Introduction to Managing with Metrics

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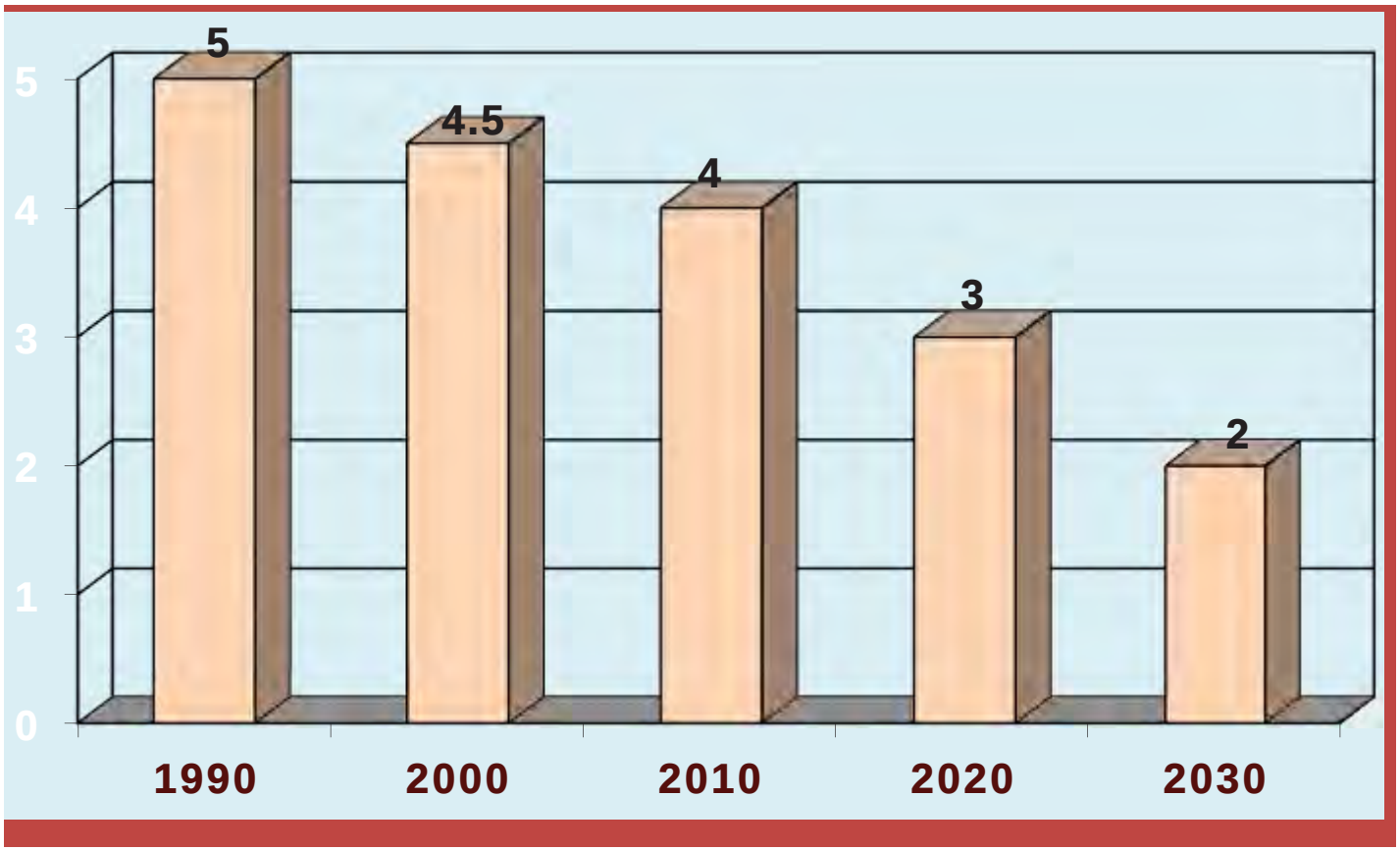
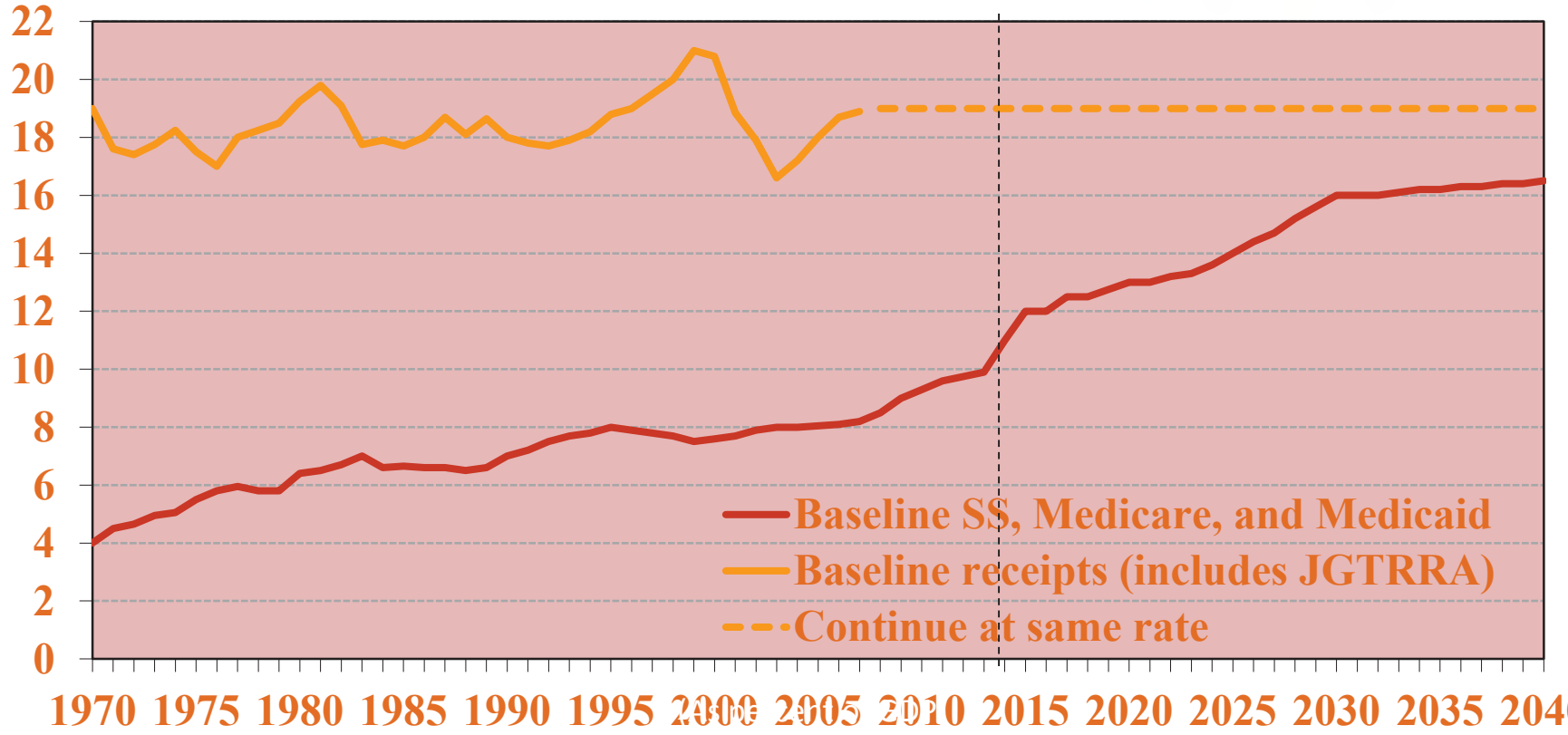
Why Be So Concerned Now?

