



The Business Case for Clinical Practice Transformation

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Authors

Roger Chaufournier

Christine St. Andre

Table of Contents

1. The Problem Statement
2. The Tension for Change
3. What Does a Transformed Practice Look Like?
4. What If?
5. The Formula to the Puzzle
6. Driving the Business Case: The Leverage Points for Change
7. Role for Senior Leaders
8. Summary

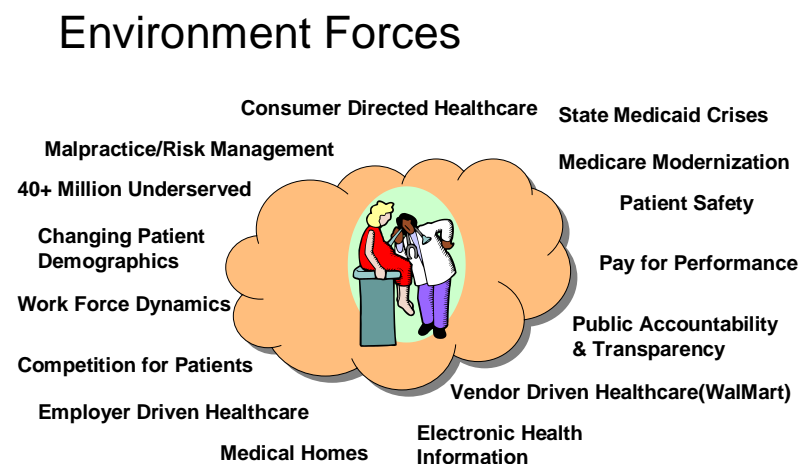
The Problem Statement

Significant activity has taken place in ambulatory care that is leading to a transformation of the delivery system and practice of medicine itself. Advances in idealized design principles (application of Lean, reengineering, etc.) are streamlining practices and providing the opportunity for higher levels of efficiency. At the same time, the introduction of the Wagner Care model is proving to be a disruptive technology that is challenging organizations to rethink their underlying approach to health care delivery. Despite anecdotal reports of breakthroughs in achieving improved outcomes and positive impacts on the bottom line, there is a very slow adoption curve of these best practices. Senior leaders struggle to connect these activities to their own business case in order to justify the time, resources and emotional energy that must be expended to support this transformation work. On the revenue side of the business case, there are also significant and real reimbursement issues wherein the current system simply does not reward prevention nor pay for many of the proposed steps needed for transformation. This monograph is intended to provide senior leaders with insight as to how using Quality as a Business Strategy can drive the bottom line performance of the organization and to encourage senior leaders to accelerate their efforts at transformation.

The Tension for Change

The management and leadership literature is full of models of change. In many of the models it is suggested that in order for there to be change, there must first exist a tension for change. There needs to be enough dissonance in place to warrant the pain and transition cost of change. So why transformation now? Does a tension for change exist?

Figure 1. Tension for Change



There are many forces encroaching on the day to day practice environment. Many are near term and immediately palpable (e.g. work force dynamics such as staff turnover) and others represent shifts that are more strategic with longer term impact (e.g. the Medical Home concept or employer driven healthcare). The coupling of increased demands for transformation, increased transparency of outcome and performance metrics, and emerging models of compensation (e.g. Pay for Performance) are enough for enlightened leaders to experience a tension for change. In the not too distant future, providers will be competing not just on perceived quality as reported in the local popular press, but also on quantitative measures of quality as defined by performance metrics of outcomes, efficiency, satisfaction and cost. Those practices that transform ahead of the curve will benefit from the transparency and new models of compensation. Those that lag will face an uphill battle and competitive disadvantage while scavenging for the resources to accelerate the readiness and transformation processes.

