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**Good companies: organizations discovering the good in  
themselves by using Positive Deviance as a change  
management strategy**

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## ACKNOWLEDGEMENTS

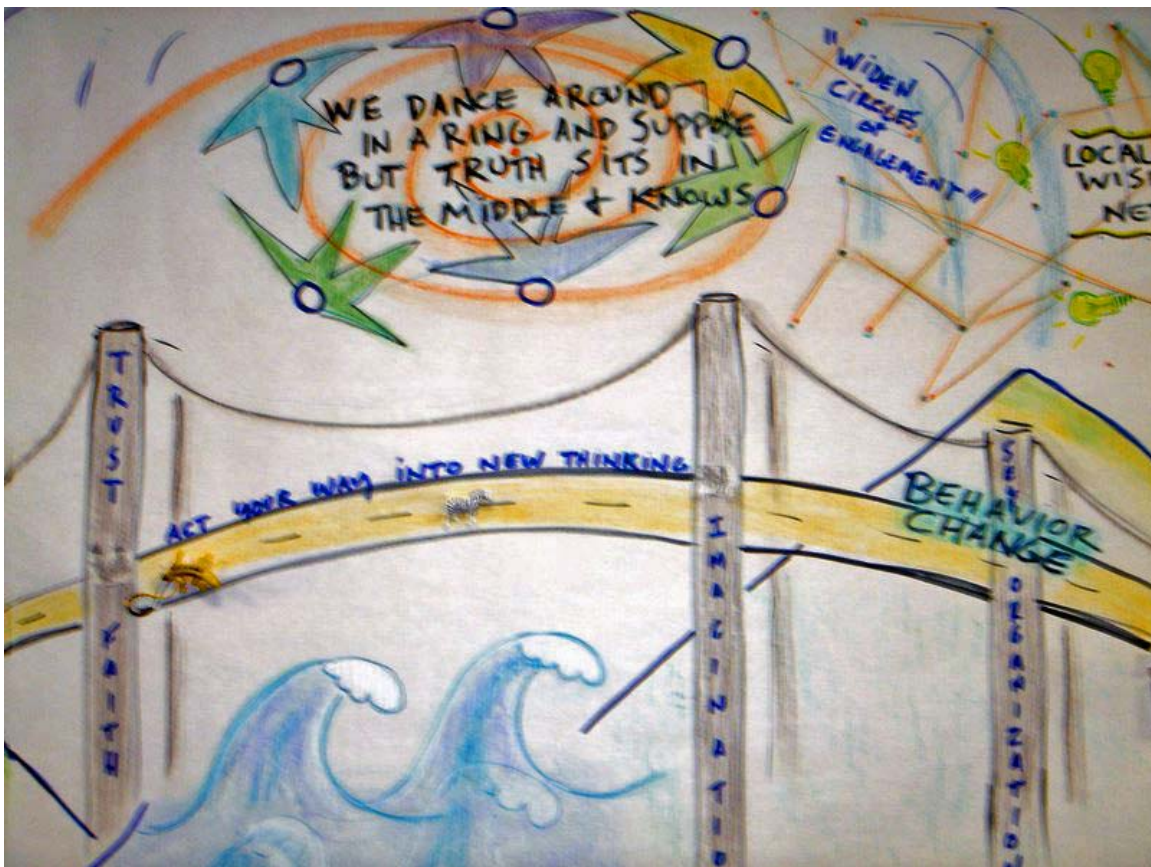
Piecing together the different strands of positive deviance, a concept that is still fuzzy – in Keith Grint’s terms (Grint, 1997) - and evolving, has been a fully positive, if not a positively deviant, experience. Getting acquainted with Jerry and Monique Sternin and others at the Positive Deviance Initiative has been inspiring and motivating. Both Jerry and Dr. Richard Pascale provided initial encouragement and read drafts of an early paper on the topic. The folks at the Plexus Institute, notably its President, Curt Lindberg, served as connectors and assisted me greatly in making the right contacts at my three cases study organizations. Plexus opened up all sorts of doors, including a fascinating visit to neuroscience researcher Dr. Scott Kelso and his colleagues at the Center for Complex Systems and Brain Science at Florida Atlantic University.

I am indebted to the staff at Waterbury Hospital in Connecticut, the VA Pittsburgh Healthcare System, and Merck de Mexico for opening up their doors, and reports, and emails for someone who just showed up one day with a dissertation to write. I have been inspired by Dr. Tony Cusano, Dr. Jon Lloyd, Andres Bruzual and the many people at these organizations who buck the trend and want to try something new.

In an earlier draft I sought to link assets-based approaches – such as Positive Deviance – with the theology of James Carse and the philosophy of H.-G. Gadamer. My sense is that play, dialogue, and aesthetics all commingle in the good company...but the task proved daunting. And all reference to Carse and Gadamer in this dissertation fell on the cutting room floor of my home office. I am, however, still much indebted to Drs. Jose A. Solis and Ramon Santos of the St. John Vianney Catholic Seminary for an introduction to postmodernism a few years back and for the more recent loan of reference material.

This has been a most unusual year. I can only describe it as a journey to another reality. And for that my thanks go to Denis Bourgeois of HEC and Elizabeth Howard at Templeton College, who as Program Directors of the CCC program

provided the environment for my journey to unfold. Elizabeth, additionally, first made mention of positive deviance, and was there at the end to remind me that a deadline is not just a deadline. To my CCC cohort, compatriots in the land of change, this is not simply my story. In no small measure, they also took part of the conversation in the dining halls at Oxford and over wine and coffee in *le chateau* at Jouy-en-Josas. As a direct consequence, I've gained a bit of wisdom and a lot of weight...such is the prize/price, I suppose, of the pursuit of knowledge.



Source: *From the Inside Out: Sustainable Solutions to Intractable Problems through Positive Deviance* Conference at Tufts University, Boston, Massachusetts, June 28-29, 2005.

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## ABSTRACT

My topic rallies around the concept of Positive Deviance (PD). In every community, there are individuals who solve intractable problems in original and resourceful ways without recourse to special methods or external resources. These individuals are deviants in that they stray from the norm, but positive in that they solve problems most people in the community can't solve on their own. Positive Deviance, then, as a method or tool or approach attempts to solve difficult issues or problems by identifying positive deviants, determining the new practices which should be adopted based on a study of these deviants, and having the community practice the new behaviors thereby amplifying the deviance to solve the problem for the greater community. The first fully documented and well-publicized instance in the use of positive deviance was with the Save the Children NGO in Vietnam in the early 1990's. Jerry Sternin, then head of the NGO in Vietnam, had very little time to come up with a strategy for solving the issue of child malnutrition in Vietnamese villages. He relied on research conducted at Tufts University by Dr. Marian Zeitlin and others to apply positive deviance in the field. The initiative was very successful and eventually led to other interventions in communities throughout the developing world. We've known, then, about Positive Deviance for more than a decade. Articles have been written in *FastCompany* (2000), included in a book by Richard Pascale (2000), and as recently as this year in the *Harvard Business Review* (2005). Why is it then that PD hasn't caught on in organizations? Why isn't PD one of the popular management fads documented by Pascale and others? And more importantly, if PD actually changes people's behaviors, why isn't it a more widespread change management strategy? There's a bit of mystery at work here, and my challenge is not really to solve the mystery in the time allotted, but perhaps to give it a better contour and open up several lines of investigation.

“I believe there will always be some of us who have a passion for giving their best. And quite frankly, if there aren't, then no process will save us.”

Dr. Tony Cusano  
Practicing Attending Physician - Waterbury Hospital  
Assistant Clinical Professor - Yale University

## **PREAMBLE**

This dissertation is organized in five sections or parts. The first part takes the reader into a definition of Positive Deviance and its potential origins. It discusses what I have termed a turn to the positive, and closes with research questions and several hypotheses. Part 2 covers the fertile ground of asset-based approaches and discusses some of the most salient ones, with a comparison to PD. Part 3 is the busiest and word-count rich section of the dissertation, highlighting three organizations currently using PD. These initiatives are work in progress. In section 4, the case studies are analyzed through a couple of lenses to extract affinities, commonalities, and differences. I make use of Rogers' ground-breaking work into the dissemination of innovations. Finally, Part 5 offers propositions in terms of lessons learned, a discussion of hypotheses, limitations of research, and some lines of inquiry for further research. An attempt is also made to define a good company.

## Part 1: Definitions and origin of Positive Deviance

A manager in your typical multinational is trying to import a best practice from another Division. Following a best practices approach and after consulting the guidelines established in several benchmarking manuals, the manager dutifully adheres to a well-known 10-step process (Camp), that is:

1. Identify what is to be benchmarked
2. Identify comparative companies or units
3. Determine data collection method and collect data
4. Determine current performance gap
5. Project future performance levels
6. Communicate benchmark findings and gain acceptance
7. Establish functional goals
8. Develop action plans
9. Implement specific actions and monitor progress
10. Recalibrate benchmarks

It is all fairly straightforward, if laborious and very intensive. After several weeks of concluding the implementation, the manager returns to his unit only to find that the benchmarked process is not performing according to expectations. Digging deeper, he finds to his chagrin that none of the best practices have been successfully transferred to his unit. The original process remains as it always has, and no one can account for the hard and expensive work of the benchmarking study.

This situation is not at all uncommon. The promises of benchmarking have not fully materialized. And one of the reasons lies hidden in the critical sixth step of the most popular methodology, as described above: “Communicate benchmark findings and gain acceptance.” The not-invented-here syndrome is alive and well in industry. If anything, it has become predominant in an age of down-sizing, off-shoring, pressure for immediate results, and fear in the workplace. Gaining acceptance basically means that now you have to convince employees in an area that someone else, somewhere else, is doing a better job than they are. But no matter, it is not really their fault. They simply have to learn what others are doing right and bring it home. However, there is one catch, and first these employees have to acknowledge that what they are currently doing is not quite

right. Other than putting aside basic human pride and joy in your craft, the implications for these employees are that they are not doing their jobs. “Shame on us; we’ve been found out!” And one way of making sure and proving to all concerned that they do know what they’re doing is fairly obvious. The new process, the one we have just spent several hundred thousand dollars benchmarking, simply doesn’t work here. The logical extension, then, of not-invented-here is the mere fact that it doesn’t-work-here, either. Welcome to the crazy, mixed-up world of 21<sup>st</sup> century management.

## **HISTORY OF POSITIVE DEVIANCE**

Now let’s look at another situation. In 1990, Jerry Sternin was the head of the Save the Children program in the Philippines (Pascale 2000, Sternin 2003b, Sternin 2005a). Save the Children (USSC) is a U.S. based NGO providing care and care strategies to children in the developing world. Jerry and his wife Monique were asked by the USSC to move to Hanoi and take charge of opening the program in Vietnam. At this time, relations with Vietnam were difficult. There were few Americans in the country, and in fact the Hanoi regime was still on the State Department’s list of non-desirables. A trade embargo effectively alienated the Vietnamese government from any US initiative, whether private or public.

Although the war of liberation and unification was receding into the past, Vietnam was still a very poor country. Between 60 and 70% of all Vietnamese children under the age of five suffered from malnutrition to some degree. Several classical developmental remedies had been tried, but provided only short term relief. As Jerry tells it:

The reasons for the failure were not difficult to discern:  
a) villagers were passive program beneficiaries who were neither encouraged nor required to change any of the underlying behaviors/practices which led to their children’s malnutrition; b) the nutritional gains which were realized during the program’s implementation were completely based on *external* food resources which were no longer accessible to villagers after the implementing agency departed; and c) the major focus of the program was on providing additional

food, with little or no attention paid to improving the all-important child caring, and health-seeking behaviors associated with nutritional status. In short, “they came, they fed, they left” and nothing had changed. (Sternin 2003b:23-24)

The expert-driven approach to solving malnutrition was simply not working in Vietnam. And the Vietnamese government did not have the resources to solve a problem which affected millions of children. With the good dosage of skepticism which greeted Jerry and Monique, they were not too surprised when they were told they only had a six month visa to prove their worth in solving what seemed to be an intractable problem. The Sternins had no time to search for a solution or even develop an approach. Jerry knew that he had to find an existing strategy for the malnutrition issues in Vietnam. His earlier work in the Far East and knowledge of several approaches in the field of nutrition led to the experimentation which eventually became the positive deviance approach. In the early to mid 1980's, investigators at the Tufts School of Nutrition -- and notably Dr. Marian Zeitlin -- had found in study after study that some malnourished children are rehabilitated more quickly than others receiving the same treatment in the same clinical facility. The researchers identified the factors that led to better outcomes and labeled the more successful children “positive deviants.” Although the research was documented and a language for the approach had been coined, a practical and programmatic methodology was not available. The Sternins put the theory to a very live test in the Quong Xuong District in Than Hoa province, four hours south of Hanoi.

What Jerry discovered and applied in practice is that in every community there are a number of “positive deviants whose special practices or behaviors enable them to outperform or find a better solution to a problem than his neighbor [or cohort] who has access to the same resources.” (Sternin 2003b, 28) The idea was to assist the community to find the positive deviants who had already incorporated sound strategies to combat malnutrition, study these practices with the initiative of the community, in some cases use successful parents as teachers and coaches for the community, and perpetuate the practices by ensuring these were sustainable without external resources. However, Jerry

stresses that the approach is context-dependent. So for example, some parents were feeding children more frequently; others were using a different diet, made up completely of local if unusual ingredients which differed from the norm. Applied positive deviance (PD), then, was born in the villages of Vietnam in a desperate attempt to better the life of impoverished villagers and their children. And over the years, Vietnamese communities formed a veritable practical university, instituting and amplifying the concept of Positive Deviance -- bringing relief to more than 50,000 children in 250 communities with a population of over 2.2 million people.

I first heard of Positive Deviance from Elizabeth Howard at Templeton College, as part of my 2004-2005 HEC/Oxford program in Consulting and Change. We were discussing in a small work group how organizational change affects the change agent, and my interest in what I have been infelicitously calling for many years - for want of a better term - organizational mutants. Elizabeth referred me to the work of an Associate Fellow, Dr. Richard Pascale, and his use of the term positive deviants when describing heterodoxy in various work applications.

## **THE MELDING OF DIFFERENT STRANDS**

Interestingly, the concept of positive deviance has been around for a while. In the field of sociology, and specifically the sub-field of deviant behavior, there was a considerable controversy in the mid-1980's to early 1990's. The flap played out mostly in one of the leading journals of the sub-field, namely *Deviant Behavior*. The five key articles in the debate were written by academics Erich Goode, Maria Heckert, Edward Sagarin, David Dodge, and Nachman Ben-Yehuda.

David Dodge initiated the conflict in 1985 with his article "The Over-Negativized Conceptualization of Deviance: A Programmatic Exploration." (Dodge) His main argument is that the field of deviant behavior has had a fixation on the negative, and not just the negative but the marginal: the addict, the prostitute, the pimp, the gambler, etc. Dodge's first exposure to the notion of positive deviance was in the work of noted criminologist Leslie Wilkins:

[Wilkins] drew a bell-shaped curve, with normal acts – those that conform to a norm – in the middle, acts that are regarded as extremely sinful or very serious crimes occupying its left-hand tail, and, those seen as extremely saintly acts occupying its right-hand tail (Goode 1991:289).

Dodge argued for an opening, a shifting of the existing paradigm to encompass any deviation from the norm as a field of legitimate sociological study. Noted scholars in the field, particularly Sagarin and Goode, fiercely defended the orthodoxy. Sagarin in particular derided the notion of positive deviance, calling it an oxymoron. Deviance is by definition negative and sanctioned by society. Muddying the waters with sloppy terminology will undo the little good scholarship that has been carried out in the field (Sagarin, 180). The debates went back and forth with several interesting applications, for example to works of art and artists and to the relativity of the concept of deviance (Heckert). The issue remains, but the debate has died down, at least in the realm of sociology. However, most sociologists clearly feel uncomfortable with the term, if not the notion itself, of positive deviance. Some believe it should be called positive deviation -from the norm - and left at that (Ben-Yehuda).