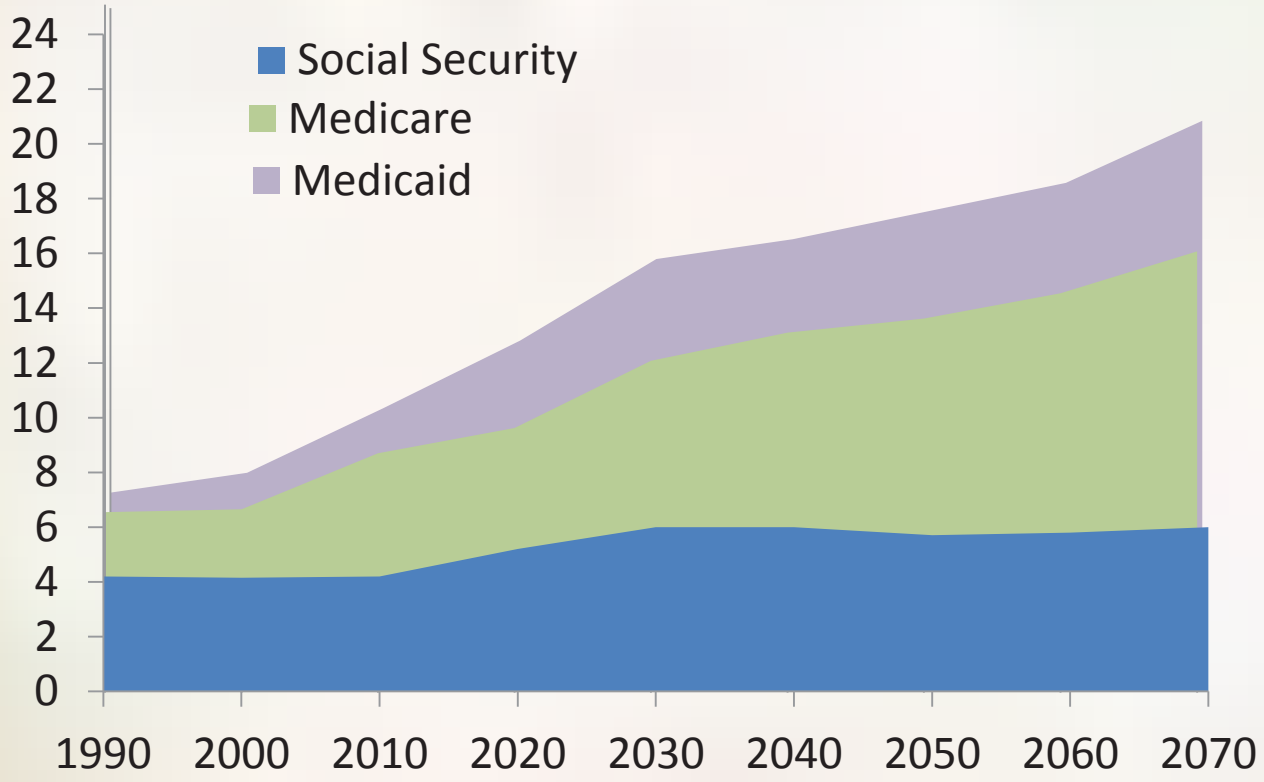
Number of Workers Per Retiree



Federal Receipts vs. Entitlements

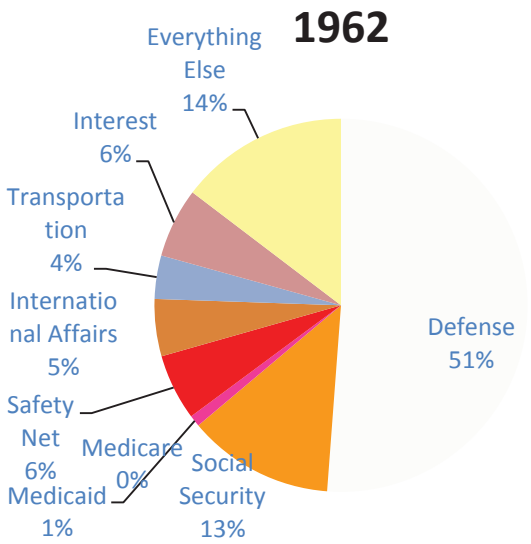


Social Security, Medicare & Medicaid Outlays as a Percentage of GDP 1990-2075

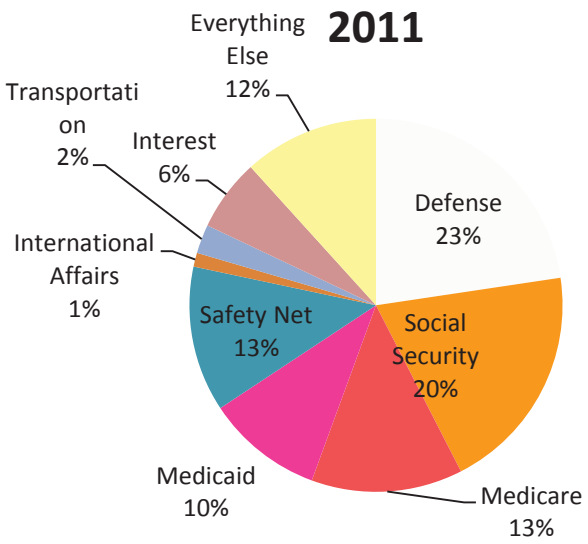


Source: C. Eugene Steurle and Adam Carasso, (*Budget Crisis at the Door*), The Urban Institute, 2003. Based on data from the Congressional Budget Office, "A 125Year Picture of the Federal Government's Share of the Economy, 1950-2075," July 3, 2002, table 2.

Federal Government Spending



Medicaid
Medicare
S.S.
20%



Medicaid
Medicare
S.S.
43%

Healthcare Costs

- 1900 – 3% GDP (Gross Domestic Product).
- 1964 – 6% GDP.
- 1994 – 15% GDP.
- 2020 – 25% GDP.
- Per person expenditure for healthcare:
  - 1965 - $205
  - 2000 - $4637
  - 2010 - $8233

Political lobbying will continue to be essential
but will suffer diminished returns.

No matter who wants to give it to you
or who doesn't…the money just won't be there!

Just When….

- **Growing need for services**
- **Increasing complexity of patients**
- **Need to ensure resources spent <u>efficiently and effectively</u>**
- **Pressure to boost revenue**
- **Preparation for Patient Centered Medical Homes, ACOs, Capitation**

You can’t manage what
you don’t know!

If you can’t measure it,
You can’t manage it!

I. Measure

Gathering Data

- Measure inputs
- Measure activities
- Measure outputs
- Measure outcomes

Measuring Inputs

- **Inputs** (Resources): include the human, financial, organizational, and community resources a program uses to do the work.

Measuring Inputs

- Inputs
  - Human and Financial
  - Physical – Hours worked, number of specified FTEs, examination rooms, phone calls answered, supplies, physical space, and equipment (i.e., MRI, x-ray, and lab)
  - Financial – Salaries, equipment lease, overhead costs per square foot, and contract services

Measuring Activities

- **Program Activities** are what the program does with the resources. Activities are the processes, tools, events, technology, and actions that are an intentional part of the program implementation. These interventions are used to bring about the intended program changes or results. All functions of the organization…operational, clinical, financial.
- Scheduling, intake, examination times, recording.

Measuring Outputs

- *Physical* – Number of visits or encounters, patients, prescriptions, cases, X-rays, lab work, referrals made, etc.

- *Financial* – Value of services (i.e., patient revenues and directed grants)

Measuring Outcomes

- **Outcomes** are the specific changes in program participants' behavior, knowledge, skills, status and level of functioning; i.e. **creating wellness**. Outcomes are only measurable as long-term results.