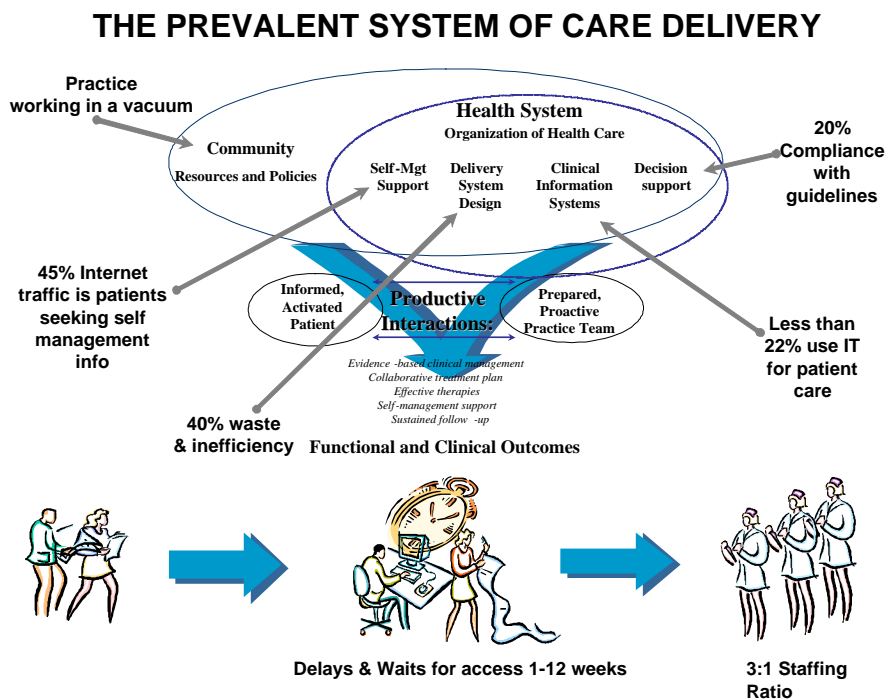
What Does a Transformed Practice Look Like?

Don Berwick, M.D. often quotes the phrase “*Every system is perfectly designed to achieve the results it achieves.*” It is critical to appreciate the meaning of this phrase as it applies to ambulatory care. The root cause for transformation does not rest with issues of incompetent or willfully negligent clinicians and care teams. This is not an issue of resistance to change or self-serving and greedy individuals trying to hold on to the past. This is an issue of a system of ambulatory care that has evolved over time, has outlived its utility and is now in need of change. Our prevalent system of ambulatory care has evolved through design forces such as reimbursement, regulation, and the complexities of large bureaucracies.

Figure 2. provides a snap shot of the current system of care. Waits and lack of access to care is a major issue and one that ripples throughout the system. Around the country practices that report having some form of advanced access are in the distinct minority.^{i ii iii} The remainder use traditional methods of scheduling that may involve waits as long as several months. In fact, some providers may still view having a waiting list as a “badge of honor”. Unfortunately, patients’ inability to get access to care when they need or want it sets off a chain of events that drives much unnecessary utilization in health care. It results in high no show rates which in turn decreases the productivity and efficiency the practice staff. It drives people to seek alternative access points and modes of communication, including use of alternative therapies and self diagnosis and treatment through the information found on the Internet. A recent study suggested that as many as 80% of users on the Internet seek health information. However, as few as 5% use the Internet to communicate with their providers.^{iv v vi} Sadly, even when patients are able to obtain an appointment, it is very common to see packed waiting rooms with idle patients reading magazines and experiencing cycle times in excess of ninety minutes. And do they ultimately