Sociology is not the only discipline exploring the notion of the positive. In Psychology, for example, there is a psychotherapeutic tradition which goes back at least to Carl Rogers, Abraham Maslow, and Kurt Goldstein in the 1950's, which attempts to accentuate positive behaviors. Tired of Freudian approaches -- which focus on psychopathologies -- clinicians like Rogers sought to move clinical practice away from dysfunction and into the realm of healthy living. Rogers' theory, as elucidated in the seminal 1951 work "Client-Centered Therapy," is built on a life-force called the actualizing tendency. An actualizing tendency is the built-in motivation present in every living creature to develop its potential to the fullest extent possible. Beyond survival, Rogers believes that all creatures strive to optimize their existence. More recently, the field of Positive Psychology has been given additional impetus by established academicians like Martin Seligman, president of the American Psychological Association (Cameron).

We need a psychology of rising to the occasion because that is the missing piece in the jigsaw puzzle of predicting human behavior....I do not believe that you should devote overly much effort to correcting your weaknesses. Rather, I believe that the highest success in living and the deepest emotional satisfaction comes from building and using your signature strengths. (Seligman, 12-13)

In the fields of development and nutrition, dependence on needs-based approaches has focused on deficits to address community issues and problems in the developing world (Lapping). For the past two decades, however, assets-based approaches have come to the fore, particularly in nutrition-related areas. Marian Zeitlin, a pioneer in nutrition studies and campaigns using assets-based methods, states that already in the mid-1960's and early 1970's Mark Hegsted and Joe Wray were stressing the need to focus on healthy families and successful mothers (Preface, Monique Sternin et. al). Zeitlin credits nutrition education expert Gretchen Berggren with coining the term positive deviance in the mid-1980's. In a personal communication (Zeitlin 2005), she stresses that Positive Deviance is closely related to another assets-based approach called Appreciative Inquiry (AI).

All of these strands co-exist in time, and at times share similar spaces of practice. It may be the case that a *turn to the positive* took place in various disciplines, starting in the middle of the 20<sup>th</sup> Century and gained strength toward its last two decades. An attempt was made recently to clarify the conceptual disarray (Spreitzer, 2004). Curiously, this time the charge was made from the realm of business studies, and one of the authors is a specialist in organizational behavior and human resource management at the University of Michigan School of Business. In this article, positive deviance is made part and parcel of the field of Positive Organizational Studies/Scholarship (POS), and four views of positive deviance are defined: statistical, supraconformity, reactive, and normative.

The authors favor the normative view and define positive deviance as “intentional behaviors that depart from the norms of a referent group in honorable ways.” (Spreitzer, 2004, 832) However, they are careful to point out that this definition “focuses on behaviors with honorable intentions, independent of outcomes.”

(Spreitzer, 2004, 833). While sifting carefully through the debate and staking out the different positions, Spreitzer's definition still falls short of Sternin's applied efforts in the area. By excluding outcomes from the definition, Spreitzer leaves out the key component most practitioners associate with applied positive deviance and thus PD still lacks the complete conceptual framework and backing for academic study. PD is still very much a work in progress and in the early stages of dissemination outside of the field of nutrition and NGO's.

## **NOTES ON PD METHODOLOGY**

Just how does Positive Deviance work? At Tufts University, and working with a Ford Foundation grant since 2001, Jerry Sternin and a small cadre of specialists have established the Positive Deviance Initiative. They now draw on multiple applications of PD in several health-related areas in many parts of the developing world and increasingly in the U.S. A manual or field guide has been developed and a methodological guideline is in place. However, the explicit methodology is somewhat fluid as different practitioners adopt it for their own sets of problems and applications. Additionally, Jerry Sternin would be the first to admit that he is not a methodologist; his immediate concern is to solve developmental problems and alleviate suffering. In order to make progress in this endeavor he will try whatever works.

The following description of the PD "recipe" is based on the clearest step-by-step outline I have encountered, in a book proposal by Sternin and Pascale (2005).

- First, a community needs to be defined; this is the unit of application, a school, a village, a special group, etc.
- Second, a careful situation analysis is conducted. The aim of the analysis is to define a problem to be addressed and a description of behavioral norms. This is a critical step, as no norms today, no deviants later (Sternin 2005a:10).
- Third, a set of objectives is clearly defined – in other words, what the desired outcome will look like.

- Fourth, define and identify the positive deviants. The latter are only deviant with respect to the established behavioral norm. If the deviant practices are successful yet attained with access to special resources, they are termed “true but useless” or TBU. Only those successful practices attained within the constraints of existing resources are positively deviant.
- Fifth, design the positive deviance inquiry. Enlisting members of the community in an action learning exercise, preparation is undertaken to investigate the deviant practices.
- Sixth, carry out the inquiry. The field inquiry is led by an PD facilitator but the participants are community members. The process of discovery is theirs, and not the facilitator’s.
- Seventh, analyze the inquiry findings. A TBU filter serves to discard those practices which work, but only under special conditions.
- Eighth, design an intervention based on the inquiry findings. In this paradigm, new practices lead to new attitudes, which are then internalized over time and become knowledge.

Different explicators, or the same explicators on different occasions, though, have used a variety of schemes to outline the PD process or method. I assembled the following table based on various sources of information: the PD field guide (Monique Sternin, et. al, 1998), a Fast Company article (Dorsey), a presentation given by Jerry Sternin at the Snowmass Forum (Sternin 2003a), the recent Harvard Business Review article by Pascale and Sternin (Pascale, 2005), and a presentation given by Jerry Sternin at a recent Plexus Institute conference (Plexus Institute, 2005b). All explanations are referenced against the Sternin-Pascale outline described above and labeled “Recipe” in column 1 of the table.

Step	Pascale/Sternin “The Power of Positive Deviance” Book Draft, 2005 [Recipe]	Save the Children Field Guide 1998 [Method]	Sternin Fast Company article, 2000 [Method/ Principles]	Sternin Snowmass Forum, 2003 [Method Summary]	Pascale/Sternin HBR article May, 2005 [Method/ Principles]	Sternin Plexus Conference June, 2005 [Method Summary]
1	Community needs to be defined	Getting Started	Don't presume that you have the answer	Define	Make the group the guru	Define
			Don't think of it as a dinner party			
			Let them do it themselves			
2	Situation analysis is conducted	Conducting a situation analysis	Identify conventional wisdom		Reframe through facts	
					Make it safe to learn	
3	Objectives are clearly defined					
4	Define and identify the positive deviants	Conducting the Positive Deviance Inquiry	Identify and analyze the deviants	Determine	Make the problem concrete	Determine
5	Design the positive deviance inquiry			Discover		Discover
6	Carry out the inquiry				Leverage social proof	
7	Analyze the inquiry findings					
8	Design an intervention	Design a program	Let the deviants adopt deviations of their own	Design	Confound the immune defense response	Design
			Track results and publicize them	Discern		
			Repeat steps 1-7	Disseminate		

Why the differences in method? Again, Jerry Sternin is a missionary and passionate advocate but not a methodologist. Jerry stresses that positive deviance will not solve all problems, and he is careful to note that PD may be blended with other approaches (Plexus Institute, 2005b). To call an approach PD he only has two basic tenets:

- The answer already exists within the community and their discovery is up to the community (a portion of the community is practicing deviant but positive behavior – the exact proportion is context-specific)
- People first have to practice the deviant solutions to get into the habit of making them sustainable (knowledge by itself doesn't change behavior)

For many of the reasons stated above, I favor the term “recipe” rather than method when it comes to PD. After all, a recipe has to be situated, possibly modified, and experimented with.

In the table, also note some of the more general outlines are in reality summarized and short-hand notations for the more detailed outline. That is, it is easier to remember Define-Determine-Discover-Design than an eight or ten step protocol. In addition, since Positive Deviance is a philosophy or value system, merely describing the methodology is not enough. Focusing on methodology relegates PD to the status of tool to be applied. And this could be another reason why different explicators focus on different aspects of positive deviance, e.g. values (“Make the group the guru”) vs. steps (“Conduct situational analysis”).

## **FACILITATION AND LEADERSHIP**

In a telephone conversation with Jerry (Sternin 2005 b), he stressed that paradoxically the role of the facilitator is important, but non-essential. That is, the facilitator's intervention is that of participant/observer -- never directional or prescriptive. The facilitator blends into the background allowing for an optimization of the self-discovery and learning taking place in and within the community. Jerry reinforced the notion of rapid dissemination as discussed by

Everett Rogers in his work on innovation. According to Rogers, the rate of adoption of an innovation depends on five characteristics (Rogers 15):

- **Relative Advantage:** the degree to which a new idea is perceived as better than the old way.
- **Compatibility:** the degree to which an idea is perceived to be consistent with the existing values, experiences, and needs of the adopters.
- **Complexity:** the degree to which an idea is perceived to be difficult to understand and use.
- **Trialability:** the degree to which an idea may be experimented with on a trial basis.
- **Observability:** the degree to which the results of an idea are visible to others.

Sternin notes that applied positive deviance, as a method, encompasses each of these characteristics. And therefore, its success in obtaining buy-in and rapid deployment is predictable. And more importantly, it enables a deployment which is sustainable.

Another facet of PD which bears emphasis is the role of leadership. Richard Pascale underscores an essential element in these types of assets-based approaches (Pascale 2005a, 2005b). The leader's authority takes a step back as the community takes over in leading the effort – followers become leaders. And thus the community owns the inquiry and the discovery. Leadership makes all of the difference in applying positive deviance, and it is crucial when applied to organizational settings. Leaders in most organizations get paid to make decisions and tell others what to do; it's a model that is difficult to walk away from. Giving up ego and letting go are not characteristics easily associated with modern management, at least not in the West. Positive deviance, then, may require a different type of leader and highly developed organizations. Jerry Sternin, with an MA in Asian Studies from Harvard, likes to quote Lao Tzu (Sternin 2005 a):

Learn from the people  
Plan with the people  
Begin with what they have  
Build on what they know.  
Of the best leaders  
When their task is accomplished  
The people all remark  
"We have done it ourselves."

## **POTENTIAL ISSUES**

Is Positive Deviance, then, one of the most effective change management approaches of recent times or simply too good to be true? There are several potential issues with the application of positive deviance. First, positive deviance is a laden or loaded term. Having advanced through different arenas – Criminology and Sociology, Nutritional Science, Developmental Economics, Business and Organizational Studies – possibly independently, we would have to precisely narrow the definition of positive deviance to isolate it from other approaches and the many connotations it carries in various camps. Second, while Jerry Sternin, Richard Pascale, and Barbara Waugh (Sternin 2005 b, Waugh 2001, Mieszkowski) make mention of positive deviance within business contexts in places like Hewlett-Packard, Novartis, Merck, and Genontech the documented applications in business organizations are sorely lacking. Barbara Waugh at Hewlett-Packard candidly admits that PD is but one of many approaches she used at HP to promote change (Waugh, 2005); and even then, she seems to have used the concept rather than the methodology described by the Save the Children case study. Third, for PD to work, it assumes that there are positive deviants. Without positive deviants, there is no PD. Are positive deviants, then, prevalent for most intractable problems? For some? For the minority of problems? Just how widespread is the phenomenon of positive deviance?

## **CHANGE MANAGEMENT STRATEGY**

To situate PD within the universe of change management strategies, as these are relevant within business contexts, we need more evidence of its application and success in business. It would prove difficult to entertain the approach with a business audience by regaling them with case studies of child malnutrition, domestic violence, and female genital mutilation. While these cases and situations are most humane, vital to the development of much of the world, and urgent for those suffering the indignities of poverty and ignorance they are not optimal for making a business case. And then there's the "so what?" perspective. Positive deviance is indeed a very intuitive term. Most of us, throughout our

careers, have known positive deviants or may have been one. And yet, resourceful individuals may just be smarter or more experienced, and they are successful even while their practices are not repeatable. They may certainly be employing “true but useless” practices.

The success of positive deviance in community settings over the past twenty years is a testament to its effectiveness and continued appeal. Its applicability and success in organizational settings is less compelling. Are there inherent features in the approach that make it unfriendly to organizations? Or shifting the question around, do organizations require a certain maturity for the approach to work? And the maturity lies in which areas of development?

My research question has to do with the application of PD in organizations as a change management strategy. Organizations are here defined as private institutions, both for profit and not-for-profit, in any industry or sector of the economy. My aim is to separate organizations from communities, the latter being groups of people with a common cause but not necessarily incorporated for the sake of organizing work. Organizations have managers and employees; communities have leaders and community members. For the sake of guiding my investigation I have a small set or family of questions:

- Why has PD been successful in the public/quasi-governmental sector of NGO's and the developing world?
- Adversely, why is PD virtually unknown in the private sector and in the developed world?
- Is there something inherent in organizational life which inhibits PD?
- Do some of the characteristics which drive today's behavior in organizations, e.g. a short term outlook, “drive away” approaches like PD?

Some hypotheses for investigation may be:

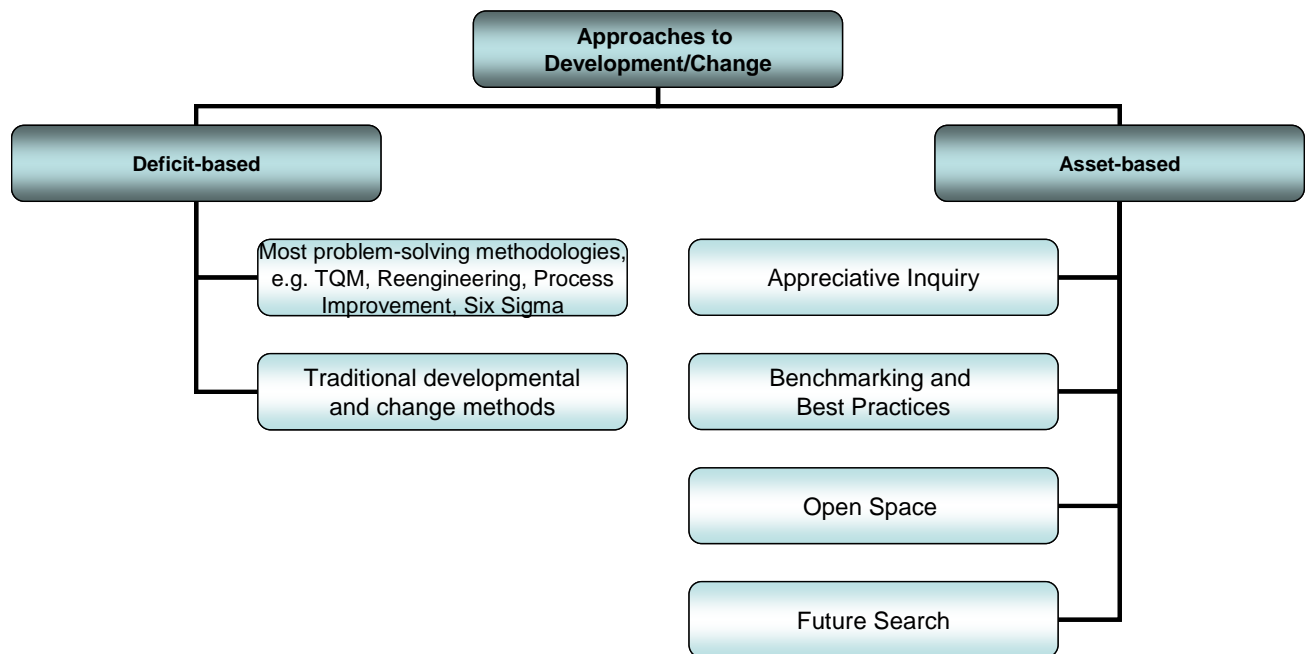
- PD does not work in organizations, particularly those that are for-profit, because of the inherent strains to perform well in the short term.

