.5%
Donated Goods & Services	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Net Assets Released from Restrictions		0.0%		0.0%	0	0.0%	0	0.0%
Other Operating Revenue	104,710	2.5%		0.0%	0	0.0%	0	0.0%
TOTAL OPERATING REVENUE	4,202,448	100.0%	4,920,739	100.0%	6,734,521	100.0%	7,994,620	100.0%
Salaries & Related Expense	3,050,207	72.6%	3,690,554	75.0%	5,050,891	75.0%	5,995,965	75.0%
Professional / Contracted / Consultant Fees	428,999	10.2%	295,244	6.0%	404,071	6.0%	416,193	5.2%
Supplies	126,031	3.0%	157,464	3.2%	215,505	3.2%	255,828	3.2%
Insurance	15,268	0.4%	15,726	0.3%	23,589	0.4%	24,297	0.3%
Travel & Training	40,450	1.0%	47,364	1.0%	64,822	1.0%	76,951	1.0%
Administration & General	53,178	1.3%	62,268	1.3%	85,220	1.3%	101,165	1.3%
Bad Debt Expense	67,014	1.6%	33,507	0.7%	45,858	0.7%	54,438	0.7%
Rent	175,181	4.2%	180,436	3.7%		0.0%		0.0%
Facility Operation & Maintenance	8,853	0.2%	9,119	0.2%	200,000	3.0%	206,000	2.6%
Depreciation	105,248	2.5%	105,248	2.1%	79,352	1.2%	79,352	1.0%
Depreciation on New Site		0.0%		0.0%	325,070	4.8%	325,070	4.1%
Interest Expense	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Interest Expense New Site		0.0%		0.0%	28,415	0.4%	27,752	0.3%
Other Operating Expense	275,607	6.6%	147,622	3.0%	152,051	2.3%	156,612	2.0%
TOTAL OPERATING EXPENSES	4,346,036	103.4%	4,744,552	96.4%	6,674,843	99.1%	7,719,624	96.6%
CHANGE IN NET ASSETS - OPERATING	-143,588	-3.4%	176,187	3.6%	59,678	0.9%	274,996	3.4%
Grants / Contributions for Capital	0	0.0%		0.0%		0.0%		0.0%
Changes in Temporarily Rest. Net Assets	45,004	1.1%		0.0%		0.0%		0.0%
Contributions		0.0%		0.0%		0.0%		0.0%
Other Non-operating Income	83,170	2.0%		0.0%		0.0%		0.0%
TOTAL NON-OPERATING INCOME	128,174	3.0%	0	0.0%	0	0.0%	0	0.0%
CHANGE IN NET ASSETS	-\$15,414	-0.4%	\$176,187	3.6%	\$59,678	0.9%	\$274,996	3.4%

Cash Flow Statement

FISCAL YEAR	12/31/2015		12/31/2016		12/31/2017		12/31/2018		12/31/2019	
CASH FLOW FROM OPERATIONS										
Change in Net Assets	\$5,903,172		\$2,518,649		\$1,796,403		\$654,954		-\$252,106	
Adjustments:										
Depreciation	1,454,874		1,491,246		1,813,636		2,136,958		2,176,127	
(Increase) Decrease in Restricted Cash/Inv	0		0		0		0		0	
(Increase) Decrease in A/R	405,881		-56,208		-346,255		-523,310		-46,884	
(Increase) Decrease in Grants Receivable	-258,093		0		0		0		0	
(Increase) Decrease in Inventory	-5,203		-55		-339		-512		-46	
(Increase) Decrease in Othr Current Assets	0		0		0		0		0	
(Increase) Decrease in Othr LT Assets	0		0		0		0		0	
Increase (Decrease) in Accounts Payable	2,277,013		58,454		187,056		231,102		56,809	
Increase (Decrease) in Accrued Exp	-344,757		81,851		288,899		481,826		119,220	
Increase (Decrease) in Othr Current Liab.	0		0		0		0		0	
Cash Flow from Operations		\$9,432,888		\$4,093,936		\$3,739,400		\$2,981,019		\$2,053,120
Cash Flow from Investment										
Acquisition of Land, Building & Improv	0		0		-10,500,000		0		0	
Construction in Progress	0		0		0		0		0	
Acquisition of Furniture & Equipment	0		0		-1,500,000		0		0	
Cash Flow from Investment		\$0		\$0		-\$12,000,000		\$0		\$0
Cash Flow from Financing Activities										
Proceeds (Paydown) of Long-term Debt	-4,458,803		-452,587		9,125,357		-611,341		-756,717	
Proceeds (Paydown) of Capital Leases	0		0		0		0		0	
Proceeds (Paydown) of Othr L.T. Liab.	0		0		0		0		0	
Cash Flow from Financing Activities		-\$4,458,803		-\$452,587		\$9,125,357		-\$611,341		-\$756,717
Net Cash Flow		\$4,974,085		\$3,641,349		\$864,757		\$2,369,678		\$1,296,404
Beginning Cash		\$4,578,820		\$9,552,905		\$13,194,254		\$14,059,010		\$16,428,688
Ending Cash		\$9,552,905		\$13,194,254		\$14,059,010		\$16,428,688		\$17,725,092