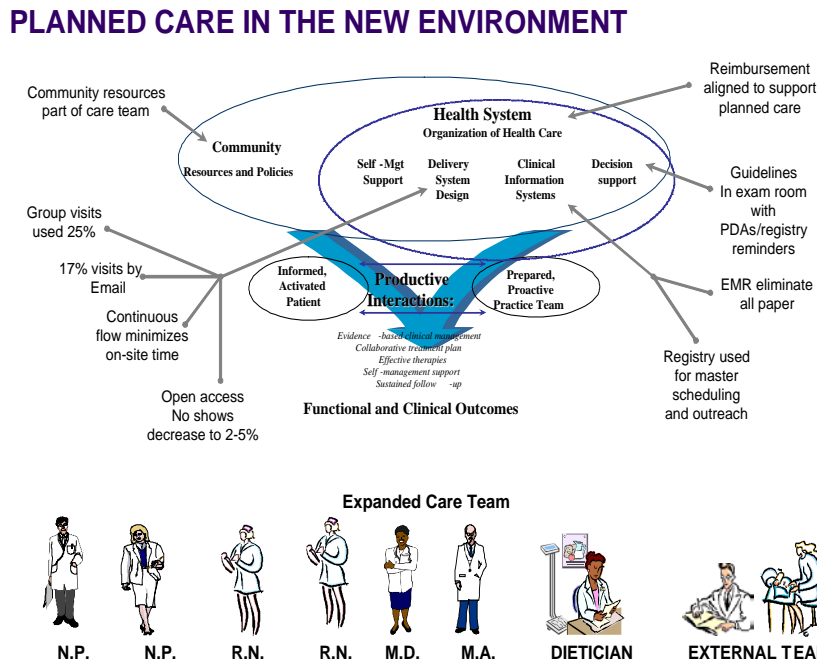
receive great care once they reach the holy grail of the exam room and their provider? The literature tells us they do not. The literature indicates that less than 55% of the time patients receive the care they needed according to the evidence base.^{vii} This fact too results in significant over-utilization of healthcare resources, including unnecessary hospitalizations due to Ambulatory Sensitive Conditions^{viii}, up to 40% of all Emergency Room visits^{ix}, and as much as 30% of sub-specialty referrals^x.

Figure 2. The Prevalent System of Care Delivery



So what does a transformed system look like? A transformed clinical practice combines the principles of idealized design with a proactive care model that results in a system responsive to the needs of the patient. Such a system engages the patient and family as partners in care with a goal of achieving a high degree of capacity for self-activation. Attributes of such a system would include an advanced access model where preventive and scheduled visits are integrated with same day opportunities; care systems designed to fully optimize the care team (potentially with higher staffing ratios than currently exist); information systems that provide point of service reminders and prompts linked to the evidence base while at the same time providing population reports for system redesign; and facilities that ergonomically accommodate this new model of care such as room for alternative models such as group visits and peer learning opportunities.

Figure 3. A Hypothetical Transformed Practice



In such a system, the patient spends less time in the office, although the amount of time with his/her clinician may actually increase. There may also be more frequent contact with the practice through email, blogs and telephone. This example transformed practice also is acutely aware of its performance data across multiple dimensions of clinical outcome, cost, and satisfaction data and uses this data with all staff in an empowered environment focused on continuous improvement. Such a transformed practice is not afraid of transparency because it is the low cost, high quality alternative to the current system.

Is such a vision a pipe dream that will never be realized? Do these concepts seem out of the question and totally unrealistic for your environment? Or is this a potential vision for a business strategy to move your organization to that new frontier as the high performer leading the rest of the pack? In fact, there are practices that have moved in the direction of total transformation and have adopted and implemented many of these design principles.

What if?

What if a formula existed that would allow you to do the following?

- Reduce the cycle time in your practice
- Improve your care team's productivity

- Increase your revenues
- Increase your collections
- Decrease your cost per patient
- Increase patient satisfaction
- Increase staff satisfaction
- Increase provider satisfaction
- Decrease no show rates
- Place you in a position to be a top competitor in the market

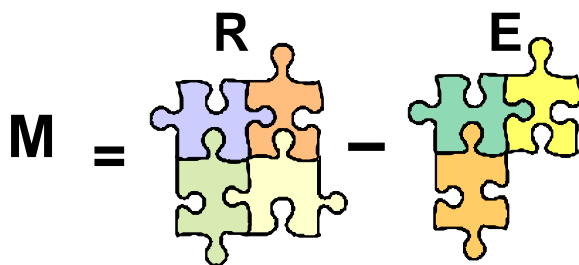
Would you be willing to learn more? Lean transformed practices achieve these results. They achieve the results by focusing on a simple formula and driving the variables underpinning the formula. They view management of a practice as a complex puzzle and dissect each puzzle piece and begin to reshape the puzzle.