- Long-term Results
  - Reduction of disease incidence in community
- Let's talk about creating wellness

What Produces Wellness?

II. Benchmarking

Turning Data Into Information

Typical Types of Benchmarking

- Comparison to your past performance
  - Last year
- Comparison to your predicted performance
  - Budget
- Comparison to various peer cohorts
  - State
  - Size
  - Urban/rural

Beyond the Budget

- Measuring and benchmarking goes beyond the budget…beyond financial
- Financial measures should be benchmarked
- Operational measures will be benchmarked
- And, there are some measures and benchmarks that are a combination.
- If a measure has a $ in front of it is financial; if it doesn't it is usually operational
- Let's look at some examples

Begin With the Financial Measurements

The Importance of Financial Benchmarking

Ratios

- Easier to understand and usually more **informative** than the unrelated, free standing information in financial statements and operational data
- Relationship between various pieces of data to reveal indicators that a deeper analysis may be warranted

Liquidity:
Days Cash on Hand

Unrestricted Cash

(Total Operating Expenses – Depreciation) ÷ 360 Days)

Measures Liquidity

The number of days an organization can operate without any new cash inflows

Recommended Benchmark

Maintain Days Cash on Hand ***at least 60 days*** *at minimum. Stretch goal:* ***90 days***

Liquidity:
Current Ratio

$$\frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$$

Measures Liquidity

How many times the health center can cover its current obligations (due within one year) with current resources.

Capital Link's Recommended Benchmark

*Maintain Current Ratio of **2:1** or higher*

Liquidity:
Days in All Accounts Receivable

<u>All Receivables</u>

NPSR + G&C Receivables + Net Assets Released from Restrictions/ 360 Days

Measures Liquidity

→ *The average number of days it takes the health center to turn all its receivables into cash*

Capital Link's Recommended Benchmark

→ *Goal is to keep this ratio low! Maintain All Receivables turn under 60 days*

Liquidity:
Days in Accounts Payable

Accounts Payable

(Total Operating Expenses minus Salaries and Depreciation) / 360 Days

Measures Liquidity

The average number of days it takes the health center to pay its suppliers

Capital Link's Recommended Benchmark

*Goal is to keep this ratio low! Maintain Payables under **30** days*

Operating Margin

$$\frac{\text{Change in Net Operating Assets}}{\text{Total Operating Revenue}}$$

Measures Profitability

The percentage of operating revenue that the health center retains as profit (or loses) from operations.