Forecasted Balance Sheets

FISCAL YEAR	FY14	FY15	FY16	FY17
Cash & Investments	3,160,925	3,983,926	5,797,708	7,057,807
Accounts Receivable	897,387	635,000	897,387	580,387
Grants Receivable	39,426	52,000	39,426	67,300
Inventory	0	0	0	0
Other Current Assets	0	300,000	0	0
Total Current Assets	4,097,738	4,970,926	6,734,521	7,705,494
Land, Bldg. & Improvements	5,000,000	7,000,000	7,000,000	7,000,000
Construction in Progress				
Furniture, Fixtures & Equipment	2,050,000	4,690,554	5,050,891	5,995,965
Accumulated Depreciation	650,000	700,000	820,000	1,100,000
Net Fixed Assets	6,400,000	10,990,554	11,230,891	11,895,000
Total Assets	10,497,738	15,961,480	17,965,412	19,601,459
Accounts Payable	1,500,000	2,250,000	1,600,000	1,950,000
Current Maturities of Long Term Debt	225,000	375,000	435,000	510,000
Current Maturities of Capital Leases				
Accrued Expenses	865,000	230,000	150,000	185,000
Total Current Liabilities	2,605,000	2,625,000	2,185,000	2,645,000
Long Term Debt	7,200,000	8,150,000	7,775,000	7,345,000
Capital Leases	0	0	0	0
Total Long Term Liabilities	7,200,000	8,150,000	7,775,000	7,345,000
Total Liabilities	9,805,000	10,775,000	9,960,000	9,990,000
Total Net Assets	692,738	5,186,480	8,005,412	9,611,459
Total Liabilities & Net Assets	10,497,738	15,961,480	17,965,412	19,601,459

Forecasting...



Supporting the Financial Projections

Market Assessment Process Overview

1. Define market area, primary, and secondary
2. Estimate size of the potential market:
 - Demographics, economic overview, health indicators
 - Identify population by payer mix
3. Estimate market share
 - By payer type
4. Consider the competition
5. **Quantify & Evaluate the market need**
 - **Sets foundation for staffing and volume assumptions**

Define Market Area

- Market areas can be defined geographically in the following ways:
 - Counties
 - Metropolitan statistical areas (MSA)
 - Incorporated places/cities/towns
 - Zip codes
 - Census tracts
 - Neighborhoods
(in most urban areas)



Collect Patient Data

- Where are patients coming from?
 - By community, zip code, or census tract
 - Within or outside of established market area?
- Demographic characteristics
- Economic characteristics
- Medical needs
- Use of health center services



Examine Service Area: Accessible Resources

- Internal Data (UDS, utilization reports by site)
- HRSA: UDS/UDS Mapper, HPSA, etc.
- US Census Bureau
- State Centers for Health Statistics
- Demographic/mapping web sites
- You, your staff, your board, your friends, your patients



Secondary Data Sources

- UDS/UDS Mapper
- HPSA/MUA designations
- Third-Party estimates and projections
- Behavioral Risk Factor Surveillance (BRFSS)
- Census Bureau
- Local reports and surveys
- Medical societies
- Medicaid/Medicare

Helpful Links

UDS Mapper/HealthLandscape

<http://www.udsmapper.org>

US Census Bureau:

American FactFinder

http://factfinder.census.gov/home/saff/aff_transition.html

QuickFacts

<http://quickfacts.census.gov/qfd/index.html>

Small Area Estimates

<http://www.census.gov/did/www/sahie/index.html>

Business Patterns

<http://www.census.gov/econ/cbp/>

Melissa Data

<http://www.melissadata.com/lookups/>

Mapping/Geocoding

<http://www.batchgeo.com/>

<http://www.gpsvisualizer.com/geocoder/>

County Health Rankings

<http://www.countyhealthrankings.org/>

Community Health Status Indicators

<http://communityhealth.hhs.gov/HomePage.aspx>

Behavioral Risk Factor Surveillance Survey (BRFSS)