- PD is crowded out of the marketplace because of a historical preference and bent for deficit-based approaches in industry.
- Only organizations exhibiting a certain culture or values-in-action will prove to be friendly with regard to a PD initiative.
- Assets-based approaches, like PD, are more friendly to community environments where competition and short-term pressures may not be as critical as in organizational settings.

## Part 2: Comparisons with other methods

### ASSETS-BASED APPROACHES

In the literature on economic and social development a distinction is made between deficit-based and asset-based approaches to development. The use of deficits to promote change has a long history and it is predicated on the identification of a need and the establishment of a gap which must be closed. The focus is on what is missing, i.e. a deficit. In the past two decades there has been a collective realization in the development community that perhaps an alternative approach would be more appealing and effective. And that is an asset-based approach which focuses on existing strengths. The focus shifts from what is missing to what is there, i.e. a precondition of strength which should be leveraged.



How does Positive Deviance fit with and compare to some of the most popular asset-based approaches?

## POSITIVE DEVIANCE AND APPRECIATIVE INQUIRY

David Cooperrider is the lead exponent of AI and as he explains:

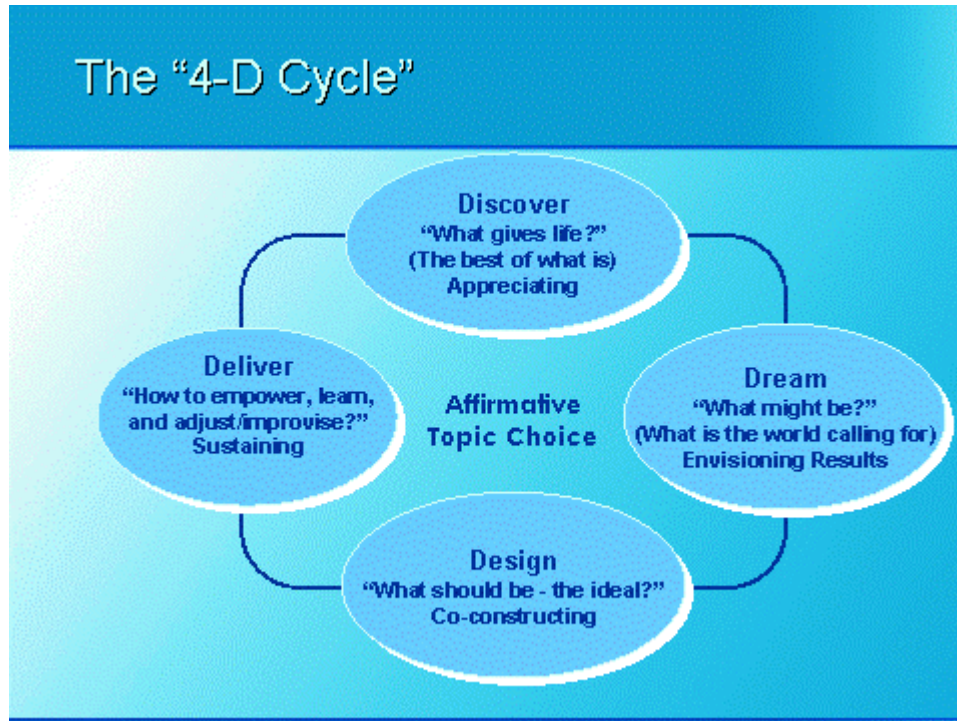
Appreciative Inquiry is a process of search and discovery designed to value, prize, and honor. It assumes that organizations are networks of relatedness and that these networks are “alive.” The objective to Appreciative Inquiry is to touch the “positive core” of organizational life. This core is accessed by asking positive questions.....[AI] operates on the premise that asking positive questions draws out the human spirit in organizations (Cooperrider 2003, 226-227).

Appreciative Inquiry works by unearthing collective assumptions or beliefs. These beliefs are shared by a group and causes members of the group to behave in a certain way. In turn, AI is based on several working assumptions (Hammond):

- In every society, organization, or group, something works
- What we focus on becomes our reality
- Reality is created in the moment, and there are multiple realities
- The act of asking questions of an organization or group influences the group in some way
- People have more confidence and comfort to journey to the future (or the unknown) when they carry forward parts of the past (or the known)
- If we carry parts of the past forward, they should be what is best about our past
- It is important to value differences
- The language we use creates our reality

These assumptions create what Kenneth Gergen calls a transformation via a generative methodology for positive social change (Gergen). The point then is not to merely observe the world and try to understand it, but rather to change it for the better. Gergen enlists the social scientist in a role change for science -- in at least two ways: you better understand the object of study when you actively perturb it, and since you are taking an active role anyway you might as well influence the group for the better. Not everyone in the social sciences agrees with this view, however, as specters of relativism and mysticism come to the fore.

The social construction of reality, or Gergen’s sociorationalist view, underpins the AI approach and gives it a degree of epistemological depth not quickly identifiable in other approaches.



Source: Sue James, AI Consulting, 2004

An AI initiative typically proceeds through four stages: Discover, Dream, Design, and Deliver or Destiny. All throughout the initiative, participation, inclusion, vision, and letting go are key elements to a successful execution. As the following table shows AI and PD have a lot in common: process, language, 4D’s, and basic philosophy.

Appreciative Inquiry		Positive Deviance	
<b>Discover</b>	Appreciating: select focus area, conduct interviews to discover strengths	Community needs defined; conduct situational analysis; define objectives	<b>Define</b>
<b>Dream</b>	Envisioning results: identify intriguing possibilities	Define and identify positive deviants	<b>Determine</b>
<b>Design</b>	Co-constructing: create bold statements of ideal possibilities	Craft the positive deviance inquiry; carry it out; analyze findings	<b>Discover</b>
<b>Deliver</b>	Sustaining: take and sustain action	Design interventions for change	<b>Design</b>

They are not identical, though, as a practitioner of both succinctly makes clear:

I had been interested in PD for a long time before receiving a contract from Unicef, NY, to research the topic in what grew into 5 countries and lasted from 1987 to 1992. These days I am focused on sustainability education and studies, and in this area I make more use of Appreciative Inquiry than of Positive Deviance. As you know, the 2 are very similar, with the difference that PD applies to precise behavior change - changing the nature and sequence of actions in specific "events" or "frames" - and AI more to group building and strategic planning. (Zeitlin, 2005)

## **POSITIVE DEVIANCE AND COMPLEX ADAPTIVE SYSTEMS**

While Complex Adaptive Systems (CAS) and what is commonly known as Complexity Science may not be properly categorized as an asset-based approach to development, it is being discussed widely as a more comprehensive management philosophy which fits with the current state of democratic, open, and fluid organizations. The parallels with asset-based approaches are striking. Leaders adopting CAS as a management philosophy do not engineer, they design organizations; they don't dictate solutions, but instead engage in discovery; they don't presuppose a situation, they decipher situations. (Pascale, 2000) If this sounds like March's exploration mode (March), it isn't coincidental. Organizations moving successfully along fitness landscapes exhibit these behaviors. But movement is simply not enough; the movement has to be sustained. To live at the edge of chaos -- a sign that an organization is making progress through the landscape -- leaders have to (Pascale, 2000, p. 229):

- Explain the drivers of business success
- Talk straight
- Manage from the future
- Reward inventive accountability
- Harness adversity by being failure-tolerant
- Foster discomfort
- Cultivate organization-individual reciprocity

These disciplines propel the type of leadership required to be successful in today's organizations. Reciprocity is the one discipline which bears additional mention. Since loyalty to the organization is difficult to enforce in an era of diminished benefits and job security, Pascale et al. argue that reciprocity will have to substitute for loyalty. Reciprocity, then, is a "new deal" whereby firms and

employees forge a contract of mutual gain without long-term assurances. The CAS response to living at the edge of chaos bears resemblance to Grint's (2005) category of leaders as wheelwrights working within a heterarchy.

## **POSITIVE DEVIANCE AND BENCHMARKING**

Positive deviance is sometimes compared with process benchmarking. Both methods attempt to find a best practice, adopting it, and then replicating it (leveraging) throughout the organization. However, the two approaches vary greatly in application (Bertels). Benchmarking has been heavily criticized for leaving out the contextual details, and what works in one environment, need not work in another without considerable effort and manipulation. By virtue of Rogers' criteria for rapid innovation, benchmarking could easily run into difficulty with the characteristics of relative advantage, compatibility, and complexity as discussed above. It is alien to the system. And in many instances, it is simply rejected by the system. The following table explains why (Bertels 455):

	<b>Benchmarking</b>	<b>PD</b>
<b>Focus</b>	External	Internal
<b>Criteria</b>	Process Performance	Successful Behavior
<b>Level Of Detail Studied</b>	Low	High
<b>Duration of Study</b>	Short	Ongoing
<b>Ease of Transfer</b>	Low	High
<b>Accessibility</b>	Low	High
<b>Risk of Failure</b>	High	Low

Source: Bertels, 2003

Benchmarking rarely looks at the behavior of the people involved in the process; the level of detail tends to be low as only two or three levels of process maps are documented; the benchmarking is constructed in terms of a project with a specific start and stop, and a time table; and ease of transfer as well as accessibility are not usually high on the list of priorities. PD focuses on behavior and sustained behavioral change, and it facilitates this change by not intimidating people with strange technologies or complex procedures.

On the other hand, PD does have common elements with an allied notion of benchmarking, i.e. communities of practice (CoP's). Communities of practice are networks within an organization, which serve to share information and expertise among peers in a lateral, not hierarchical way. The communities form, most times spontaneously, around practices of interest, e.g. team work and team development, LINUX programming, community care, or even experiential marketing. The difference in the PD approach versus others used in business environments is in its non-threatening nature, and in the sense that impacting solutions may be had at very low cost using the latent knowledge of people working within the system.

### **Part 3: Case Studies: Description**

The following three case studies serve to highlight and hopefully illuminate the practice of positive deviance. All three are live studies, i.e. they are work-in-progress. One is a private regional hospital in New England, Waterbury Hospital (WH). Another one is a public healthcare system in Pittsburgh Pennsylvania, Veterans Affairs-Pittsburgh Healthcare System (VAPHS). And the third is a wholly-owned subsidiary of a major pharmaceutical, Merck de Mexico (MSD). I believe these three cases are representative of PD work taking place today in organizations. Whether they totally represent the entire spectrum of PD activity is another matter altogether. First of all, most PD activity to date has taken place in communities in the developing world and through the facilitation of NGO's like United Nations agencies and Save the Children. Second, very few cases in the private sector are documented. Although mention is made, or hinted at, regarding initiatives in Verizon, Genentech, Goldman Sachs, and others, either these efforts are jealously guarded or the experience has not been sustained. The one documented case, at Hewlett-Packard, is several years old and the participants will be the first to admit that the PD approach served as more inspiration than actual practice. Third, while students -- at least at Tufts University where Jerry Sternin teaches -- engage in PD projects as part of a course practicum, their projects were not made available to me on the grounds of protecting students rights to privacy. In sum, there may be a lot of PD practice taking place at the moment, but it's fair to say that most of it doesn't take place in organizations, as opposed to communities, and the efforts taking place in organizations are incipient.

Each case has an introduction to the organization, followed by an explanation of the issue probed and how PD is being used, commentary from the chief executive, and key points or highlights.

## **Waterbury Hospital: A Case Study in Positive Deviance**

## OLIVER'S STORY

The town of Waterbury, Connecticut has never fully recovered from its heyday as brass capital of the United States. Local lore has it that its prominence in ammunitions production singled out its manufacturing facilities as one of Hitler's key targets for a potential bombing raid of the U.S. One of the many New England towns that lost its manufacturing base after the 2nd World War, Waterbury is still a decidedly blue collar town in the interior of Connecticut. I arrived late at Bradley International Airport, a regional hub which serves the greater Hartford area. Since Waterbury was about an hour away by car, too far for a reasonable taxi fare, the taxi dispatcher was attentive enough to put me in touch with a local car service. I was told to wait ten minutes for the car. After a very long 45 minutes, a van arrived to take me into Waterbury. The driver is a good natured and polite man by the name of Oliver, from an undisclosed Caribbean island. This I presume from his accent. He asked how long I had waited. I told him and then said the dispatcher had told me that the driver had been caught up in "traffic" --- something I confessed had puzzled me since I couldn't imagine very heavy traffic in Hartford...at midnight. He laughed and said: "No, man, I was taking a shower when they called me for this gig." His honesty was disarming. Now I had been traveling for a week, and on that particular day since very early in the morning, so wasn't predisposed to casual conversation. My crankiness was compounded by the fact that American Airlines doesn't feel obliged to feed its passengers and thus had a limited meal of peanuts and a cola. Oliver tried to cobble together bits and pieces of conversation, to which I replied in monosyllabic affirmations. Eventually, we came to extended construction work on the highway and he had to slow down. We soon realized, however, that the slow traffic wasn't simply due to the construction. But instead, to a gruesome accident where a huge semi-truck had skidded off the road, crushing the pilot's cabin almost beyond recognition. Tragic accidents do make for conversation. And after the usual comments of surprise and contrition, Oliver and I struck up a conversation. Or I should say he spoke at length in a precise and modulated tone and I, less cranky and now fully engaged, listened carefully.

“After the hurricane [Katrina] the situation was very desperate down there. I know because I have relatives in Mississippi and we had been in contact with them. Many of us here in central Connecticut wanted to help out, you know. Well, I get a call from my boss and he says Oliver I need a driver early next week on a long haul road assignment. And I say but next week is inconvenient and besides I don’t do long hauls. Where is this to, anyhow? We’re going to Louisiana, Oliver. Are you nuts? There’s a hurricane down there. Yep, precisely. We’re taking eight ambulances down to Louisiana. How could I say no? One of the state agencies had sent out a request for ambulances and New York responded quickly but they didn’t have drivers. That’s why we got involved. So we drove down to New York and formed a convoy of the eight ambulances with my van serving as support vehicle. Our first stop was Tennessee but with ambulances, believe it or not, you really can’t go very fast. So, it’s tiring. Along the way, we saw plenty of National Guard convoys. They waved at us and we waved back at them. We kind of felt part of a team. Other drivers on the highway honked and gave us a thumbs up; some yelled at us and pumped their arms, but we couldn’t hear them with the windows up and the AC on. We didn’t have any banners or signs or anything. Everyone just knew that we were headed down to Louisiana, I guess. By the time we got to Tennessee, we were dead tired. We needed sleep. So, we tried sleeping for a few hours and then got right back to it. Actually, we didn’t sleep much. The bed just wasn’t right, and too much adrenalin going. As we were nearing Louisiana, one of the drivers, a woman, was really hurting. I don’t think she was a professional driver; and she was falling asleep. Some of us were telling the lead that we needed to stop and rest. And he was sort of vacillating. But then he got a call from the authorities. We simply couldn’t get to New Orleans and were being diverted to Gulfport instead. A hospital there needed the ambulances right away. That gave us the additional jolt we needed, and we drove through the night straight to Gulfport to deliver the ambulances. Those folks were really glad to see us. At night you couldn’t see very much. But in the morning, you got a clear sense of the destruction all around you. We wanted to see more. But the troopers told us that we really didn’t want to go into the more blighted areas of town. There are corpses floating in the water, they said. There

are things you don't ever want to see, they said. So they convinced us to stay away, and after a day resting we headed back to Connecticut."