Capital Link's Recommended Benchmark

*Maintain Operating Margin at **3%** or higher. The higher the margin, the stronger the financial performance.*

Bottom Line Margin

Change in Net Assets
Total Operating Revenue

Measures Profitability

The percentage of operating revenue that the health center retains as profit (or loses) from all business activities.

Recommended Benchmark

*Maintain Bottom Line Margin at **3 to 5%** or higher. The higher the margin, the stronger the financial performance.*

Create Your Management Tools

Financial Indicator	FY2010	FY2011	FY2012	FY2013	Benchmark (as applicable)
Profitability					
Operating Margin	-3.1%	8.9%	17.8%	4.4%	>3%
Bottom Line Margin	7.2%	9.0%	17.8%	4.4%	>5%
Revenue Mix (% Net Patient Service Revenue |% Grants and Contracts)	60% | 30%	60% | 30%	60% | 30%	60% | 30%	varies
Personnel Expense as % of Total Revenue	88.6%	78.6%	72.2%	69.4%	<70% to 75%
Revenue and Expense Growth					
Revenue Growth Rate	Base Year	-3.0%	9.2%	136.2%	N/A
Net Patient Service Revenue Growth Rate					N/A
Grants and Contracts Revenue Growth Rate					N/A
Operating Expense Growth Rate	Base Year	9.9%	21.0%	69.6%	N/A
Liquidity					
Days Cash on Hand	18.05	80.75	71.06	111.62	> 45-60 days
Current Ratio	4.19	5.89	4.66	5.38	>1.25
Working Capital Growth	Base Year	1%	20%	10%	>0%
Days Patient Accounts Receivables	127.18	77.55	63.93	49.27	< 65 to 75 days
Days in All Receivables					< 65 to 75 days
Days in Accounts Payable	29.91	22.25	21.30	17.42	< 60 days
HRSA-Required Measures					
Long-Term Debt to Equity Ratio	0.22	0.20	0.25	0.42	No benchmark provided
Working Capital to Monthly Expense Ratio					No benchmark provided
Change in Net Assets as a Percent of Expense					No benchmark provided

Operational Benchmarking

Redefining Productivity

- Visits per Provider – still important?
- Shift to the patient:
  - Visits per patient
  - Patients per provider
  - Patients per team per year
  - Recidivism and follow-ups
- Team efficiency and effectiveness
- Not rocket science: maximize outcomes/minimize encounters

Patient Management: User and Visits	2010	2011	2012	2013	State Median
Medical Patient/Medical FTE					
Behavioral Health Patient / Mental Health FTE					
Dental Patient / Dental FTE					
Vision Patient / Vision FTE					
Enabling Patient / Enabling FTE					
Total Unduplicated Patient / Total FTE					
Medical Visits per Provider FTE (Physician and Mid-Levels)					
Behavioral Health Visits per Provider FTE					
Dental Visits per Provider FTE (Physician and Mid-Levels)					

III. Evaluating

Converting Information to Knowledge

Learning What To Do

- Much information is easy to interpret once you've completed benchmarking.
- Some improvement choices are obvious.
- Don't focus yet on what to do, focus on what the results are telling you.
- Consider multiple causes for the information.

Evaluating: Breaking Good

- Start by evaluating what you do well.
- Why do you perform well?
  - Inputs, outputs, systems?
- Are your performance causes exportable to any of your less effective systems?
- Which sites are doing better?
- What would have to change?

Evaluating Systems

- You cannot change systems…you can only replace them.
- Systems never work as they are designed
- Water cooler effect.
- If you try to change the way you think they work, you effort will fail.
- Xerox

Evaluating: People or Process?

- Edwards Demming: 85% of all problems are from system design, not people.
- Evaluate processes first
- Unless there are obvious shortcomings, alter systems first and wait to evaluate people until after the new systems are in place

Evaluation: Maximize Interaction

- Adjacent Possibilities
- Diversification.
- Stakeholders
  - Internal
  - external.