The Puzzle and the Magic Formula

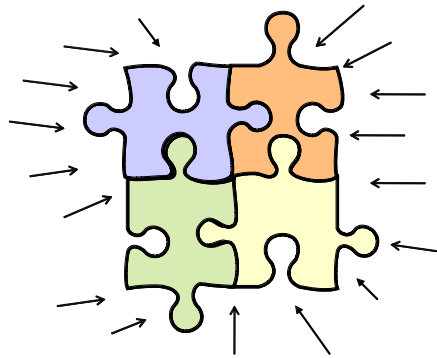
Field work and study in idealized design and in the business case for planned care have resulted in insight to a simple formula that drives the business case for an organization. The formula is brilliant in its simplicity. The complexity and challenge rest with the execution on each piece of the puzzle as well as in fitting all of the pieces together. Those organizations that address all aspects of the puzzle in a balanced approach have been the ones that have been able to build their business case and demonstrate that the vision presented earlier is achievable.

Figure 4. The Business Case Formula

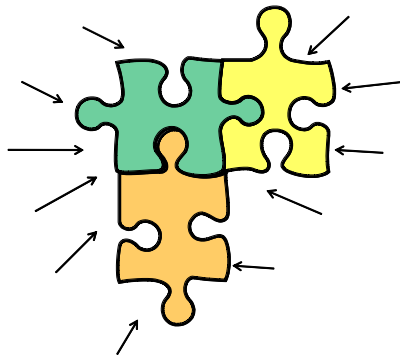
The Business Case Puzzle



The formula is based on the concept that a positive margin is essential. Increasing that margin allows the practice to underwrite other aspects of its mission or to fund the costs of transformation. The end game for a positive



Each of the variables in Figure 5 plays a role in driving the Revenue side of the business case ledger. Those that are financial are obvious. What is not so obvious, however, are the effects of those variables that are often associated with quality improvement initiatives such as practice redesign or collaborative efforts to adopt the Wagner planned care model. The collaborative approach requires a practice team to convene to work on the six dimensions of the care model. Soon, the team discovers that introducing a clinical registry requires manpower for data entry of clinical patient data. Time and again practice teams become dejected that leadership will not fund the resources required to do the data entry to populate the registries. Yet it is this same clinical information that might be the critical documentation necessary to warrant higher levels of coding for reimbursement or to enable the practice to benefit from a Pay for Performance initiative. In this case, the organization fails to appreciate the return on investment in the form of higher revenue.



The cost structure of a practice has an obvious impact on margin and costs are most often the target for corrective action when margin erodes. Total costs include both fixed (those that are not related to volume) and variable (those that change as volume changes). It is important to look at both. Although fixed costs are sometimes viewed as simply that—fixed---there may be overlooked opportunities in that area. For example, a lease for equipment or space may have been originally negotiated in a period of high interest rates. This lease may be taken for granted and no efforts made to lower fixed costs through a new lease or refinancing. Naturally, costs related to people make up the largest component of overall cost with staff productivity impacting both fixed and variable costs. The application of lean principles can have a significant impact on administrative and clinical productivity. As productivity increases, staff time and cost per unit declines. The cost per unit savings can lower total practice costs. The time savings creates the opportunity for increased revenue potential. Lean principles can also be applied to management of material expenses, an area where many practices leave money on the table

Driving the Business Case: The Leverage Points for Change

To drive a business case for transformation it is important to focus on all of the variables of the puzzle, adapting change concepts and best practices to one's unique practice setting. To do so, the practice needs to ensure that the right team

is on the transformation bus. Transformation cannot occur through the efforts of clinical staff alone. In smaller practices that might mean including an office manager or a billing staff member on the improvement team. In larger organizations it may mean reaching outside the practice setting to corporate finance or patient accounting staff. It may require other staff of an organization that must be involved who may not normally interact with the care team on a daily basis. It is critical to engage resources across the entire organization in the transformation process.

There are a core set of high leverage opportunities that represent the starting point for the journey. Each is outlined below.