This was my introduction to Waterbury. And a bonus to boot, for in my search for positive deviance, a chance encounter served as a powerful reminder that there are positive deviants and then there are simply good Samaritans

## INTRODUCTION TO WATERBURY HOSPITAL

Waterbury Hospital (WH) is a 357 bed institution located in Waterbury, Connecticut and founded in 1890. Employing a staff of 2,000, and affiliated with the Yale University School of Medicine, the University of Connecticut School of Medicine, and Connecticut Children's Medical Center, Waterbury's vision is to be the health care organization of choice by providing superior customer service to patients and physicians. Its mission statement is to provide compassionate high quality health care services through a family of professionals and services. Waterbury's annual Report to Our Community (Waterbury, 2004), lists the following financial statement:

<b>Waterbury Hospital Financial Summary (\$USD)</b>		
	<b>FY 2004</b>	<b>FY 2003</b>
Net Revenues from Patients	\$183,373,006	\$172,397,321
Other Operating Revenue	\$6,524,644	\$6,588,986
<b>Total Operating Revenue</b>	<b>\$189,897,650</b>	<b>\$178,986,307</b>
<b>Operating Expenses</b>		
Salaries	\$93,121,847	\$92,630,776
Employee Benefits	\$24,630,763	\$22,795,993
Supplies and Other	\$56,978,380	\$57,995,792
Depreciation	\$9,878,389	\$10,299,198
Interest and Amortization	\$1,622,357	\$1,742,985
<b>Total Operating Expenses</b>	<b>\$186,231,736</b>	<b>\$185,464,744</b>
Gain/(loss) from operations before minority interest	\$3,665,914	(\$6,478,437)
Minority interest in income of combined affiliates	(\$1,393,567)	(\$1,576,126)
Gain/(loss) from operations	\$2,272,347	(\$8,054,563)
Non-operating income	\$2,723,840	\$2,583,073
<b>Net Gain (Loss)</b>	<b>\$4,996,187</b>	<b>(\$5,471,490)</b>
Addition to property, plant, & equipment	\$6,933,031	\$5,183,022

Approximately 70% of operating expenses come from Payroll and purchased services, highlighting the intensity of human resources in the operation of the hospital. With a payroll of nearly \$120mm, WH is the largest private employer in the region. In 2004, the hospital wrote-off nearly \$13mm USD in provided care that went without reimbursement by the government. This sum is in addition to the more than \$2mm USD of charity care provided by the institution. WH is the major provider of comprehensive behavioral health services in its region. It provides for a large and chronically mentally ill population with special requirements. WH has numerous facilities to promote community health and well-being. And its Orthopedic Center is recognized regionally as well as nationally.

The hospital has a broad-ranging series of initiatives which fall under the heading of "Healing Environment." Part branding and part cultural program, the Healing Environment is synonymous with a desire to become a learning organization with empowerment for the staff and collaborative care and decision-making for patients. Helping Hands, for example, is a volunteer-driven benefit providing relaxing rubs for patients. Meditation sessions are available for the staff during lunch. Even Pet Therapy is a surprising yet welcome benefit, for some. Taken singly, these initiatives may not have broad appeal, but in conjunction amount to an expansion of the health care concept -- where well-being is seen more holistically. Remarkably, the logo for the Healing Environment set of programs is a Buddhist mandala. The logo is in remembrance of a sand mandala ceremony and performance by Buddhist monks at the hospital several years ago. While the monks were crafting the mandala, a curious incident took place. The night before the mandala was to be completed, someone broke into the hospital and destroyed the mandala. Consternated staff and patients took the administration to task the following morning over the lax security. Outraged over the act of vandalism, the community reacted with a virulent rumor mill...a satanic cult...crazed patients...dissatisfied hospital staff...Eventually a security camera revealed that a couple of kids had broken loose from their parents and proceeded to gleefully jump all over the mandala. Rumors dissipated soon after this information was made public. What struck the entire community is that the monks, oblivious to the rumors and other frenetic activity, quietly went back to

work without saying a word and re-built the entire mandala as if nothing had happened. The accident, followed by the monks' resignation and tranquility, greatly moved the hospital's staff and inspired the logo.

The CEO at Waterbury, Dr. John Tobin, is an unusual executive in that he has extensive connections with the Plexus Institute, a leading collaborative federation of complexity systems practitioners, and has a long history of engagement in learning practices such as complex adaptive systems. He took his Doctorate in Management, as a working executive, under Ralph Stacey and Douglas Griffin at the University of Hertfordshire. Tobin has written on leadership and the paradox of "detached involvement", a theme he investigated at Hertfordshire. He is particularly indebted to the work of social scientists, notably George Mead and Norbert Elias. In a recent paper (Tobin, 2005a), Tobin explains:

By detached involvement I mean that a leader exercises enough self-control to provide some degree of mental "distancing" from one's current situation in order to achieve a somewhat broader perspective than others. Through detached involvement, the leader may apprehend more possibilities offered by a given situation than others are able to, and thus the leader has more possibilities for action, more options, because of this broader perspective.

Tobin even relates various episodes at the hospital and how he addressed them or learned from them. One of these situations was a protracted merger discussion with the other large local hospital, St. Mary's, a Catholic institution. Not unlike many other locations throughout the U.S., the two hospitals planned to unite so as to combine facilities and share the cost of rising health care. Ultimately, the merger was nixed by the local Catholic bishop on the grounds of incompatible operating philosophies – the main issue being legalized abortion. The negotiations were extensive and exhaustive, and at the outset Tobin wasn't even included as these were being managed in secret by the Board of Directors. Fear, anxiety, and humiliation taught him a lesson that he considers essential to his continued growth as an executive.

In many ways, then, Waterbury is no different from the host of regional hospitals struggling to meet a diverse and often incompatible set of objectives. On the

other hand, a certain willingness to be different, or to try different approaches even when encased in a “New Age” format, is palpable in the culture.

## **THE MEDICATION RECONCILIATION PROBLEM – A SUMMARY**

Dr. Tony Cusano is an attending physician at Waterbury with a specialty in nephrology and he had a problem. How should doctors talk to patients and their families about the end of life? Physicians are not trained for this responsibility, and hospital routines are enforced partly to desensitize care givers to the fact that they are constantly dealing with life and death situations. But this problem proved to be too big and unwieldy. Eventually Cusano and his staff realized that many issues at the hospital revolved around communication problems.

Operationalizing “communications” soon also proved to be rather daunting. At about the same time, however, several patients had been complaining to Cusano about the sheer number of medications they had to take in their prescribed regimen. Many patients had regimens of more than 20 different medications. Via anecdotes, nurses had been letting him know that on discharge from the hospital patients were confused about their medication. This had been an often discussed problem at the hospital, and not unique to Waterbury. But even though committees had been set up to address the issue, scant progress had been made. Cusano and various hospital staff members decided to run a test and call patients after release to determine their level of compliance with their regimen of drugs. To their dismay, they found that approximately 61% of the patients were taking medicine incorrectly.

But Cusano noted that as many as 39% were taking the correct medications in the prescribed dosages and frequencies. Informally engaging additional hospital staff – Cusano calls them “friends of friends” – more telephone calls were made only to find that the pattern of poor compliance was sustained. Staff began asking the positively deviant patients what tricks or tips they had to enforce compliance – simple things like having a correct list of medicines, insisting on getting explanations for the medicines, having an orderly and structured way for taking the medicine. And the staff also began to generate ideas, from making

after release calls to the patients to designing a pink card with the patients' medications, dosage, and frequency for patient use.

Resistance to Cusano's inquiry was significant, but when data were presented and initial success became evident the detractors withdrew. The effort took a life of its own, and hospital staff assumed ownership without authority. Cusano now says that he had to have faith in the process. He had to give up control in order to assure sustainability.

## **THE MEDICATION RECONCILIATION PROBLEM – REVISITED**

I first encountered Dr. Cusano and Ms. Ginny Potrepka, the hospital's Patient Relations Manager, at a Positive Deviance Workshop at Tufts University in June 2005. Having made the contact at the workshop, where Dr. Cusano presented their use and progress on positive deviance, I made arrangements to visit the hospital in September 2005. At the hospital I also met with Bonnie Sturdevant, Director of Quality Management, and Magalie Milfort, an Advanced Practice Registered Nurse, both of whom took part in the project core team.

In the very first few presentations of positive deviance at the hospital, going back to October 2004, several problems were discussed as possible candidates for an intervention. Patient satisfaction and hand washing compliance were discussed and discarded, the first being too general and the second posing difficulties in accurate surveillance and measurement. The medical staff wanted to concentrate on enhancing communications within the hospital. Once the communications pie (staff to staff, staff to patients, etc.) was dissected, patient communications was deemed paramount. The core team rallied around the theme "an informed patient is a better patient." But at this point the team got stuck and Dr. Cusano, who is a member of a hospital committee on Pharmaceutics, stepped in and defined as well as began to champion the medication reconciliation problem. Over the Christmas holidays, test calls were made to patients as the criteria were being defined, scripts fine-tuned, and initial data gathered. Bonnie's Quality Management area was instrumental in providing survey tools and guidance. In addition to the calls, the pharmacy was enlisted to


check if patients were in fact purchasing the medicines. This verification served to cross-check the patients recollection. The initial phone calls were quite revealing. There was an instance where one patient, a gentleman on a blood thinner, was asked if he was taking his medication every other day. He said, of course. On probing by the nurse, the patient reveals that he was taking the medicine every Monday, Wednesday, and Friday. But what about on the weekend, the nurse responded. To which the man replied, weekends don't count, it's only every other day – by which he understood every other weekday, but not on weekends! Instead of taking the medication on average 15 times a month, he was taking it approximately 12 times a month or 80% of the required dosage. Dr. Cusano mentions another instance in which a patient had instructions on a discharge sheet “Take Q6H” as instructions for a specific pain medication. The patient did not read the label on the pill bottle, but assumed that Q6H on the discharge sheet meant to take the medication “six times” a day. (Cusano, 2005a)

Jerry and Monique Sternin made six visits to the hospital between October and May. Facilitators spent between 85-100 hours on the intervention, not to mention the numerous hours spent by nurses making calls, as well as staff meetings and work sessions. And it was important for the staff to take the time. While everyone in the hospital understood the problem of medication reconciliation, there was poor awareness of the extent of the problem and its severity. Criticality of the issue promotes change, and the personal involvement of the nurses in the calling and in the overall intervention helped to raise awareness in the hospital: “Yes, we do have a problem here!”

While there wasn't a project plan as such, the timeline for the bulk of the intervention has been reconstructed by Ms. Potrepka. This timeline is not all inclusive, but does capture the major milestones along the way.

Initial Project Timeline (post-facto)				
2004	Oct	20	Jerry Sternin conducts a presentation for approx. 60 hospital leaders	
		21	Sternin conducts workshop for 24 WH employees	
		22	Grand Rounds with approx 50 doctors and other staff	
	Nov	8	F/up visit with above groups for next steps	
		12	Meeting to define problem in ACR	
		19	Redefine and narrow down specific problem	
		30	Mtg with Jerry to focus on definition of discovery tool	
	Dec	9	Further development of tool	
		14	Preparation meeting for facilitators	
		16	Jerry visits to gauge progress	
	2005	Jan	6	Mtgs with facilitators
			14	Jerry visits to monitor progress
Feb		8	Medication Reconciliation subcommittee of Pharmaceutical & Therapy committee mtg	
Mar		23	Jerry visits again	
		28	Phone calls made by nurses to patients	
Apr		14	Medication Reconciliation meeting	
		26	QSC meeting to disseminate PD information	
May		3	QSC celebration meeting	
		12	Medication Reconciliation meeting	

As a result of the data gathering, and following the PD process, positive deviants were interviewed and good behaviors identified. For example, behaviors included: having a well-defined list of medications required on discharge; better forms to issue to patients; tips for using medicine trays and pill organizers, etc. One tool which forces behavior is the Personal Pocket Medication Card (tri-fold pink card), here shown open, front and back:

Physicians: Name: _____ Phone: _____ Name: _____ Phone: _____ Name: _____ Phone: _____ Pharmacy: Name: _____ Phone: _____ Pharmacy: Name: _____ Phone: _____ Visit us at: <a href="http://www.waterburyhospital.org">www.waterburyhospital.org</a>	IMMUNIZATIONS: Pneumovax Last dose _____ Influenza Last dose _____ Tetanus Last dose _____  Card provided by Waterbury Hospital Medication Reconciliation Team	<b>Personal Pocket Medication Card</b>  Name: _____ Telephone: _____ Allergies: _____ Emergency Contact: _____ Telephone: _____
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here have melted in time. However, the key that PD uses to unlock that, I believe, is that it helps to create a group of champions by finding people in small accruals, each of whom adopts the values/behavior intrinsically. I can say that I have found several caregivers who have become as committed to this project as I am, and indeed without them, the energy would have long since dissipated (this is, after all, a volunteer job for me). I think part of the process of PD does involve setting up a "booster vaccination" schedule, for the group in general. But you're right, in that until time goes by, I can't really tell you how sustainable this really is. But I do know that we've changed the culture of awareness for patient medication safety, and that, in a group of professionals, is a large part of the battle. Most of what we do is "culturally ingrained" behavior, which is why I believe so much in PD as a process made for my profession. Any process that enables our group to find its highest level will be sustainable because I believe there will always be some of us who have a passion for giving their best. And quite frankly, if there aren't, then no process will save us. (Cusano, 2005c)

## **THE EXECUTIVE'S VIEWPOINT**

John Tobin has already been introduced in the case. As CEO of Waterbury Hospital, he met Jerry Sternin through the Plexus Institute and invited him for a presentation. He states that the project took a life of its own with scant prodding. (Tobin, 2005b) Throughout the intervention, Tobin went to a few of the meetings and provided "symbolic" support. He admits that the project was driven entirely by the staff; his contribution was more of an initiator than a project manager. His philosophy is that culture is an emerging phenomenon more dynamic than static. And a leader has to understand the place, the focal point of his organization. In a hospital focus should be on the healing mission, and Waterbury in particular is a community hospital in a post-industrial town.

Regarding change, organizations cannot be copycats. At Waterbury they had tried other change efforts, including reengineering, but had negative experiences. Tobin feels the need to design change efforts more in keeping with the healing nature of the organization's core mission. He believes that approaches like PD work best in organizations where people who adopt the change have a strong personal interest in the outcome, e.g. the parents of children in Viet Nam. When

the change is more abstract and personal interest is removed, then it's much more difficult to promote change with PD.

Regarding the future, he sees continued experimentation with PD at Waterbury, building on the success of the medical reconciliation issue. Sustainability is the result of making a personal, almost a physical, connection to the issue.

## **POSITIVE DEVIANCE INSIGHT**

From the Waterbury experience what themes or insights emerge? And what lessons can we apply for the future development of positive deviance?

1.- **The essential role of community involvement:** The caregivers, nurses primarily, had to have a very intensive participation in the intervention. As Jerry says, you don't think your way into a new practice, you practice your way into a new way of seeing and thinking. There is the rational, back of the mind knowing, and then there's the experiential, here and now sort of knowing which is key to changing behavior. Many of the practices discovered in the intervention were not really new, just not practiced.

2.- **The champion emerges (and isn't appointed):** Tony Cusano is not a staff physician at Waterbury; he is a private physician with visiting privileges at Waterbury. He is not even the head of the Committee under which medication reconciliation falls. But he had an interest in solving the problem. Tony is both a physician and a medical instructor, and intrigued in getting physicians educated in non-directive approaches. He ponders: how do you really teach people to do things? Can you organize examples in another way? For all of its science, medicine is still a practical art.

3.- **The external environment can serve as reinforcement:** While the intervention is voluntary and self-directed, the environment can certainly help it along. For example, JCAHO (Joint Commission on Accreditation for Health Organizations) is considering the implementation of standards for medication compliance on patient discharge beginning in 2006. The standard may not be a catalyst in Waterbury's case, yet serve a useful purpose to sustain the effort.