<http://www.cdc.gov/BRFSS/>

Health Indicators & Behavioral Risk Factors

Mortality Rates:

Heart disease, cancer, diabetes, chronic lower resp. disease, asthma

Maternity/Child Health:

Birth rate, infant mortality, % receiving adequate prenatal care, low birth weight

STD Infection Rates:

HIV, syphilis, gonorrhea, chlamydia

Health Risk Factors:

Overweight/obese, smoking, diabetes, asthma, exercise, % uninsured/no physical

Sources for Health Indicators

- State/county health department
 - (often the most accurate source for vital statistics)
- CDC WONDER Database – www.wonder.cdc.gov
- Local health department or foundation reports
- BRFSS
- County health rankings
- Community health status indicators
- HealthLandscape

BRFSS

 SAFER • HEALTHIER • PEOPLE™

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Office of Surveillance, Epidemiology, and Laboratory Services

Behavioral Risk Factor Surveillance System

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► BRFSS CONTENTS

- [Prevalence and Trends Data](#)
- [SMART: City and County Data](#)
- [BRFSS Maps](#)
- [Web Enabled Analysis Tool \(WEAT\)](#)
- [Chronic Disease Indicators \(CDI\)](#)
- [About the BRFSS](#)
- [BRFSS Datasets \(downloads and documentation\)](#)
- [Chronic Disease and the Environment](#)
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BRFSS

Turning Information Into Health

The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984. Currently, data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam.

[Learn More »](#)

► SPOTLIGHT

The 2006–2008 [BRFSS Asthma Call-back Survey Data and Documentation](#) are now available for download. 

 The [Gulf States Population Survey](#) is a telephone survey to be conducted monthly for a one-year period, from December 15, 2010 to December 15, 2011, in selected Gulf coast counties affected by the Deepwater Horizon Gulf oil spill. The survey will include questions taken from the ongoing BRFSS as well as additional questions taken from standardized scales or from other surveys designed to measure anxiety, depression, and potential stress-associated physical health effects.

 **Interactive Databases**

- [Prevalence and Trends Database](#)
- [SMART: City and County Database](#)
- [BRFSS Interactive Maps \(GIS\)](#)
- [Web Enabled Analysis Tool \(WEAT\)](#)
- [Chronic Disease Indicators \(CDI\)](#)


 **Survey Data and Downloads**

- [BRFSS Annual Survey Data](#) (1984–2009)
- [BRFSS SMART Survey Data](#) (2002–2009)
- [BRFSS GIS Maps Data](#) (2002–2009)
- [BRFSS Asthma Call-back Survey Data and Documentation](#) (2006–2008) **NEW!**
- [Summary Data Quality Reports](#) (1998–2009)
- [Chronic Disease and the Environment Data](#) (2001–2006)

 **General Information**

- [About BRFSS](#)

Health Indicators


U.S. Department of Health & Human Services



Community Health Status Indicators

CHSI 2009

Our Mission: Provide Information for Improving Community Health

Home
About the Data
About the Project
How to Use Report
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Select Year

Current - 2009

Select State

Texas

Select County

Bowie

Demographics: Bowie County, TX

Population size ¹	92,283
Population density (people per square mile) ²	104
Individuals living below poverty level ³	19.3%

Age distribution¹	Race/Ethnicity¹
Under Age 19	24.7%
Age 19-64	62.0%
Age 65-84	11.3%
Age 85+	2.0%
White	72.4%
Black	24.6%
American Indian	0.7%
Asian/Pacific Islander	0.7%
Hispanic origin (non add)	5.7%

Peer Counties

Peer counties (counties and county-like geographic areas) in stratum number 23 were stratified on the basis of the following factors: frontier status, population size, poverty, age. Below are peer county ranges representing the 10th and 90th percentile of values. This trimmed range of peer county value is used consistently throughout the report.

Population size ¹	58,491 - 101,789
Population density (people per square mile) ²	25 - 233
Individuals living below poverty level ³	10.8 - 18.0%

Demographics

[Summary Measures of Health](#)

[National Leading Causes of Death](#)

[Measures of Birth and Death](#)

[Relative Health Importance](#)

[Vulnerable Populations](#)

[Environmental Health](#)

[Preventive Services Use](#)

[Risk Factors for Premature Death](#)

Questions?

Contact

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