Reduce or eliminate waits

Access is a critical driver in ambulatory care. As noted earlier, the inability to access the health care system in a timely manner often leads to inappropriate utilization and decision making on the part of the patient and family. This adds to the waste and spiraling health care cost conundrum. Conversely, elimination of waits through implementation of advanced access and reductions in cycle time can result in a positive impact on the business case. This is accomplished directly through increased patient throughput. At the same time, elimination of waits and delays will enhance the experience of both patient and staff. Patient satisfaction can convert into greater patient demand driven by reputation and referrals; this may enable the practice to grow. Staff satisfaction leads to lower turnover, which translates to lower cost.

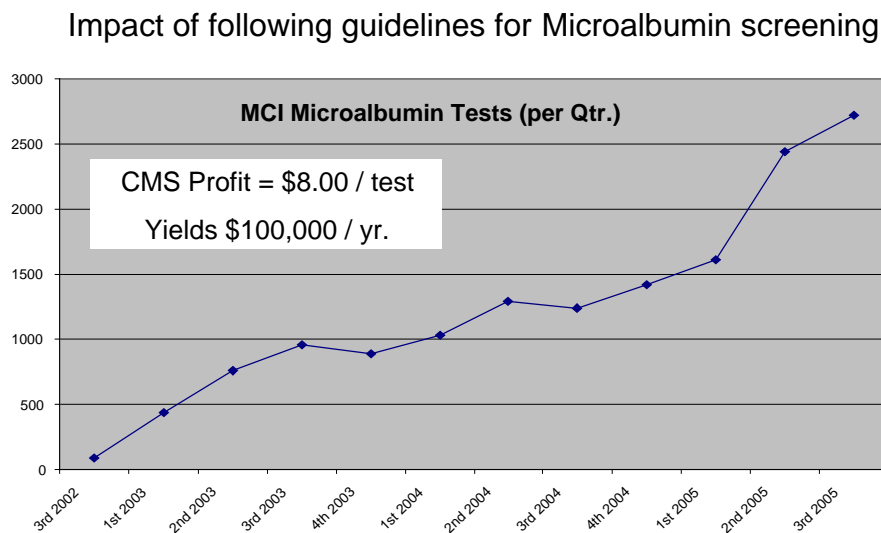
John Giannone, M.D. from Deposit Family Clinic in New York State reported in *Family Practice Management* that as a result of implementing advanced access the no show rate plummeted, which drove his practice visit volume up by 22%. The net impact was that his charges increased by 40%.^{xi} Allina Medical Center reported as a result of Advance Access more patients see their physician than before and when they do so they experienced a 17% increase in RVU translating to an average net gain in charges per patient visit of \$11.80.^{xii}

There are also many practices that have failed to manage or sustain advanced access. As with any tool or method, there are circumstances where the timing or use of an advanced access model in a particular practice is not feasible. However, far more often there is execution failure in implementation. It is important to learn from the effort and reexamine what did not work and what would have made the transition process more successful.

Maximizing Revenue

A robust opportunity for many ambulatory practices is the area of maximizing revenue. What ultimately matters is the amount of money that is collected, but the puzzle pieces that come together to determine this amount include what is billed, how much is billed, reimbursement rates, effectiveness of collection efforts, and non-visit revenue. As clinical improvement is undertaken, these variables are often not part of the thought process. This is a mistake. For example, much attention has been focused on the McGlynn study that suggested that patients receive care according to the guidelines less than 55% of the time. It was suggested that in the management of diabetes, the percentage could be as low as 35%.^{xiii} This results in a lost opportunity to improve patient outcomes, but it also results in a little discussed opportunity to enhance revenue. This same data on guidelines use would suggest that in more than 40% of the time money may be left on the table in the form of unbilled opportunity costs. Is this real? Figure 7 presents data provided by Mercy Campus Medical Center in Des Moines. Their focus was on improving their HEDIS measure on monitoring for kidney disease. As they improved their score to better than 90%, they increased the number of microalbumin screens billed. On Medicare alone, the result was a revenue increase of nearly \$100,000.^{xiv}