4.- **The positive deviant may not be the positively deviant:** The medical outcome is the patient's compliance with their medical regimen. This outcome is the positive deviance. However, the enabler of the compliance itself may not be the patient; it could well be the patient's spouse, or a relative, or a nurse, or their physician, or any number of stakeholders in or outside the household, or a combination of any of these enablers. In positive deviance we're looking not at simple relationships but rather at a system of relationships, perhaps even an eco-system.

5.- **The critical role of the icon:** Dr. Cusano makes the point that something as simple as a pink card can become iconic in a self-directed process. The card itself was not invented at Waterbury; the individual who came up with the design, Domita Semple in the quality management department, was inspired by another application elsewhere. The point is that it helped a diverse and diffused group of people, with very different relationships to each other, focus on a task: "It opened up a world." An intrinsic symbol is needed to create meaning for this collaborative process. It also branded the effort and provided energy and a sense of locality: "We did it here."

6.- **The detached involvement of the leader:** Without directly mentioning John Tobin's "detached involvement", Tony Cusano states quite candidly that in these approaches the leader doesn't have to do much work: "You drop a crystal into the solution." The leader in this case is an initiator and a connector. The difficulty for the leader is knowing when to intervene and when to stay away. Tobin makes the same point in his article.

7.- **The nature of a moving problem:** It is not the case that the solution is a moving target, the problem itself is a moving target. Initially, the hospital had a method looking for a problem: could it be hand washing compliance or maybe patient satisfaction? Then we had one doctor's concern for the dying patient. And finally a consensus on the need to improve overall patient communications, out of which emerged a specific intractable problem, medication reconciliation. But even then, as Cusano explains, it took a while to realize that the real problem was that patients were not taking the right medication. Yes, communications was

part of the problem, but there is a further issue of patient responsibility and an obligation on the part of all concerned to shift the culture of the patient. There are limitations in care-giving, after all. The initial problem, even when formulated appropriately, is only an entry point into a complexity of problems.

## **CODA**

A conversation with Cusano led to another thought-provoking, but still gestating possibility. He mentioned an article by Dr. Atul Gawande (Gawande, 2004), at the Harvard School of Public Health, aptly named “The Bell Curve.” In the article Gawande describes his search for the best Cystic Fibrosis care facility in the U.S. and his investigation into what made it the best. In the end, after a wide-ranging look at the data and his own visits to several facilities, his conclusion is that passion for craft and constant experimentation are the factors that lead to positive deviance, all other things being equal. He describes the work of Dr. Warren Warwick of Fairview-University Children’s Hospital in Minneapolis and his obsession with keeping children alive. And Cusano agrees. “It’s not about protocol, really, it’s all about craftsmanship and the passion to get it done.”

I now want to return to Oliver again. Until now, I have envisioned the positive in positive deviance as merely an adjudication of outcome, i.e. of effectiveness along a single measured dimension. In the case of Waterbury, for example, this dimension is medication reconciliation, or the % of patients complying with their medical regimen. This is the effectiveness dimension, if you will. But what if there’s another -- say a moral or emotional -- dimension at play here. What if the effectiveness and moral dimensions create a space, a domain, that is no longer uni-dimensional? And in this space, for positive deviance to fully materialize, the moral dimension has to engage. It is not so far-fetched really. The emotional and rational intertwine and mutually reinforce each other, and ultimately drive behavior and create sustainable change. In my journey to explore the nuances of positive deviance, I’m indebted to the administrators and medical staff at Waterbury Hospital for these insights; as well as to a van driver named Oliver, on a shorter journey.

## **VAPHS: A Case Study in Positive Deviance**

## **POUNDS OF MACARONI**

Heidi Walker, RN, pats the bags of macaroni as she goes through her now well-practiced routine. She is explaining the scourge that hospital-acquired infections have become in hospitals throughout the U.S. (PRHI, 2005) In the United States, approximately two million patients contract a hospital-acquired infection every year. Of these patients, 5.2% or 103,000 die; half of which are attributable to a bacteria known as MRSA (methicillin-resistant *Staphylococcus Aureus*). Each piece of macaroni in the 33 pounds she has on the table represents one of these 103,000 deaths. According to Heidi, “when I tell co-workers that each little piece of macaroni represents a human being, a fellow American who died last year due to hospital-acquired infection, it really gets their attention.” The macaroni gambit is one of the ways the Veterans Administration Healthcare System at Pittsburgh, Pennsylvania (VAPHS) is using to alert and educate its staff to the danger of hospital infections. The American healthcare system, arguably the most-advanced technologically in the world, has been in crisis for well over a decade. In addition to the MRSA deaths, nearly another 100,000 patients die each year due to careless, negligence, and just bad medical practice. “In this country, we still believe we have the best medical care in the world, but according to the World Health Organization we’re not even in the top ten,” says Dr. Jon Lloyd, Program Coordinator for the VAPHS MRSA Initiative. And medical costs are spiraling out of control as more and more health care plans transfer the costs of care to the patient. The healthcare environment is increasingly complex, torn by competing interests and stakeholders, and grossly inefficient.

## **MRSA**

70% of hospital-acquired infections are due to bacteria that are resistant to previously effective antibiotics. MRSA is one of a handful of rapidly growing and virulent pathogens (Lloyd). As the following explanation attests, MRSA is

deceptively easy to disregard: “The organism is found on many individuals’ skin and seems to cause no major problems. If it gets inside the body, for instance under the skin or into the lungs, it can cause important infections such as boils or pneumonia. Many individuals who carry this organism are usually healthy, have no problems whatsoever and are considered simply to be carriers of the organism. Individuals can become carriers of MRSA in the same way that they can become a carrier of ordinary *Staphylococcus aureus* which is by physical contact with the organism. If the organism is on the skin then it can be passed around by physical contact. If the organism is in the nose or is associated with the lungs rather than the skin then it may be passed around by droplet spread from the mouth and nose. We can find out if and where *Staphylococcus aureus* is located on a patient by taking various samples, sending them to the laboratory and growing the organism. MRSA organisms are often associated with patients in hospitals but can also be found on patients not in a hospital. Usually it is not necessary to do anything about MRSA organisms. However if MRSA organisms are passed on to someone who is already ill, then a more serious infection may occur in that individual.” (University of Edinburgh) An important distinction that cannot be overlooked is that an individual may be colonized by the bacteria and not be infected. If the individual, however, goes through a surgical procedure or has an accident, the bacteria may invade critical bodily areas and a serious infection could take place. In addition, a colonized individual can spread the bacteria. More importantly, over time and through the use and abuse of antibiotics, the bacteria has adapted and become resistant to commonly prescribed antibiotics.

MRSA is a very serious problem in U.S. hospitals and its scope is staggering.

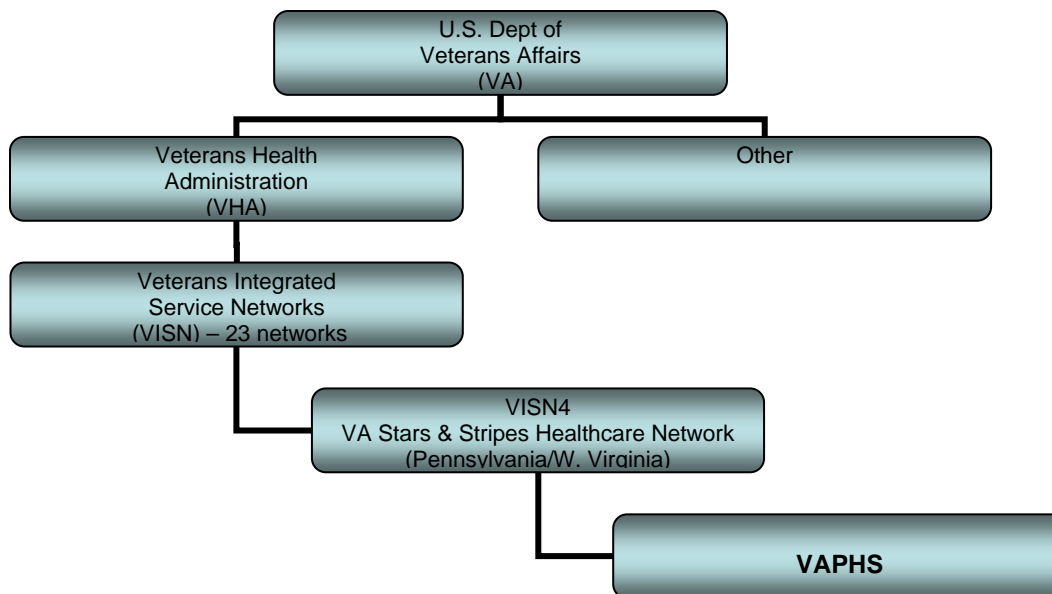
At the current rate of approximately 100,000 deaths per year, hospital-acquired infections kill as many people in the U.S. as do AIDS, breast cancer, and auto accidents combined. The threat has become even more serious because most [of these] infections are caused by bacteria that are resistant to the commonly used antibiotics and are much more difficult to cure. Whereas only a decade ago, 30% of *Staph aureus* isolates in hospital intensive care units were resistant to the antibiotic Methicillin, 60% are resistant today. The mortality rate for MRSA infections is twice that of

Methicillin sensitive *Staph aureus* (MSSA). Not only is MRSA one of the deadliest hospital-acquired infections, its prevalence is rapidly growing. The U.S. now has the second highest rate of MRSA infections in the world. (Plexus, 2005a)

And the bacteria can last as long as six months on a non-organic surface. When asked why it is so difficult to combat MRSA, Dr. Rajiv Jain, Chief Medical Officer at the VAPHS, answers that the medical community has over-relied on antibiotics for many years. (Jain) But there are cultural issues as well. Hand-washing is a major problem as doctors, nurses, and orderlies simply do not wash their hands before seeing patients. And many doctors do not believe that they can spread infections once the wound is closed. (Lloyd, 2005b) Cohorting patients requires discipline and for some medical personnel it may imply a somewhat draconian as well as costly measure. Dr. Lloyd further posits that the U.S. medical system is entrepreneurial and individualistic, and as a result has a difficult time learning from variation. There is also a stoical sense of acceptance, that is: hospital-acquired infections are a cost of doing business in healthcare.

## **INTRODUCTION TO VAPHS**

The U.S. Department of Veteran Affairs (VA) regulates and administers all matters pertaining to war veterans. One of its chief functions is to provide medical care for the veterans, and to do so it has set up a rather sizeable and complicated national bureaucracy. And about 25% of the U.S. population is potentially eligible for VA benefits as veterans, family, or survivors of veterans. The VA's fiscal year 2004 spending was \$63.5 billion -- \$29.1 billion for health care, \$34 billion for benefits, and \$155 million for the national cemetery system. The VA is the second largest of the 15 Cabinet departments.



VAPHS, then, is a healthcare system within VISN4, serving Pennsylvania and West Virginia. It comprises three divisions – University Drive, Heinz, and Highland Drive – located within a seven mile radius in the greater Pittsburgh area. The two divisions, and facilities, of interest are University Drive and the H.J. Heinz III Progressive Care Division. University Drive, an acute care facility, has 123 operational medical and surgical beds and houses numerous tertiary care services; it carries out complex clinical services including cardiac surgery and transplants. With 326 operational nursing home beds, Heinz is a long term care facility. However, outpatient services have been added to the Heinz facility to alleviate increased demand and congestion at University Drive.

The VAPHS is rather unique in that it decided to adopt the Toyota Production System (TPS) in early 2002 as a pilot within a few hospital units. Paul O’Neill, ex-Chairman of Alcoa and 72<sup>nd</sup> U.S. Treasury Secretary, is a steadfast benefactor and leading light in Pittsburgh. Working through the Pittsburgh Regional Healthcare Initiative and the Center for Disease Control, O’Neill and others made the TPS developed at Alcoa available to the VAPHS. The Toyota Production System is closely allied to the notion of what has become known in the West as lean manufacturing. Through the use of techniques developed at Toyota over a number of decades, TPS turns manufacturing on its head; it doesn’t push material through the assembly system, rather it pulls materials as needed, when needed, in a just-in-time mode which is highly efficient. The aim of TPS is to

eliminate waste and cut down production defects. And in order to do so, it uses a variety of tools and techniques:

- **Kanban**, or information card, facilitates the pull system by informing the worker when production changes are required
- **Poka-Yoke** is fool-proofing a procedure
- **Jidoka** is a defect detection and elimination system which allows the operator to stop the line when errors are detected
- **Gemba**, or shop floor, is a reminder where work takes place and is a call to remain practical
- **Andon**, or display boards, is a key element in the visual factory, where information is clearly displayed and posted
- **Standards** for procedures allow for an orderly workplace and facilitate process improvement
- **5 S's** (sort, set in order, shine, standardize, sustain) go hand in hand with standardized procedures and establish a particular work ethic for all employees
- **5 Why's** is a simple routine to get to the root cause of an issue or problem by sequentially asking "Why?" five times.
- **Kaizen**, or continuous improvement, is a never-ending cycle of improvement, usually associated with the Shewhart cycle (plan, do, check, act)

Toyota also views costing differently as they use the practice of target costing. The market sets the price for the product, and then one has to reverse engineer the cost by applying a desired profit margin. Cost is what remains and design, manufacturing, and production all have to collaborate to adhere to that "target" cost -- hence, the obsession on cost reduction and process improvement. But just-in-time production is only part of the picture (VAPHS, 2005c). In TPS, the notion of "autonomation" tempers the use of automation with operator intelligence. Errors are detected early by empowered and well-trained employees, in an environment which allows for educated guesses. The system aims to constantly have answers for their operators' major concerns:

- What do I do next?
- How do I know how to do my work?
- Once I have done my work, how do I know it's correct?
- If I have a problem, how do I get help?

In sum, TPS is a powerful and all-embracing system of production which requires a delicate amalgamation of the technical and the human; it is the quintessential socio-technical system taken to a high degree of performance.

## THE MRSA INITIATIVE – BACKGROUND

MRSA has been virtually eradicated in Scandinavia.

Twenty-five years ago in Denmark, Finland, and the Netherlands, they noted rapidly growing resistance of hospital *Staphylococcus aureus* to Methicillin and other commonly used antibiotics. When resistance reached 30%, they embarked on an aggressive search and destroy approach to the problem which virtually eliminated MRSA from hospitals in those countries. Today, less than 1% of *Staphylococcus aureus* are resistant to Methicillin and hospital acquired MRSA infections are a rarity in Northern Europe. In U.S. hospitals, 60% of *Staphylococcus aureus* are resistant to Methicillin and MRSA causes 50% of all hospital acquired surgical site infections, blood stream infections, and pneumonias. What the Northern Europeans did to eradicate MRSA from their hospitals is quite simple in concept. They cultured every patient admitted to their hospitals and isolated those who were MRSA positive from those who were not. Health care workers wore gowns, gloves, and masks and used designated equipment when caring for MRSA positive patients, and they were maniacal about washing their hands before and after every patient contact.” (Lloyd, 2005c)

In the U.S., similar protocols exist. They are known as the Society for Healthcare Epidemiology of America (SHEA) guidelines. SHEA basically calls for hand hygiene pre and post patient contact, colonized and infected patient isolation, and active surveillance cultures (ASC). The later is a nose swab which requires laboratory analysis with a 48 hour turnaround time. Dr. Carlene Muto is the principal author of the guidelines and the epidemiologist at the University of Pittsburgh Medical Center, just a few miles away from VAPHS facilities. She is a leading advocate for, and a front-line combatant in, the eradication of MRSA. Much earlier, in the early 1980's, the University of Virginia Medical Center successfully adopted the Scandinavian model. These examples beg the obvious question. MRSA has been successfully eradicated in various locales and the U.S. has evidence-based guidelines in place, so the solution is well-known. But then why does the problem persist? Knowledge of the solution, in and of itself, doesn't always result in behavioral change. Some individuals will always question the received knowledge and disregard it, others may find it painful to adopt new

ways, others still may be partially or fully unaware of the solution. The issue for the VAPHS was how to foster behavioral change in its drive to eradicate MRSA.