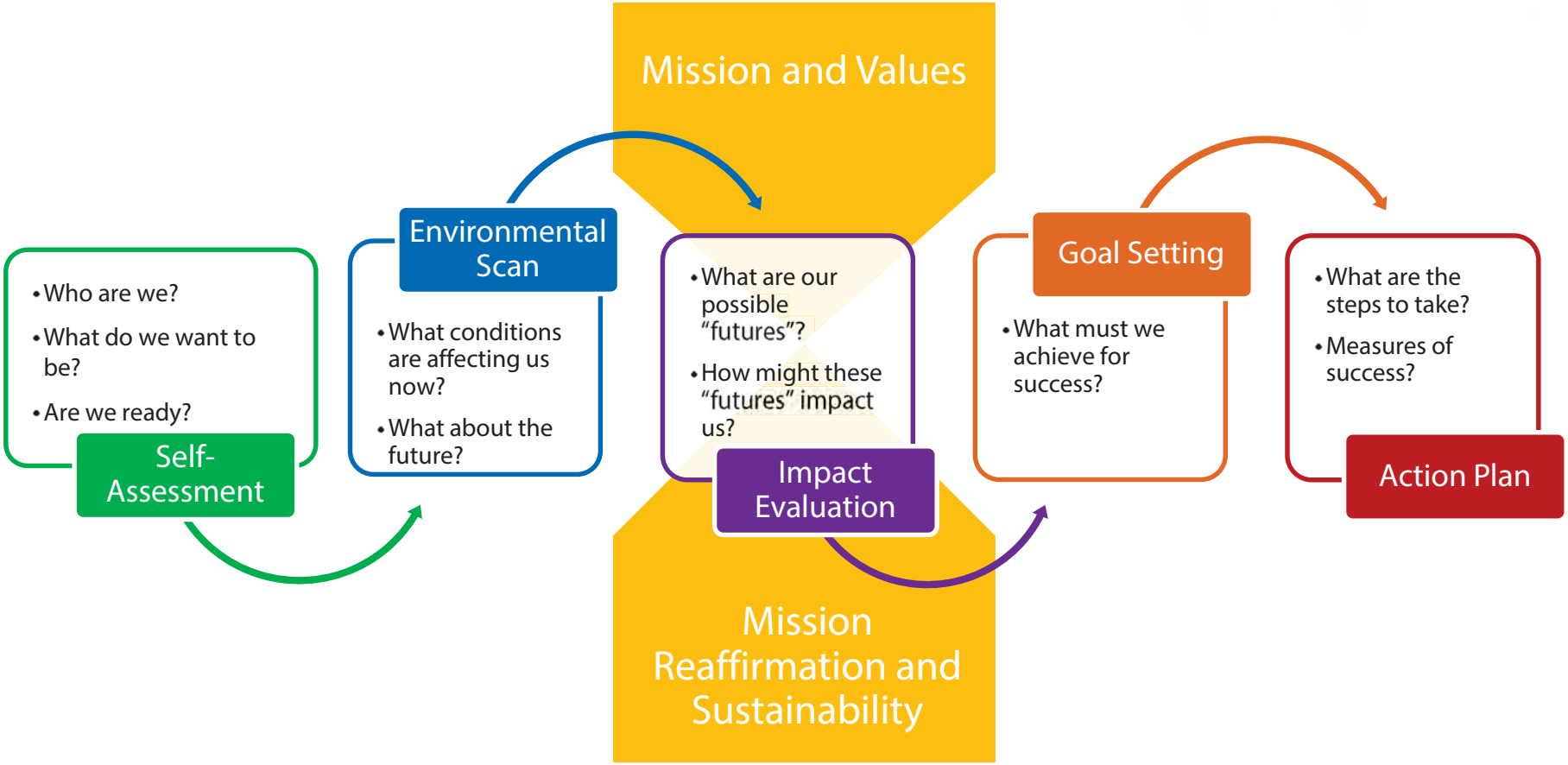
Evaluate: External Influences of Change

- Demographic changes - Strategic
- Medicare and Medicaid changes - Strategic
- Accountable Care Organizations - focused
- Patient-Centered Medical Homes - focused
- Global Payment transition - focused

IV. Action

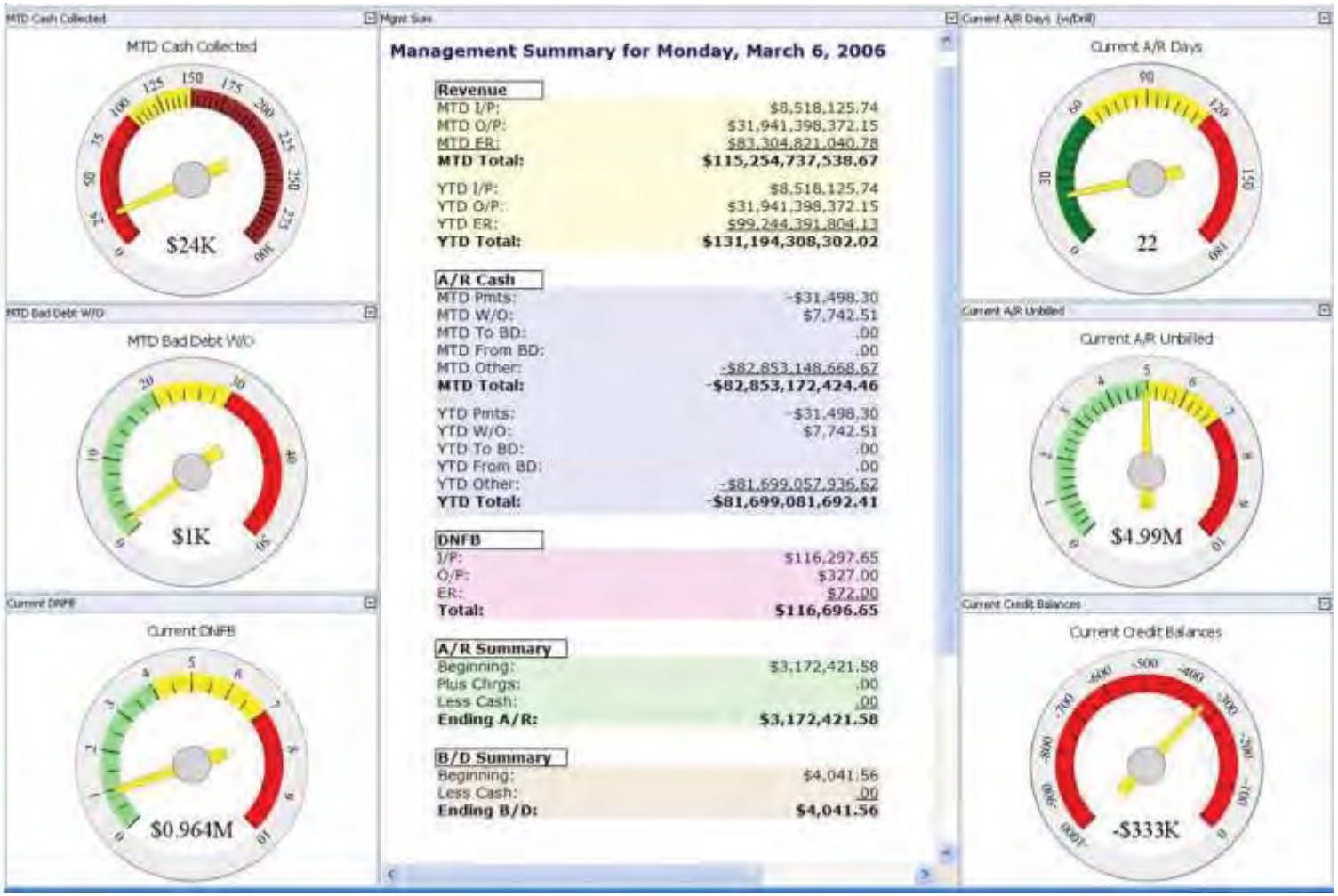
Making Decisions and Taking Action

Key Strategic Planning Components



Measuring and Managing In the Future

Real-Time Data - Dashboards



An Example

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Which Key Financial and Operational Metrics to Track?