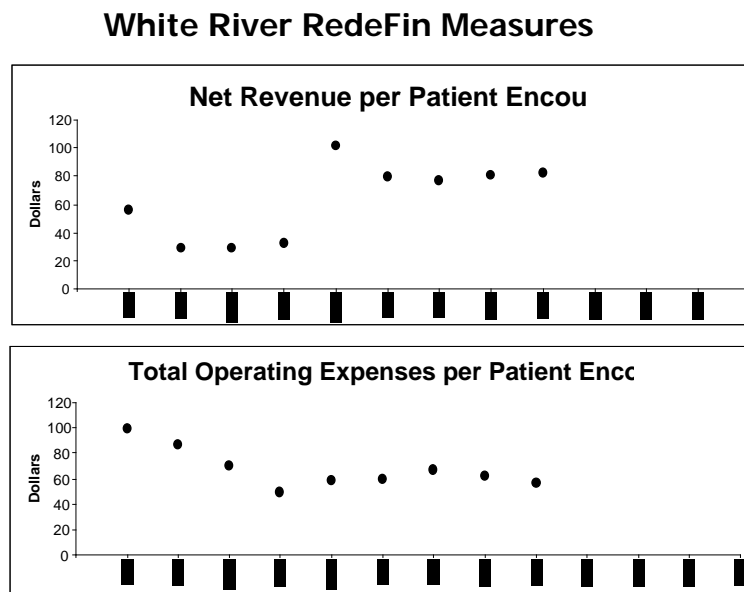
Figure 6. Increased Micro albumin Billings Resulting from Improved Care Processes and Outcomes



Another example of the link between clinical improvement initiatives and revenue relates to coding. As the care model is implemented and the way care is delivered changes, these changes are not always reflected in changes in coding practices. Complaints are voiced about payors not paying for the work of planned care. Sometimes, the work may not even have been billed.

A multi-faceted approach to maximizing revenue is illustrated by a community oriented family practice based in Augusta, Arkansas. Initially they launched a redesign effort beginning with implementation of the Wagner care model. They began “max packing” visits and increasing their attention on self management and other practices encouraged in the model. They also began using registries to better understand the needs of their patient panels. Soon they realized that they needed to focus on the business case aspects of the work. They implemented a tool that allowed them to see their work through Resource Based Value Units (RVUs). When they discovered that although their work had changed, their billing had not. They quickly realized they were leaving money on the table since the intensity of their visits had changed as a result of their transformation effort. They also realized their fee schedule and charge master were way out of line relative to costs and had not been updated in some period of time. The combination of these efforts led to a dramatic change in revenue flow as demonstrated in Figure 7.^{xv}

Figure 7. White River Community Health Impact of Focusing on Cost Recovery



Point of service collections for co-payments and self-pay fees is another area that is often overlooked because the individual dollar amounts are often small or because the systems are not in place to track them. Improvements in cash flow and collection rates have resulted from simple changes in collections policies, education of the care team, and transparency of data on actual versus potential collections.

Optimizing the Care Team

Because labor costs are such a significant portion of the total expense of a practice, the care team represents a high leverage opportunity to improve the practice's financial position. Leaders are often quick to encourage greater levels of productivity for clinicians. However, they are less eager to begin to tackle the core issue of who does what work in the practice and how the human resources be can leveraged more effectively. Optimizing the care team facilitates the ability to achieve high quality patient outcomes at high levels of productivity.

There are several key design principles that underpin an optimized care team. First is to match work with skill sets. While this sounds obvious, this design principle is frequently violated in practice. On the one hand risk management and patient safety concerns generally keep practices from having staff go beyond the limits of their skills and licensure/certification. On the other hand, it is not unusual for the professionals in a practice to be performing clerical tasks. Evaluating all of the tasks in the practice and pushing each task to the lowest level of employee allowed by licensure will lower per visit costs and free up the revenue producing clinicians to see more patients and potentially spend more time with them.