For several years, VAPHS used the Toyota Production System to spearhead the requisite changes. For the specifics of MRSA reduction, the TPS was used to improve compliance with hand hygiene in one surgical unit (4West), and the program was later expanded to the surgical intensive care unit (SICU). The result was an 82% reduction in the rate of MRSA infection after two years. (Lloyd, 2005a) Specific initiatives included the redesign of isolation rooms, provision of isolation supplies, systems for disinfection of shared equipment, and support from the administration. These pilots were very successful and the use of the TPS at VAPHS is regarded overall as a positive experience. This is unusual in that many hospitals trying TPS or different variations of the same abandon the effort rather early. After all, TPS was born in an industrial setting and the language and practices can be rather alien to medical practitioners. Dr. Lloyd attributes the success of TPS to the partnership with Alcoa, the oversight and exposure provided, and the technical and relationship skills of the Alcoa instructors. In addition, many at VAPHS saw TPS as a means and not the end in itself. Specifically, the chief epidemiologist, Dr. Bob Muder recognized that TPS was an instrument for enforcing the SHEA guidelines (Muder). TPS brought VAPHS a great deal of awareness regarding the infrastructure necessary for even something as mundane as compliance with hand-washing. For example, soap is required for hand-washing, hence soap receptacles are necessary and their placement is instrumental in facilitating compliance. This is a design problem. Additionally, the receptacles have to be constantly refilled, a procedural and maintenance problem. And they have to be refilled with stored soap, an inventory control and procurement problem. TPS taught medical practitioners at VAPHS to think it terms of systems and workflow.

All of this is fine and well, but as Dr. Jon Lloyd explained as he drove me over to the University Drive facility on a perfect November morning in Pittsburgh, TPS in spite of its appeal has significant drawbacks. TPS is resource-intensive. It requires specialized instruction by accredited teachers, and then it creates reliance on the instructor. In addition, for the pilot, one nurse was required to

become almost fully dedicated to the program. All of the nurses in the unit also had to undergo extensive training in TPS. This level of resource dedication was not possible for a total hospital application. Creating a TPS-culture is a slow process. In four years, only two VAPHS units -- of a total of 13 units -- were actively applying the tools to MRSA eradication. Finally, as Dr. Rajiv Jain explains (Jain), TPS is an expert-driven system which was going to face considerable obstacles in hospital-wide dissemination. Staff buy-in is key to implementation and replicating the work accomplished in the two initial units would prove to be challenging. In summary, TPS was expensive, slow, and top-down.

### **THE MRSA INITIATIVE – ENTER POSITIVE DEVIANCE**

Jon Lloyd brought the Positive Deviance approach to the attention of VAPHS management. Jon brings a unique perspective to the problems and issues facing medical practice today. He is an experienced surgeon, very knowledgeable in quality management tools and techniques, well-versed in complexity science, attentive to proceedings and discussion taking place at the Plexus Institute, and an astute interpreter and navigator of the medical environment. I was introduced to Jon by the President of the Plexus Institute, Curt Lindberg. Curt is a prime connector and node in the meeting of complexity sciences and Positive Deviance. Jon attended one of the early Plexus workshops on PD and met Jerry and Monique Sternin; he quickly realized that PD offered precisely what was missing in the Toyota system. PD is resource-neutral; it is not expert-driven; it is bottom-up. Dr. Jain, as Chief Medical Officer, was brought into the loop in May 2005, and this led to Jerry Sternin's visit and workshop in July. The workshop was well-attended and hugely successful in the interest created. Dr. Jain also stresses that there was another element at play. It was important for him that VAPHS not be the first medical facility to introduce PD. Politically, having another institution go first, and learning from their experience, carried weight with the VAPHS stakeholders. Fortunately, by this time, Waterbury Hospital in Connecticut was well on its way in its PD initiative.

Positive Deviance, then, was to be the tool for the expansion of the MRSA reduction initiative. But according to Jain and Lloyd, the intent ran into a potentially devastating roadblock. The very success of TPS now had key staff married to a given methodology. Anticipating strong resistance precisely from the people they most needed to be on board, Dr. Jain suggested that they try to integrate TPS with PD. The MRSA Control Model is the result of bringing together the past success of TPS with the expansion mode of the initiative using PD as the main enabler. The model lays out how the MRSA reduction initiative will now move forward. With a goal of reducing the MRSA infection rate by 50% by August 2006, and eliminating endemic MRSA altogether by August 2007,

...the model that is being developed by the VAPHS will be an asset-based method of identifying individuals and groups of individuals within and outside the system that perform uncommonly well in preventing MRSA infections when compared with others who have access to the same resources. It then enables those whose practices need change, in order to achieve comparable results, to look at the behaviors and practices that enabled the successful group to achieve their positive outcomes. The group seeking to improve implements a plan involving everyone through a process of self-discovered, analyzed, designed, implemented opportunities to practice those strategies and behaviors that enable them to prevent MRSA transmission and associated infections. (Lloyd, 2005a)

The Control Model basically incorporates the SHEA guidelines as the solution for MRSA eradication, with a robust measurement methodology inspired in part by the fact-based TPS, and use of PD for behavioral change in the system-wide implementation of the solution. I asked Jon Lloyd whether he considered this application of PD methodologically “pure” since the solution is not being discovered by the community. Jon says that the process of discovery will highlight how the solution is being successfully implemented. After all, SHEA guidelines as the received wisdom of 20 years of research, are not anything new. It is simply the case that some units or practitioners are better at implementing them than others.

Today, VAPHS is well into the second or Determine phase of the PD approach. In the Define phase both employee surveys and focus group discussions are taking place to establish needs, describe current practice and set objectives.

Focus groups are a central element of the VAPHS approach which explores attitudes and behaviors. Key questions include (Lloyd, 2005a, Attachment C):

- What kind of experience have you had with MRSA in the unit...
- How do you know which patients are colonized...
- How do you obtain a nares culture [demonstrate]...
- When and how do you gown and glove...
- Do you encounter obstacles to performing hand hygiene, gowning and gloving...
- How do you respond to patients and families who ask questions about MRSA?

A bit of a discrepancy with the pure PD approach is the use of an MRSA education module up-front. Lloyd says that while he has no argument with the PD tenet of “one practices their way into a new behavior,” sometimes lack of knowledge is an inhibitor for practice. The Determine phase blends into a Discover phase as site visits will both uncover positive deviants and discover useful practices. A community meeting and celebration is scheduled for January 2006 with Jerry Sternin. The timeline for implementation is about two and a half months behind schedule:

Phase	Event	Original Dates	Revised Dates	Leader
<b>DEFINE</b>	Focused Group Discussions	August 2005		Lloyd/Walker
	Survey Tool	August/Sept 2005		
	MRSA Education	September 2005		
<b>DETERMINE</b>	Site Visit Teams	September 2005	November/ December 2005	Lloyd/Walker
<b>DISCOVER</b>	Site Visit teams	September 2005	November/ December 2005	Lloyd/Walker/ Jain/Sternin
	Community Meeting	October 2005	January 2006	
<b>DESIGN</b>			TBD	

## THE EXECUTIVE POINT OF VIEW

In a conversation with Dr. Rajiv Jain, I first sought to understand his role in the PD process and triangulate information from other sources. The story is fairly

consistent. Dr. Jain's interventions at critical junctures helped the process move along, e.g. inviting Jerry Sternin for his first visit, integrating TPS with PD for a combined approach, setting the rules or preconditions for applying PD (i.e., "we will not be the first in the medical world"). But as in other executive interviews, the issue of sustainability was paramount.

Q: "What will make this PD effort sustainable?"

A: "Leadership commitment of the same level of magnitude that it took to initiate this process. Leaders have to keep asking; it's a self-awareness leaders have to invoke. We have to structure change to such a point that the staff drives it and owns it in day to day practice; practice changes culture and the two become one. Leaders must not back-off [from the asking, not the driving]."

I also asked Dr. Jain how he saw this effort in a couple of years. He responded that he had an "internal and external dream." The internal dream was to use PD to beat other hospital-acquired infections once MRSA was eradicated. The external dream was for the VAPHS to become a laboratory for these innovative approaches so that they could share the innovations with other medical facilities.

## **INSIGHTS FROM POSITIVE DEVIANCE**

From the VAPHS experience what additional themes or insights emerge? And what potential lessons can we apply for the future development of positive deviance?

1.- **Creating your own deployment model:** VAPHS has developed a hybrid implementation model for the eradication of MRSA. PD is clearly the central element in the behavioral change aspect of the program, but not the only element in the program. Lloyd and other VAPHS stakeholders have clearly pinpointed the contribution of PD to changing current practices.

2.- **Leveraging the culture:** With regard to PD, VAPHS leverages its culture in two ways: first, it has a relatively lean administration with access to top staff and centralized decision-making for key issues. Second, being a war veteran

institution it can rely on the values and honor code of military personnel to foster change for the good of fellow-military staff. "We want you to help us combat this infection so that your fellow veterans won't get sick."

**3.- The use of reinforcing mechanisms:** Existing networks, mechanisms and programs are all pressed into service to facilitate PD deployment. For example, the MAGNET (Mentoring, Attitude, Goals, Nursing, Energy, Teamwork) Recognition Program is a nation-wide credentialing initiative which recognize hospitals providing excellent nursing care. (VAPHS, 2004) The infrastructure of MAGNET is made up of Professional Practice Councils where nurses promote best practices, share ideas, and promote a learning environment. Jon Lloyd hopes to amplify PD through these Councils.

**4.- PD and energy release:** More so than in other cases, PD at VAPHS -- specially through the use of focus groups -- serves to release latent energy in the group. All asset-based approaches share this principle of energy build-up, but linked to a clearly articulated and relevant mission (i.e., MRSA eradication) the energy creation for the initiative can be substantial.

**5.- Environmental complexity and PD:** AT VAPHS we have an initiative which transcends the boundary of a single institution. We see collaboratives, initiatives, national, state, and local institutions. Individuals with a variety of loyalties have to work together for a common cause. The MRSA Initiative at VAPHS is a microcosm of the entire U.S. medical sector, and instead of an application within one institution, what we have is fundamentally an institution which has become a hologram for an entire environment.

**6.- Honoring the local culture:** In a complex care-giving environment, local solutions mitigate the possibility of creating an auto-immune reaction to change. The variety of stakeholders and competing interests combine to resist tenaciously top-down approaches.

**7.- Empowered staff/involved patients:** Empowered clinical staff is only part of the picture. Involved patients and families play a large part in good clinical

outcomes. Involvement here means educated, alert, and assertive. To the extent that patients and families are willing and able to be involved, they can co-create the space for asset-based approaches to work.

## **CODA**

Listening to and observing VAPHS staff like Heidi Walker and Jon Lloyd, I couldn't help but be reminded of Dr. Cusano's summation at Waterbury Hospital. Passion for craft and constant experimentation underlie all method. Like tactics, methods are temporary instrumental devices which take us just so far. In the case of VAPHS, use of the Toyota Production System – a wonderfully polished and efficient meta-system which has evolved over decades at Toyota, becoming in effect an integral part of the Toyota identity – has reached a wall. While structural change was the focus, TPS made progress. As the key to success is now behavioral change, PD comes to the fore. While the MRSA initiative is taking on additional energy and impetus, forces are being arrayed to advance the fight to new fronts. And yet, it takes the discernment and commitment of individuals to step out (of the system) and step up (to the challenge) for a program to move forward. And at VAPHS, in addition, it apparently also takes pounds of macaroni.

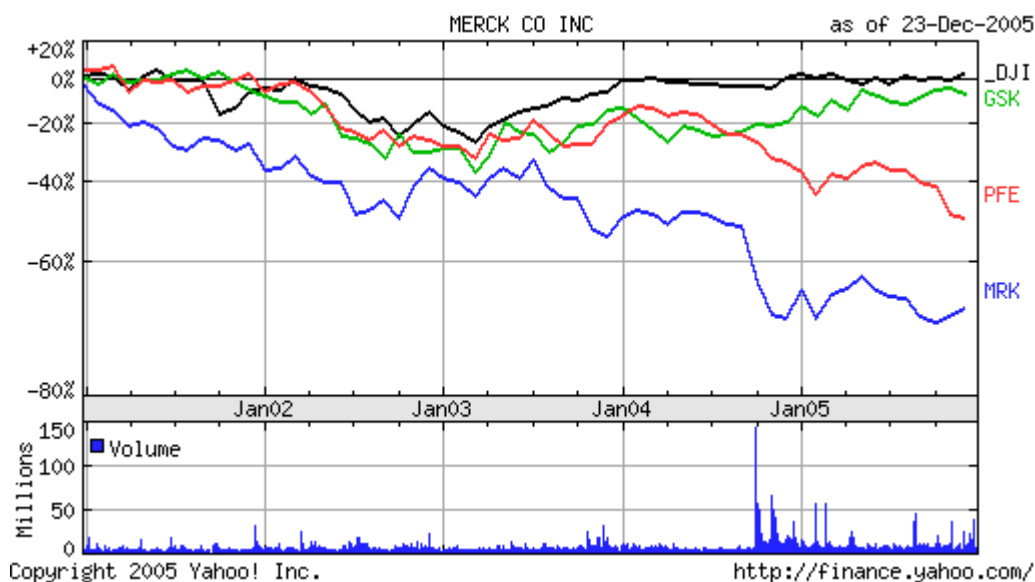
## **Merck de Mexico (MSD): A Case Study in Positive Deviance**

## STEEPED IN CONTROVERSY

The Miami Herald article headline reads: “Merck to cut 7,000 jobs.”

Embattled drug maker Merck & Co. said Monday it will cut 7,000 jobs – 11% of its workforce – and close or sell five manufacturing plants in the first phase of a reorganization meant to save up to \$4 billion by the end of the decade. Its shares dropped more than 4% in afternoon trading....Merck faces the loss of patent protection in June for its blockbuster cholesterol drug Zocor [the world's second biggest drug] and thousands [i.e., 12,000] of lawsuits and billions of dollars in potential liability from its recalled painkiller Vioxx....Merck has slipped from being the world's third biggest pharmaceutical to number 5 in recent years. (Johnson)

According to the same article, Merck's R&D pipeline is lackluster, which bodes ill for the pharmaceutical because of the long lead time it takes to innovate and market new drugs. At a market cap of \$70 billion Merck is not a small company, although far smaller than its two leading competitors Pfizer (PFE) and GlaxoSmithKline (GSK). Merck's stock price has dropped from a high of \$100 five years ago to \$32 today. Its PE ratio, at 15.41, lags both Pfizer's at 21.84 and GSK's at 26.61. The stock price comparison over time is even more dramatic as Merck fares poorly against its competitors and the overall market trend; its accelerated decline is troubling and of concern to industry watchers.