Capital Link suggests health centers regularly monitor 10-15 performance measures using data available from financial statements, practice management systems, and Uniform Data System (UDS) reporting. However, each organization should adapt this model to closely track the statistics most relevant for its own performance goals and objectives.

		KEY FINANCIAL & OPERATIONAL METRICS	Why This is Important	Formula
FINANCIAL HEALTH	1	Operating Margin	Measuring stick of your business model; margins typically small but need to be positive	Change in Operating Net Assets / Total Operating Revenue
	2	Bottom Line Margin	Is performance dependent upon large capital grants and/or other sources of non-operating revenue?	Change in Net Assets / Total Operating Revenue
	3	Personnel-Related Expenses as a Percent of Revenues	Consumes 70-75% of revenues; key driver of financial performance	(Salaries & Related Expenses + Fringes & Payroll Taxes + Professional/Contracted/Consultant Fees) / Total Operating Revenue
	4	Days in Net Patient Accounts Receivable	Financial management starts with collecting your money efficiently	Net Patient Accounts Receivable / Net Patient Service Revenue / 360
	5	Days Cash on Hand	Is there enough liquidity to keep operations running smoothly?	(Unrestricted Cash + Investments) / (Total Operating Expenses - Depreciation) / 360
PRODUCTIVITY & FINANCIAL OPERATIONS	6	Physician Productivity (visits)	Productivity is the basis for revenue generation [in a fee-for-service environment]	Physician Visits / Physician FTEs
	7	Mid-Level Productivity (visits)	Productivity is the basis for revenue generation [in a fee-for-service environment]	Mid-Level Visits / Mid-Level FTEs
	8	Dental Provider Productivity (visits)	Productivity is the basis for revenue generation [in a fee-for-service environment]	Dental Visits / Dental Provider FTEs
	9	Medical Provider Productivity (patients)	Becomes more important in transition to patient-centered care models	Medical Patients / Medical Provider FTEs
	10	Medical Team Productivity	Productive team-based care depends on integrated staff and program planning	Total Medical Patients / Total Medical Staff FTEs
	11	Cost (and Revenue) Per Visit	How are your visit costs and revenues changing over time?	Total Expenses (or Revenues) / Total Visits
	12	Cost (and Revenue) per Patient	With the move to PCMH, how are patient costs and revenues changing?	Total Expenses (or Revenues) / Total Patients
STAFFING & UTILIZATION	13	Medical Support Staff Ratio	How does your team composition track with productivity?	Medical Support Staff FTEs / Medical Provider FTEs
	14	Non-Clinical Staff Ratio	Strategic balancing of personnel costs is key for financial sustainability	Total Facility and Non-Clinical Support Staff / Total FTEs
	15	Visit (and Patient) Growth Rates	Are visits growing faster than patients? Is demand growing?	(Total Visits (or Patients)in Current Period - (Total Visits (or Patients) in Prior Period)) / Total Visits (or Patients) in Prior Period

Assessing Results through Benchmarking

Benchmarking is the process of reporting data within a comparative context, allowing clinic leadership to better interpret performance outcomes and make financial management decisions accordingly.

Considerations for health center benchmarking:

- Since health centers are mission-driven organizations, financial benchmarks must be considered in the context of other non-profit industries. Extremely high margins or liquidity do not necessarily point to long-term sustainability if programs and services are compromised in the short run. Health center leaders need to carefully assess their own performance objectives and evaluate their results accordingly.
- For meaningful comparative analysis, it is important to calculate selected performance metrics in line with industry peers. Health centers should also be consistent with their own internal calculations so that period-to-period internal analysis is relevant.

What can you compare your performance to?		Operational Data Sources	Financial Data Sources
Against Yourself	• Budget to actuals • Period to period trending	• Uniform Data System (UDS) • Practice Management System (PMS) • Office of Statewide Health Planning and Development (OSHPD)	• Internal financials • Audits • Capital Link
Against Your Peers	• Local, regional, state, national • Clinic type, size, location	• State Primary Care Association (PCA) • Regional Associations and Consortia • Health Center Controlled Networks (HCCNs) • Capital Link • OSHPD Pivot Tables • State-wide UDS Roll-Up	• Capital Link • Guidestar: IRS form 990
Against Industry Standards	• High performers • Industry guidelines • Payer contractual targets	• HRSA UDS goals/averages • Capital Link comparative analyses	• Capital Link

Challenges to effective health center benchmarking:

- Financial and operational data systems are rarely integrated, making consolidated reporting initiatives a manual process.
- Multiple people within an organization are often responsible for data reporting which can result in a lack of data consistency and credibility.
- Identifying appropriate health center peer groups and benchmarks as well as finding comparative peformance data can be challenging.
- Historical data from prior years may be less immediately relevant for current decision-making, however reports using timely interim data is often not as accurate and/or available.
- Site-level data may be most meaningful but corporate-level data may be more reliable and comparable.

Benchmarking and Goal Setting: Sample Performance Snapshot

A performance snapshot provides a relatively detailed overview of a health center's performance in comparison to available targets and benchmarks. Capital Link's analysis on the financial health of California health centers may be utilized by health centers to develop their own comparative frameworks for performance analysis.[1] The following table provides a summary of the comparative results for 15 financial and operational performance indicators for various peer data sets. A more detailed listing of performance results and analysis, including quartile and multi-year results, is available on Capital Link's website. Health centers should update this type of model with their own information to determine areas for further review and establish internal targets for each measure.