The second design principle in optimizing the care team is to maximize the productivity of the provider for each encounter. While related to the first point on skill sets, this principle includes using standing orders, huddles to prepare the care team, care managers to coordinate care, and managing demand in alternative ways (phone, email, group visits, nurse visits, etc.). All are intended to save provider time; this latter strategy also results in changing the acuity mix of the office visits from lower level visits to higher level visits with better reimbursement rates. The end product of all of these efforts is higher throughput of better reimbursed patient visits while achieving higher satisfaction and better patient outcomes.

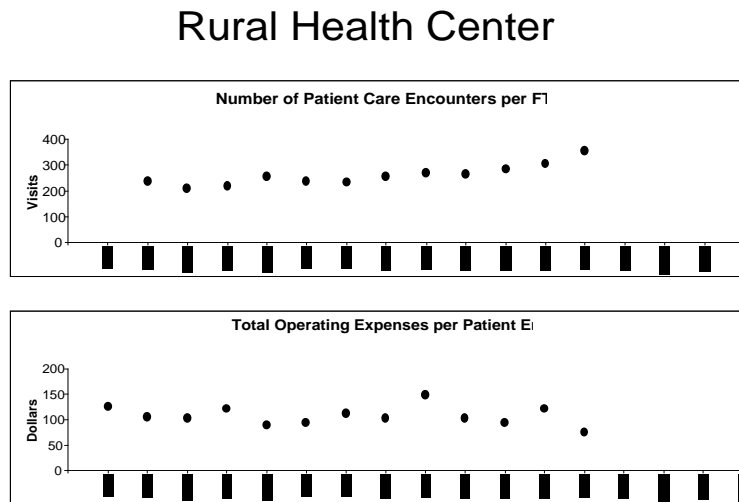
Data obtained from the Medical Group Management Association for 2006 suggests that the ratio of support staff to clinician averages around 3.4:1 nationally. However, the same data set reveals that those practices at the higher end of productivity and revenue tend to have higher staffing ratios than this average--often 5 or 6:1^{xvi}. Despite the intuitive reaction that adding staff will increase cost and therefore decrease margin, the evidence would indicate otherwise. The key is not to simply add staff, but to redefine roles in a way that optimizes the team and maximizes provider productivity. This can be sometimes be accomplished by redeploying existing staff into new roles supporting the care team. For example, someone previously housed in a medical records or billing department might be redeployed to be part of an expanded care team. While that individual may perform many of the same prior functions, the effectiveness of this approach comes from that person's integration into a true team model. This sense of team enhances productivity as well as staff satisfaction.

Application of Lean to Practice Redesign

A fourth leverage point for the business case is the application of lean principles to the practice as part of this transformation process. It is very common for lean to be vigorously applied to cycle time and patient flow. A lot of energy has been expended by practices on process flow mapping with an aim of reducing bottlenecks and removing constraints that historically have hindered the flow through the clinic. Unfortunately, these efforts fall short of leveraging all of the lean principles to drive waste out of the system. Inventory management is a classic example. Organizations often feel that they are running very lean after years of budget constraints or even budget cuts. Yet these same organizations have not gone back to really explore how they consume resources and how those resources add to the cost per visit. They do not take the time to reexamine their materials costs (or contracts) or explore how to consolidate inventory and standardize materials.

Rural Health Center of Illinois launched an effort to apply these lean principles while at the same time improving throughput and productivity. The combination of these efforts increased their encounters per provider while decreasing their cost per encounter. This is presented in Figure 8.^{xvii}

Figure 8. Rural Health of Illinois Impact of Lean Principles



The Role of Senior Leadership

Efforts at organizational change in a variety of settings confirm the assumption that the role of senior leadership is critical in long term transformation efforts.

This could not be truer in the area of the business case. The business case requires tremendous leadership support in many areas. Some of the most important roles for leaders are outlined below.

Monitor the Progress: Senior leaders need to carefully monitor transformation efforts and ensure that a business case is linked to the effort. Staff should be provided guidance on what information is needed in order to provide “return on investment” (ROI) analyses to accompany requests for new resources or with proposed tests of change to realign resources. If senior leadership does not frame the business case issues at the beginning of clinical improvement and transformation efforts, it will be unlikely that that lens will be applied to the effort until the end when it may be too late.