Source: Yahoo Finance, 2005

The Vioxx debacle, while still not settled, has been the thorn on Merck's side for several years. The drug was introduced in 1999 as an antidote for chronic pain usually associated with arthritis. Several well-documented deaths have been attributed to the prescribed use of the drug. In September 2004, the Food and Drug Administration announced that "Merck is withdrawing Vioxx from the market after the data safety monitoring board overseeing a long-term study of the drug recommended that the study be halted because of an increased risk of serious cardiovascular events, including heart attacks and strokes, among study patients taking Vioxx compared to patients receiving placebo." (FDA) At the time of withdrawal, over two million people worldwide were using the drug. The FDA estimates that in total Vioxx has caused between 88,000 and 139,000 heart attacks, of which probably 30 to 40% were fatal. (Wikipedia) Merck continues to defend its practices. In its 2004 Annual Report, Merck CEO Raymond Gilmartin states that "when Merck made the decision to voluntarily withdraw Vioxx from the market, we believed that it would have been possible to market Vioxx with labeling that would incorporate the data from the APPROVe study. We concluded, however, that based on the science available at that time, a voluntary withdrawal was the responsible course of action....we do know that Vioxx offers unique benefits among coxibs marketed in the U.S....the [FDA] advisory committee concluded that the overall benefits of Vioxx outweigh its risks..." (Merck, 2004)

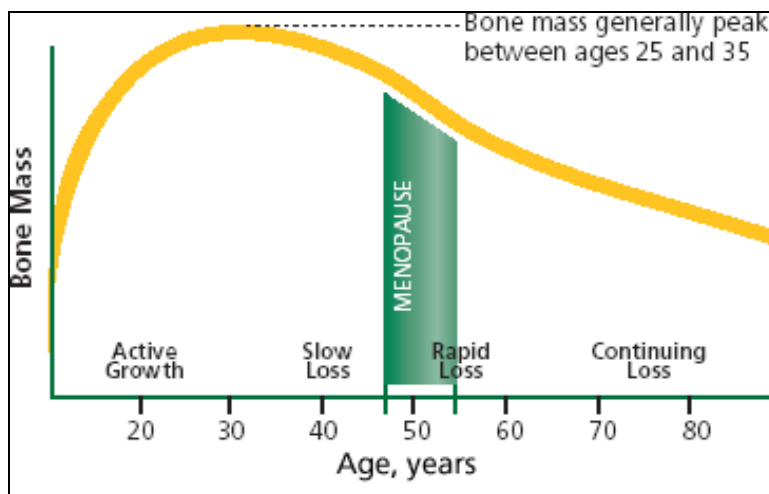
Yet even in the throes of controversy an organization can still offer pockets of excellence. Merck's positive deviance experience is a story of going against the grain and prevailing in adversity.

## **FOSAMAX**

A far less controversial drug in Merck's arsenal against illness is Fosamax (*alendronate sodium*). It is used in the treatment and prevention of postmenopausal osteoporosis, reduction of osteoporotic fracture risk in postmenopausal women, treatment of male osteoporosis to increase bone mass, treatment of glucocorticoid-induced osteoporosis, and for Paget's disease of the bone.

Osteoporosis is a disease that causes bones to become more porous, gradually making them weaker and more brittle. (“osteo” means *bone*; “porosis” means *porous*). Our bodies go through a continuous bone-building cycle in which old bone is broken down and new bone is formed. Osteoporosis is caused by an imbalance in this cycle in which too much bone is broken down and not completely built. Today, over 10 million individuals have or are [at risk](#) of osteoporosis - 80% are women. Almost 34 million more have low bone mass, placing them at increased risk of osteoporosis. Yet only a relatively small number of men and women with osteoporosis have been diagnosed or treated.....[if you] have osteoporosis, that means that your bone mass is below normal — at least 20% below that of a population of normal young adult women. (Merck, 2005b)

Osteoporosis is particularly prevalent among women past the age of 50, but may not be prescribed until the patient is well into their 60’s or even 70’s. Rapid bone mass loss usually starts taking place around 55 years of age.



Source: Merck, adapted from Wasnich RD et al. *Osteoporosis: Critique and Practicum*. Honolulu, Hawaii: Banyam Press; 1989.

Other than estrogen therapy, several drugs besides Fosamax can combat osteoporosis: Ibandronate (brand name Boniva®, by Roche), Risedronate and risedronate with calcium (brand name Actonel® and Actonel® with Calcium, by Aventis), and Calcitonin (brand name Miacalcin®, by Novartis).

## INTRODUCTION TO MERCK DE MEXICO

Merck & Co., Inc. is a global research-driven pharmaceutical company “dedicated to putting patients first.” Established in 1891, Merck discovers, develops, manufactures and markets vaccines and medicines in over 20 therapeutic categories. Merck’s stated mission is “to provide society with superior products and services by developing innovations and solutions that improve the quality of life and satisfy customer needs, and to provide employees with meaningful work and advancement opportunities, and investors with a superior rate of return.” It lists five Corporate values which inform decision-making and day to day practice (Merck, 2005a):

1. Our business is preserving and improving human life.
2. We are committed to the highest standards of ethics and integrity.
3. We are dedicated to the highest level of scientific excellence and commit our [research](#) to improving human and animal health and the quality of life.
4. We expect profits, but only from work that satisfies customer needs and benefits humanity.
5. We recognize that the ability to excel -- to most competitively meet society's and customers' needs -- depends on the integrity, knowledge, imagination, skill, diversity and teamwork of our employees, and we value these qualities most highly.

<b>Financial Highlights</b>			
<b>Merck &amp; Co.</b>			
<b>2004</b>			
(\$USD millions)			
	<b>2004</b>	<b>2003</b>	<b>2002</b>
Sales	\$22,938.6	\$22,485.9	\$21,445.8
Costs, Expenses and Other	\$14,964.1	\$13,434.3	\$11,794.1
Income from continuing operations before taxes	\$7,974.5	\$9,051.6	\$9,651.7
Net income	\$5,813.4	\$6,830.9	\$7,149.5
Basic Earnings per common share	\$2.62	\$3.05	\$3.17
Total assets	\$41,572.8	\$40,587.5	\$47,561.2
Capital expenditures	\$1,726.1	\$1,915.9	\$2,128.1
Number of stockholders	216,100	233,000	246,300
Number of employees	62,600	63,200	77,300

Source: MERCK & Co, 2004 Annual Report

The controversies mentioned earlier have had a sobering impact on the company's financials. With stagnating sales, increasing costs, deteriorating margins, and stockholder discontent Merck needs a turnaround. Despite its recent missteps, however, Merck has a solid legacy to work from. It has been widely recognized as a leading company in the field of pharmaceuticals and has been on Fortune's roster of most admired companies. From 1987 to 1993, actually, it held the top post as the U.S.'s most admired company.

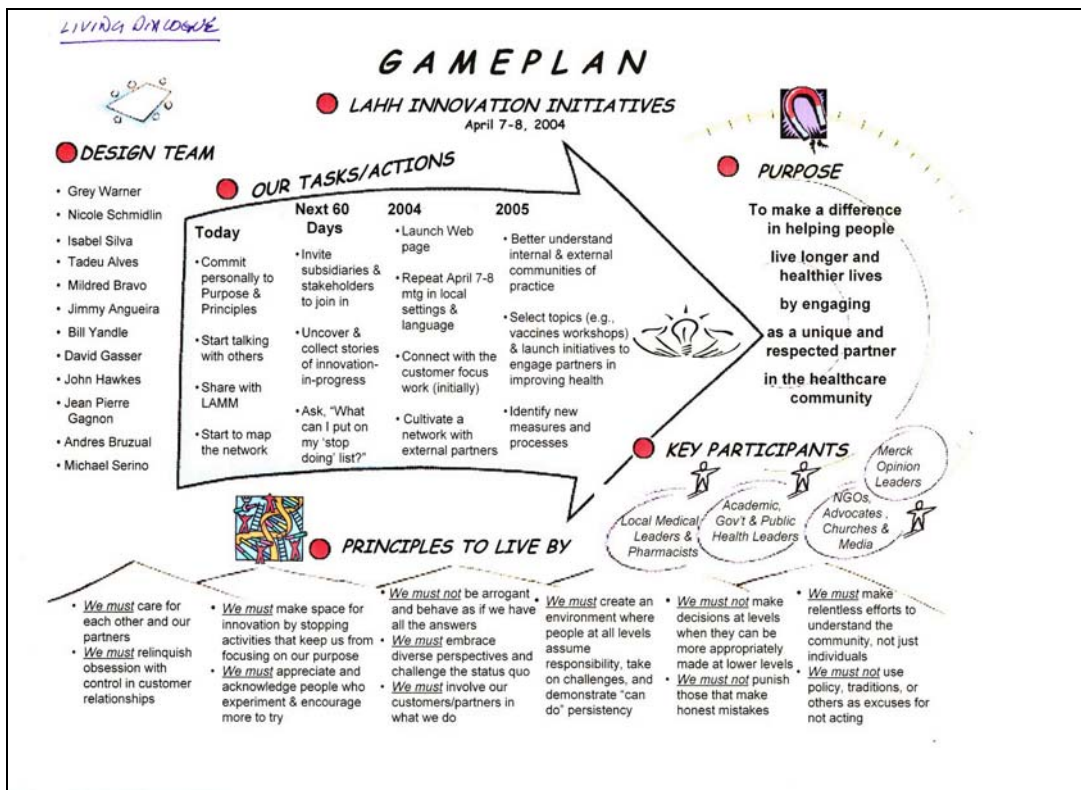
Merck Sharp and Dohme de Mexico (MSD) has been operating in Mexico since 1932. The Mexico division is fully integrated into the Latin America group headed by Grey Warner. The Latin America group is characterized within Merck by being both very profitable and an innovator in management practices. Grey's former boss at Merck, Henri Lipmanowicz, was at one point President of the Merck Intercontinental and Japan Division, and a member of the Management Committee. Today, Henri – a long-term student of complexity science -- is the Chairman of the Plexus Institute. MSD has been recognized in Mexico as one of the 20 best firms to work for, one of the best firms with regard to transparency, one of the 100 most important multinationals, one of the top 100 exporters, and 143<sup>rd</sup> of the 500 most important companies in Mexico.

## **LIVING DIALOGUE**

To place the positive deviance experiment in MSD in context, and to understand the environment in which it came about, we first have to understand Grey's vision for cultural transformation. The Latin America Group, and MSD within it, has been working at cultural transformation for approximately ten years. The recent version of this cultural change program is called the Living Dialogue and it exhibits the following characteristics:

- a Design Team composed of executives from the Latin America group and world headquarters specialists
- Key Actions, which for 2005, consist of better understanding of the communities of practice, selecting key initiatives to work with partners, revamping the measurement system

- a Purpose of community engagement through partnerships and collaboration
- Principles to live by regarding openness, transparency, risk-taking, humility, diversity, action-orientation, integration with the community.
- Identification of Stakeholders: churches, NGO's, academia, the government, local medical leaders, opinion leaders within Merck.



Source: Andres Bruzual, MSD, 2005

Underlying the cultural change is a drive to innovation. Grey clearly understands what leading innovation practitioners have been stressing for some time: "...companies that want to succeed in today's competitive environment need much more [than product innovation]. They need innovation at every point of the compass, in all aspects of the business and among every team member.... fostering a culture of innovation is critical to success." (Kelley) Organizing for innovation is then at the root of many MSD initiatives, ranging from communities of practice to the use of open space technology. Normally, when one of the

group's markets wants to experiment with an idea or approach the Design Team gets involved.

Experiments or pilots are encouraged as long as the approach is not replicated until it has been successful in one location. Recently, for example, the country manager in Venezuela, Alison Joslyn, decided to engage the workforce after a substantial downsizing; she decided to employ open space technology (OST) for the demanding group exercise. OST is always a risky proposition because it is one of the organizational dynamics approaches most lacking in structure; the participants build their own agenda and basically start the event from scratch. Alison's courage, and the executive sanction that goes with it, is typical of the environment MSD wants to foster in the region. And the positive deviance experiment at MSD is one of the initiatives taking place within this overall umbrella of cultural change.

## **THE PD INITIATIVE AT MERCK DE MEXICO**

Andres Bruzual is the head of one of three business units at MSD; he reports to the Country Manager, who in turn reports to Grey Warner. I met both Andres and Grey -- and David Gasser an organizational development consultant at Merck HQ -- at the Plexus Institute PD workshop in Boston. As guest speakers they briefly presented their case at the workshop. Their interest is how to continue the transformation of the business as they enter the 21<sup>st</sup> century. Of particular concern is the revamping of the business sales model focused on reach and frequency. The sales representatives (SR's) for Merck have to visit doctors' offices continuously during the year to sell certain products. Face to face selling is essential in this industry but very annoying for the doctors. One of the products is Fosamax, as we've seen a medicine which inhibits the onset of osteoporosis or weakening of the bones. Of the 180 sales executives in the Mexico Fosamax sales force, 22 are selling above expectations. The question for Grey Warner and Andres Bruzual is: why are these specific SR's, 12% of the sales force, doing well?

But how did the initiative start in the first place? Grey is very interested in bottom-up innovation, and an article describing positive deviance caught his eye. He invited Jerry Sternin to do a presentation. In August 2004, David Gasser held a preliminary workshop on PD in Mexico City, followed by Jerry's visit in January 2005. The purpose of this meeting was to select a topic for a PD experiment. As MSD is not considered very customer-friendly – where the customer is a physician being visited -- the core team of interested people selected customer satisfaction as the topic of interest. But further discussion proved to be frustrating since customer satisfaction in this context was difficult to define. The team went back to the drawing table and came up with two alternatives, both sales-related.

...we (The Design Team) had our weekly teleconference and I mentioned to them that we were working on the problem definition for the Positive Deviant project....they gave the same advice you [Jerry Sternin] gave us: Keep it simple, small, easy to measure and practical.....The Core Team of PD...agreed that the initial idea of....Customer Focus would not be practical and easy to measure...we brainstormed for three hours and...our first proposal is 15 out of 21 districts that have responsibility for Fosamax have an evolution index below 100, as a consequence we are losing market share. We believe this is very real and clear statement on one specific problem we are facing with one of the more important products here in Mexico. It is concrete, simple, and easy to measure it. Also the community is well-defined...Our second proposal is: Proscar is losing market share in half of the territories of the country. Proscar is a smaller product and only 19 representatives have responsibility for it.  
(Bruzual, 2005a)

Districts that were doing well in Fosamax sales had a market share of 52% vs. an average of approximately 45%. And within the well-performing districts several SR's were doing even better. In the process of selecting positive deviants, Andres points out that they had to scrub the data for special causes, like government accounts. (Bruzual, 2005b) Selecting the PD's was an activity carried out by the Core Team using the scrubbed data. Their selection coincided almost 100% with a management validation.

The sales force in the PD experiment sells Fosamax as well as other related products, and while 60% are men, most of the PD's are women. The SR's are well trained in the reach and frequency sales model, which is now 50 years old.

Sales techniques include the carrousel and the mirror; the first is a sales frequency logistic used to coordinate visits to the physicians. The second is the SR's counterpart in a given region; the mirror is a "twin" which follows up on doctor visits and buddies up to engage certain segments via reinforcement and repetition. In medical rep sales, it's key to note that -- as opposed to other sales activities -- the medical rep doesn't close the sale with a physician. The drug is actually bought and stocked by a pharmacy. All a rep can do is influence the physician to prescribe the drug.

The sales rep is trained to "hit" each target or doctor several times per year. Face to face selling is essential, but time consuming and annoying. Many doctors considered the SR's mere vendors. Positive deviant SR's are perceived as "equals" by the doctors. These SR's take the time to build relationships and partner with the physicians; they are providers of useful information, and not only product vendors.

When it came to discovering PD practices, there was no "wow!" Most of the practices were not tool-based but rather relational. And most of the SR's engaged in these practices of building relationships stated that "vocation is no obligation." While most of the sales force were using common sense behaviors typical of most sales forces, the PD's were spending quality time with the physicians; they listening instead of "sold"; they went deeper into pharmacy purchasing patterns; they localized their sales pitch; and created an environment for the sharing useful information. Most of the time, PD's were selling their knowledge of the products, not the product itself.