	PERFORMANCE SNAPSHOT (Sample)	Capital Link Target	Health Center Target	Current Year Health Center Results	2013 CA Median	CA Financial High Performers 2013 Median	National 2013 Median
	FINANCIAL HEALTH						
1	Operating Margin	>1-3%	-	-	2.1%	7.1%	1.2%
2	Bottom Line Margin	>3%	-	-	4.4%	6.7%	3.6%
3	Days Cash on Hand	>30-45 Days	-	-	52	90	47
4	Days in Net Patient Receivables	<60 Days	-	-	47	53	43
5	Personnel-Related Expense as % of Operating Revenue	<70-75%	-	-	74%	70%	73%
	PRODUCTIVITY & FINANCIAL OPERATIONS						
6	Physician Visits / Physician Full-Time Equivalent Employees (FTEs)		-	-	3,385	3,784	3,118
7	Mid-Level Visits / Mid-Level FTEs		-	-	3,032	3,358	2,632
8	Dental Visits / Dental Provider FTEs		-	-	2,696	2,937	1,981
9	Medical Patients / Medical Provider FTEs		-	-	960	1,033	964
10	Medical Patients / Total Medical Staff FTEs		-	-	330	344	329
11	Accrued Cost per Patient Visit		-	-	$186	$170	$187
12	Accrued Cost per Patient		-	-	$779	$661	$680
	STAFFING & UTILIZATION						
13	Medical Support Staff Ratio		-	-	2.1	2.3	1.9
14	% Admin & Non-Clinical Staff Ratio		-	-	21%	22%	21%
15	Patient Visit Growth Rate		-	-	6.0%	7.1%	2.0%

[1] ***California Community Health Centers: Financial & Operational Performance Analysis, 2010-2013,*** Capital Link, January 2015, http://www.caplink.org/resources/reports

Monitoring Top-Line Performance through Visual Dashboards

While the performance snapshot provides detailed data analysis and comparisons across a variety of key metrics, health centers may wish to monitor a more limited set of indicators in a graphical format, commonly referred to as a dashboard.

Some software packages used by health centers offer dashboard reporting modules, including those that are attached to practice management systems that track detailed clinical and operational measures. Dashboards from financial and accounting software, when available, can be helpful but are not usually linked to operational or utilization data sources. Whether the goal is financial sustainability or continued growth, health centers must look for ways to integrate raw data from various sources into visually compelling reports that will allow clinic leadership to routinely monitor ongoing performance.

Key steps for creating financial and operational performance dashboards

Identify your target audience

- Dashboards are more effective if you tailor them for the intended audience
- Consider data fluency; clinic boards of directors need more limited, priority information while clinic managers want more detail

Choose your financial and operational metrics

- Limit what you are tracking regardless of the audience (5-10 metrics)
- Stay consistent with your ratio definitions and calculations

Match your reporting objectives to your available data sources

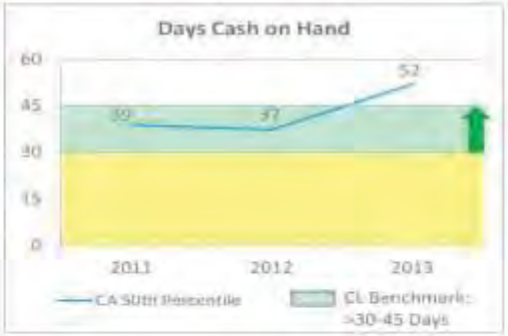
- Annual results are often most reliable: audits, UDS, OSHPD, etc.
- Monthly/quarterly data better support real-time decision making: PMS systems, interim financials, etc.
- Reporting frequency also depends on data needs of target audience (boards of directors vs. executive management vs. clinic managers)

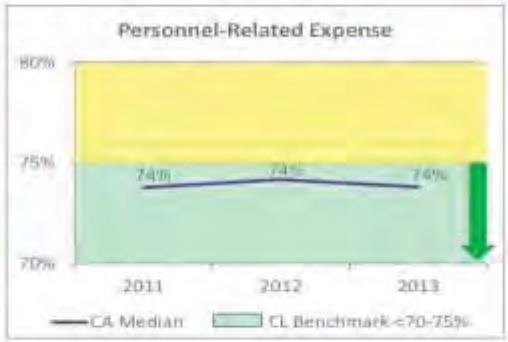
Explore your available reporting tools

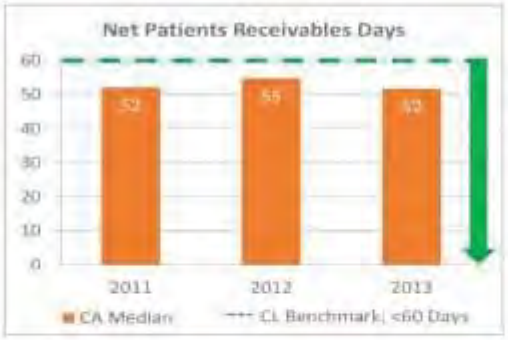
- If dashboard software is not available, look to Microsoft Excel as a relatively easy tool for charting performance results
- Dashboards typically require an investment of time to set up, but then templates are efficient to run for routine reporting

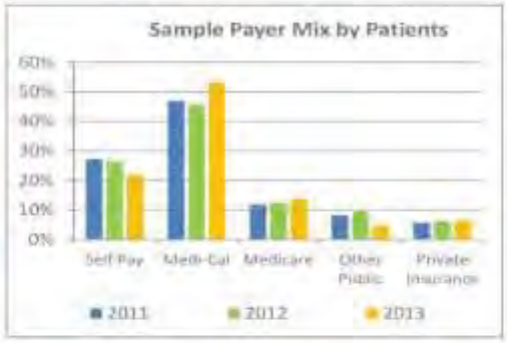
Sample Performance Dashboard

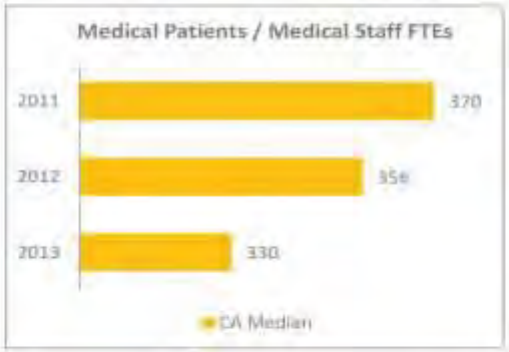
The following dashboard illustrates several sample templates that may be used for routine performance monitoring. These and/or other charts should be populated with actual health center data and incorporate benchmark targets where appropriate.