Get the CFO On Board: A key driver of success is often getting the lead finance person on board and helping drive the process. In a small practice environment this might be the office manager. In larger systems it might include a corporate finance department. In either case, the finance resource needs to understand the transformation aim, methodology, and how to support it from resource and, in some case, technical assistance perspectives. The finance department is the source of much of the data needed to understand and build the business case and must facilitate making this data available and visible.

Build a Business Case: Despite all the talk about “the business case” associated with clinical transformation, few organizations actually document their business case. Leadership should drive this function with the aim of having a clear understanding of the impact of changes being tested or spread; without understanding the current state, it is impossible to understand these impacts. A clear business case that documents the baseline financial performance of the care team can help inform decisions as they are being made real time. Once teams have access to this information they can begin to factor in the financial impact of their decisions.

Teach the Business Case: The business case may require leadership to play a role teaching the *business of medicine* to staff. What this means is that leaders must assure that those in clinical roles have familiarity with some of the financial terms and concepts and conversely, that those in finance or back office management understand the objectives and implications of clinical improvement. As an example, a simple decision not to buy an on-site hemoglobin analyzer as requested by the team may make sense in the context of the capital budget or timing of request in the budget cycle. However, if access to on-site testing proves to improve hemoglobin levels of the panel and places the practice in the position of earning a significant bonus as part of a pay performance program, then the organization may be penny wise and pound foolish. Absent leadership intervention, the information and wherewithal necessary to make these informed decisions might not normally flow through the practice.

Make Information Transparent and Breakdown Silos: A critical driver of the business case is transparency of information. The involvement of leadership is necessary, however, as this transparency may not come normally to the process; individuals or even functions in an organization cling to their data sources and the old adage of “information is power” still plays out in many settings. Leaders may act surprised when staff in non-financial roles do not pay attention to the financial implications of their work, yet how often does it occur that a nurse or medical assistant has never have been privy to cost information on some of the resources being utilized? It is leadership’s role to break through the silos of information hoarding and remove fears that accompany transparency. However, a word of caution is necessary in that the transparency of information must be accompanied by training staff as to how to use the information. This is part of the training suggested above. Too little information is a clear problem; too much information out of context can overwhelm staff. Leadership must work hard to ensure the right information is communicated in the right context and is used by the team to drive performance.

Summary

Practice transformation efforts can be very energizing and rewarding but they can also be short lived and allow regression into the old bad habits and systems. Ultimately, there must be a business case linked to the transformation effort to sustain the organizational commitment. There are high leverage concepts that can lead to the business case, but the successful implementation of these concepts depends on leadership. Leadership must play a role in breaking down siloes, setting the priorities and ensuring that information is accessible, visible, and appropriately used.. When all of these pieces of the puzzle come together, the picture will be that of a transformed organization with a solid business case that supports it.

ⁱ Issue Brief: *The Safety Net and its Use of Advanced Access in Ambulatory Care*. National Association of Public Hospitals and Health Systems. 2004.

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^{vii} McGlynn, E., Asch, S., & Adams, J. et al. (2003). The Quality of Health Care Delivered to Adults in the United States. *New England Journal of Medicine*, 348. 2635-45.

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^x Starfield B. et al: Contribution of Primary Care to Health Systems and Health, *Millbank Quarterly*, 2005;83:457-502
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^{xii} O'Hare, Dennis C. and Corlett, John. "The Outcomes of Open-Access Scheduling." *Family Practice Management*,. February 2004.

^{xiii} McGlynn, E., Asch, S., & Adams, J. et al. (2003). The Quality of Health Care Delivered to Adults in the United States. *New England Journal of Medicine*, 348: 2635-45.

^{xiv} Data obtained from Dr. David Swieskowski of Mercy Campus Health System, Des Moines Iowa 2007.

^{xv} Data obtained from Greg Wolverton, White River Rural Health Care, Inc., 2005.

^{xvi} Data obtained from David Gans, Medical Group Management Association 2006.

^{xvii} Data obtained from Lee Ann Brandt, Rural Health, Inc., 2005.