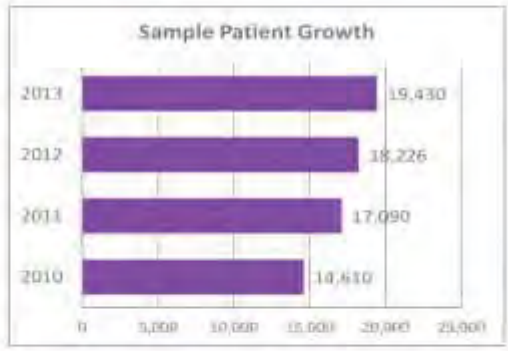












Analyze and Adjust: Revenue and Expenses

When benchmarking tools indicate a potential weakness in one or more specific areas, management should further analyze the reasons and take action as appropriate. It is important to align revenues and expenses with organizational priorities to ensure financial sustainability. Management should closely monitor the key revenue and expense categories and adjust controllable items in the short-term while reviewing major longer term and/or strategic changes.

Patient Revenue Management: *Better billing and collections means more revenues*

- Revenue maximization starts with the front desk; ensure staff is well trained and motivated for patient enrollment in appropriate insurance programs and collection of minimum visit payments.
- Closely monitor changes in payer mix and and reimbursement rates as these drive the operating budget.
- Routinely monitor key revenue cycle metrics, including: accounts receivable days, % of A/R>90 days, average net revenue per visit, allowances as a % of charges, denial rates.
- Consider outsourcing aspects of collections processes as a way to increase revenue and decrease related administrative costs.

Grants/Contracts Revenues: *Most health centers generate 30% of overall revenues from this source*

- Determine if there are opportunities to secure additional grant or fundraising income to support program expenses.

Employment Expenses: *Personnel-related costs including benefits and contracted services comprise 3/4 of overall health center expenses*

- Health insurance is one of the organization's highest costs—review options for higher deductibles (even if self-funded/subsidized by the health center, this strategy often saves money).
- Evaluate the balance between salaries and benefits to ensure it is reflective of the demographics and priorities of your staff.
- Contracted clinical services – monitor the volume of referrals and patient satisfaction with services on an annual basis to determine at what point in-house services are more cost-effective.
- Contracted support services – as the size and number of sites grows, monitor the cost and benefit of utilizing outside resources to maintain facilities.

Supplies and Services Expenses: *Represent 10-15% of costs for a typical center*

- Group purchasing programs are a no-cost membership option that provides savings on many products and services—often in the range of 10-20% per line item. Most programs will provide a free analysis to identify potential savings.

Facilities Expenses: *Typically comprise 5–10% of expenses*

- Take advantage of creative low-cost financing sources available to health centers to fund capital expansion or renovation projects. Some financing programs can even provide project equity to reduce debt. Given current market conditions, consider refinancing opportunities to reduce interest expense.

Analyze and Adjust: Productivity

Health center managers often focus on productivity as the key driver of financial performance. However, productivity is a function of many operational dynamics, most notably the inter-connections between staffing, process, and facility. Real improvement, particularly for team-based care models, often requires addressing these three performance drivers simultaneously.

Staffing: *Staffing plans must strategically utilize each member of the team in ways that support the team-based care model*	
Goals	• Increase the number of patients that each individual provider can effectively manage by finding the right mix of support staff that best meets the needs of your patient populations, particularly given the growing shortage of providers. • Increase the breadth and depth of services offered to those patients to improve outcomes and minimize overall healthcare costs.
Strategies	• For each site, determine and monitor the type and number of staff required to support the desired program utilizing the chosen model in the available facility. • Develop team productivity targets based on industry benchmarks and regularly track progress toward achieving those goals. • Share results in a public forum as increased incentive to improve performance.
Process: *The effectiveness and productivity of the team is dependent not only on individual skill sets but on the ability of the team to work together efficiently*	
Goal	• Ensure daily work flows support the function of the team to effect positive patient outcomes.
Strategies	• Confirm that each staff member is maximizing his/her license and credentials. A good rule of thumb is for each team member to spend 80% of the day completing work reflective of his/her particular expertise and 20% on work simply shared by the entire group to maximize team function. • Examine team processes to eliminate redundancies in reporting and documentation, allowing more staff resources to be focused on patient care.
Facility: *As the model of care delivery changes, it is essential to have multi-functional, flexible spaces that can be repurposed inexpensively as staff and processes change*	
Goal	• Maximize use of current space while ensuring flexibility for future growth.
Strategies	• Align space and processes to create patient flow patterns that maximize efficiencies and the number of patients served. It is important to consider space needs/design layout to ensure patients move quickly and efficiently through the center. For example, simply moving certain functions near the front desk is a basic change that can improve patient flow. • Increase and/or change the hours of operation to reflect days and times requested by existing and potential patients. Evaluate hours for alignment with the work, school, and cultural schedules of your community. For example, late evening hours may be beneficial in a farming community. Early morning hours may be most popular in a community of long-distance commuters. Late afternoon well-child appointments are key to building your school-aged population. • Develop a facilities plan based on anticipated patient growth to understand how quickly your current or proposed facility will reach capacity and constrain your staff and patient flow. Strategically plan to expand or upgrade your facility space so that there is room for growth when you need it.

Questions?

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Capital Solutions for
Health Centers

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