**Common Behaviors**

- Visit on average 8 physicians a day
- Communicate three times per week with mirror
- Call physicians on their birthdays and important events
- Distribute samples to all physicians
- Respect the physicians' time
- Check with pharmacies to see how product is moving
- Use visual aids to communicate product's advantages

**PD Behaviors**

- Physicians speak most of the time (60%)
- Pharmacy prescription audits to validate physicians' prescribing habits
- Keep up to date on local current events to make better conversation with physician
- Use of company resources to make arrangements for visits and other logistics
- Use of satisfaction surveys at events
- Check pharmacy stocks pre and post events to gauge impact of presentations
- Constant repetition of the product name and the word "new"

Visit three pharmacies per day  
Achieve 90% coverage of specialists

In the 20 minutes of the visit, 90% of the time is spent on business  
Comprehensive and integrated teamwork with mirror

Source: David Gasser, MSD, 2005

The PD initiative at Merck is now well into the fourth or Design phase, having officially started in January 2005.

Date	Key Event
January 18-19	1 <sup>st</sup> formal PD workshop with Jerry Sternin
February 3	PD problem defined
April 5	Data Review
May – July	Spread of PD initiative outside Mexico City
July 18-19	2 <sup>nd</sup> PD Workshop
Aug – Sept	Entering Design phase
October 18-19	3 <sup>rd</sup> PD Workshop

I ask Andres how he feels about the process: “New behavior adoption would be optimal. Better prepared SR’s would be acceptable. And a best practice exercise which didn’t achieve dissemination would be a worse case outcome. Already, we have seen positive results, Fosamax is selling 17% better than last year vs. a market which is growing at 13%; and in doing so we have reversed the trend of the prior two years. We also have spill-over effects. For example, painkiller Arcoxia is selling well over last year at 34% vs a negative trend for the market. Even taking into account special causes, such as the retirement of similar products in the market...this is an outstanding result. A lot of learning is taking place across the board.” (Bruzual, 2005b)

True to form, Andres recognizes that the project is “theirs,” i.e. the SR’s. As the leader, he has to be patient, and let the process take its course. More fundamentally, he reveals that he has changed. His wife tells him that he doesn’t sweat “the small stuff” anymore, that he’s able to discern between the important and the trivial with more ease.

## THE EXECUTIVE POINT OF VIEW

Working in Merck's HQ in New Jersey, Grey Warner is a busy man. I have an interview with Grey one week after they announce massive lay-off's. I tell myself this is not going to be fun. Sure enough, my interview is postponed once, then twice. But, then, in spite of the first harsh snowstorm of the year, Grey is in the office and his secretary Miriam informs me that he'll speak with me in a few minutes.

I ask Grey to place this PD experiment in perspective for me. He responds that PD is one of a variety of tools – Appreciative Inquiry, Chaordic Design, Open Space, Conversation Café -- that Merck uses to instill openness and innovation. (Warner) He further states that he was searching for a way to have better conversations with physicians; one that is less cumbersome and invasive. Ultimately, he wants SR's to build better and longer-lasting relationships with physicians. Positive deviance is not a best practice approach; it's highlighting existing practices which work. All of the cultural transformation work, he has been leading is aimed at creating an environment where things can emerge, a learning environment. "This is a grown-up approach; we want to engage those employees doing real work."

Sustainability is again one of my concerns. "What happens if Andres takes on another assignment?" I ask. Grey tells me that it's not just Andres; it has become part of the organization. Reinforcement mechanisms have to be designed around the new business model, structurally and in training. Some clues that PD is working are apparent in the Viewpoint employee survey.

When I point out that Merck Latin America is doing well in a company that is struggling, Grey responds that in Latin America they have been at cultural transformation for a long time. They started from a very low base: a "jefe" culture, fierce internal competition, top/down best practices, and locations where all sorts of taboos were alive and well. Today, they are one of the most innovative parts of the company. "But we have to work at it. I relay to managers that they don't have to agree with me, but they do have to have a point of view. They need to engage

through self-organization, they have to own their initiatives. They have to work together. And I continue to ask how they're doing.”

## **INSIGHTS FROM PD**

1.- **Embedding PD in the environment:** At MSD, Positive Deviance is not a one-off exercise, but rather one in a continuum of exercises. Never an end itself, the methodology takes a back seat to the overall objective of fostering innovation and specifically building a new sales model.

2.- **Situations for low probability of success:** Andres states that he wouldn't try to do PD if managers felt strongly that they were the only problem-solvers; or in very small groups, where the likelihood of finding PD's would be difficult; or in highly politicized or unhealthy environments; or in circumstances where internal competition is strongly valued.

3.- **Geography can hinder progress:** At MSD, unlike the other two cases, geography was a challenge. Most of the activity took place in Mexico City, and when it came time to disseminate the effort, there was no experience base in the interior of the country. As a result, progress has been very slow in the interior.

4.- **Frequency and dissipation:** Several participants commented on the fact that while the meetings and other events were very positive, they were too spread out. Even Jerry Sternin became concerned at one point about a “frayed” effort.

5.- **“This is not Vietnam”:** Jerry's centerpiece case study with the Save a Children NGO in Vietnam did not resonate as much in Mexico as in the U.S. Naturally, American and to some extent European audiences may find more interest in a country where both French and American armed forces fought for years. Mexicans wanted more examples closer to home.

6.- **“De-fosomaxing” the process:** So much effort was placed on the Fosomax sales force that some participants became concerned that the PD approach would be forever linked to the product.

**7.- The controversy of nurture vs nature:** Several interviewees, sales force veterans, simply believe that good salesmen are born and not made. In other words, there are positive deviants, but it's simply impossible to learn from them. One experiment may not be enough to convince them.

**8.- The change in the change agent:** Andres claims to have been changed by this experience. Several sales managers also said the same. But it's difficult to discern if PD itself was the cause of the change. This is an organization that has been undergoing a very long change process over the course of many years.

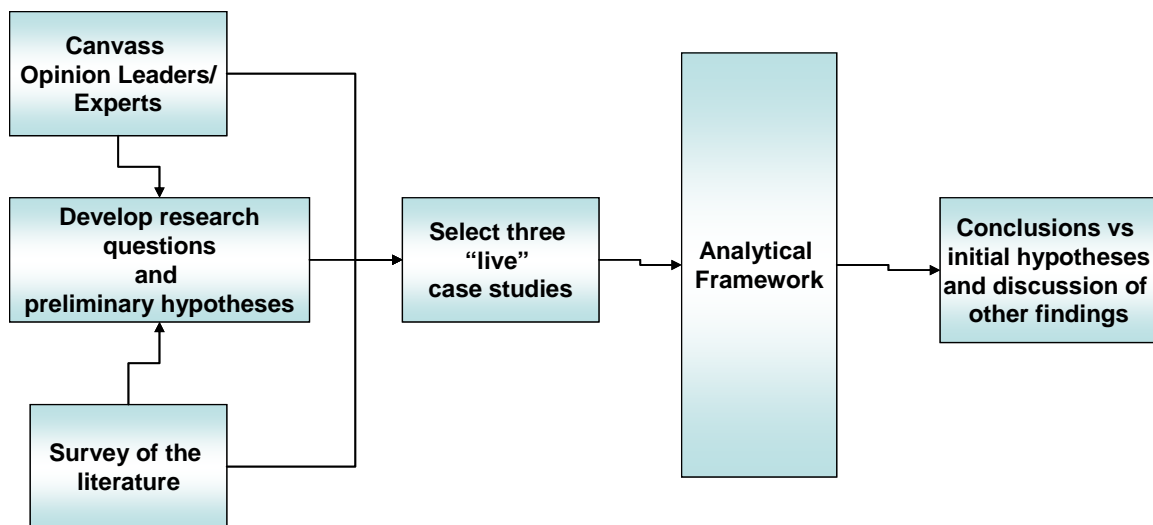
## **CODA**

More than in the other case studies, or in speaking with opinion leaders, or even at the PD workshop, the people at MSD are using a new language in reference to daily work. They speak about contagions, vectors, networks, viruses, conversations...all of this may be the result of the industry they happen to work in, or the many years of cultural change in the system. Just the same, if language is an indication of changing norms, then positive deviance could be more than a passing experiment, an oddity, at Merck.

## Part 4: Case Studies: Analysis

### APPROACH TO DISSERTATION

Before proceeding to analyze the three cases, this may be an appropriate space to step back and outline my approach to this dissertation. My investigation into Positive Deviance followed the logic depicted in the following diagram, although it turned out to be more iterative than linear. I sought out opinion leaders and experts like Dr. Richard Pascale, Jerry Sternin, Dr. Marian Zeitlin, Barbara Waugh, and others and began a dialogue via phone, email, and at times in person. Dr. Pascale and Jerry Sternin were kind enough to read and comment on early drafts. As part of this dialogue and learning from practitioners I leveraged the Plexus Institute, a focal point for complexity science networking in the U.S. I also attended the PD Workshop held by Plexus and Tufts University in June 2005.



My survey of the PD literature was limited by the fact that while there is substantial amount of material regarding the fifteen or more years of work in the developing world, there is very little documented and readily available material on PD work in organizations. As a result I had to rely heavily on personal communication, emails, annual reports, internal presentations, meeting minutes, project plans, etc. I did gather, however, the material to which there was public

access. My research questions were fed by a curiosity and what I interpreted as an anomaly, namely the almost exclusive use of PD in community-based work. However, this was the most iterative element of the logic since new information led to me to reshape and revise my views.

The case study approach was a given almost from the outset since PD is an emerging method and quantitative analysis would be severely handicapped by having only a few data points. I would like to say that I approached the case studies through ethnography as a participant/observer, but this claim would be quite a stretch since I did not “live” in these organizations and had rather limited contact with them. My method was more journalistic in that I was interested in fleshing out their story, i.e. the organization’s journey into PD. This journalistic or impressionistic way of depicting the organizations was balanced by my experience in conducting structured organizational assessments using systemic tools like those in use at the U.S. Baldrige National Quality Program (NIST). The number of case studies selected was based on the need to have some variety and the reality of keeping the investigation within a timetable and budget. The organizations selected were based on availability and access, as well as the small pool of potential candidates.

For analytical frame, I chose two lenses. First, Everett Rogers’ seminal work on the dissemination of innovations seemed a good fit for both my research questions and an emerging phenomenon like PD. Several opinion leaders I interviewed seemed to think so as well. Second, I used my own homegrown framework to compare and contrast the cases as different elements emerged during my own work in progress. My conclusions are based on the slice of PD I actually had a chance to witness and partake in.

## **CONTRASTING AND COMPARING**

The three organizations depicted in these cases are very different but they do share some common elements. They are all devoted to the life sciences, and this has more to do with the network that brought me to them than any other specific

reason. The Plexus Institute brings together complexity theory and the life sciences. It has a diverse membership, yet the core is composed of professionals in the fields of healthcare, psychology, basic sciences, etc. All three organizations have at least one opinion leader who is part of the Plexus network. And these opinion leaders were all present, either in full or in part, at the June 2005 PD workshop I attended.

To compare and contrast the PD journey in these organizations, the following table exhibits fourteen attributes. No particular science was invoked to select all of the attributes, except that for example several change management theories have the environment or framework play a leading role (Contingency Theory), and -- also by way of example -- most theories stress the role of the CEO or change agent.

<b>Overall Framework</b>	<b>Waterbury</b> "The Healing Environment"	<b>VAPHS</b> Toyota Production System	<b>Merck</b> "The Living Dialogue"
<b>Framework Influence</b>	Slight	Significant	Significant
<b>Driver for Change</b>	Education of medical practitioners	Resource-constraint	Innovation
<b>Trigger Primary Change Agent</b>	Executive Opinion Leader	Opinion Leader Opinion Leader	Executive Opinion Leader (Business Unit Leader)
<b>Positive Deviants</b>	(MD, Visiting Staff Physician) Patients, families, medical staff	(MD, Internal Consultant) Patients, families, medical and support staff	Sales Reps
<b>Focal Issue</b>	Medicine reconciliation	MRSA infection reduction	Increased sales of Fosamax
<b>PD Approach</b>	Pure	Hybrid	Pure, but one of many
<b>PD Phase</b>	Design plus	Determine/Discover	Design
<b>Initiation</b>	October 2004	July 2005	January 2005
<b>CEO</b>	Slight	Substantial	Moderate
<b>Involvement J. Sternin's Involvement</b>	Substantial	Moderate	Substantial
<b>Outcomes</b>	Positive and attributable	Too early to tell	Positive, without attribution

Overall Framework and its influence on PD initiative: all three organizations are working within a framework or umbrella of initiatives. At Waterbury, the “Healing Environment” is a brand name for the hospital’s care-giving philosophy which sits in the background of daily activity. But even so, the philosophy would probably inhibit certain change efforts, like reengineering for example, while fostering some asset-based approaches. There’s friendly ground here for PD. Likewise at Merck, although the Living Dialogue is not in the background at all, but rather in the foreground. At VAPHS, so much emphasis has been placed on the Toyota Production System (TPS) – mostly a deficit-based, error and waste reduction culture -- that managers realized PD would only function if it were somehow merged into the TPS culture. All of this would indicate that the management philosophy and framework of an organization does play a role in cultivating a PD initiative.

Driver for change, trigger, and primary change agent: each organization had a different driver for the change process using PD. At Waterbury, at least for the primary change agent, there is a keen interest on medical education, i.e. in making medical education real, where physicians interact with and relate intimately with patients, a return to the craft of medicine. At VAPHS, there was a clear realization that for the dissemination of the TPS model considerable resources would be required and PD offered a more resource-neutral alternative. And at Merck, “innovation from below” is the cornerstone of its transformation efforts. The trigger for the PD initiative was at times the chief executive or COO, and sometimes jointly with an opinion leader who brought the CEO into the picture -- the latter was the case at VAPHS where Jon Lloyd procured Dr. Jain to participate. In every case, an opinion leader assumed the role of primary change agent: Dr. Tony Cusano at Waterbury, Dr. Lloyd at VAPHS, and Andres Bruzual at Merck de Mexico. While change driver doesn’t seem to have a bearing across the three cases, the CEO and a key opinion leader have to provide sanction for the effort and lead the charge.

Focal issue and positive deviants: All three organizations face very different issues, in two there was a gap to close, i.e. drive the measure to zero; in another, Merck, there was an amplification of performance by way of additional sales. The positive deviants ranged from the simple – Sales reps at Merck – through the mildly complex – patients, their families, and medical staff at Waterbury – to the truly complex – basically the entire care-giving system at VAPHS. While it's too early to tell how the VAPHS journey will eventually play out, this is a very wide variety of issues and scope and scale of deviance.

PD approach, PD phase, and initiation time frame: Waterbury and Merck have been working on their PD initiative for more than a year; VAPHS is getting started. While Waterbury can be considered a completed case, both VAPHS has a way to go, and Merck is entering a defining phase. The approach at Waterbury is almost a textbook PD approach, and the same at Merck except for them is one more tool in use. At VAPHS, the marriage with TPS is a true experiment in hybrid methodologies. We see here several patterns: a 12-month period seems to be adequate for a PD experiment, at least for a first attempt; pure approaches seem to work, while the jury is out on a hybrid; PD can work by itself or as a member of a tool kit.

CEO and Expert Facilitator involvement: Perhaps not surprisingly given PD's affinities with complexity science, in all three cases the role of the CEO was at best monitoring at a distance. John Tobin at Waterbury and Grey Warner at Merck had very little influence once the initiative got started. And while Dr. Jain at the VAPHS did play a crucial part in the early stages, it is not clear how much involvement he'll have moving forward. In fact the involvement of the change agent, once the initiative gets started -- or to use complexity science terms, once the initial conditions have been set – is remote. Dr. Cusano clearly states that it was “easy” for him to lead because he didn't have to do much of it. However, in spite of the much repeated phrase among PD circles that the facilitator is irrelevant and that the approach is not expert-driven, Jerry Sternin's presence has been essential in all three cases to both kick-off the effort and sustain it.

Jerry brings credibility and years of practice to the initiatives. And his visits serve as project milestones to prod work along.

Outcomes and sustainability: It's too early to tell the outcome at VAPHS. At Waterbury and Merck the outcome is positive, although only Waterbury can quantifiably attribute its success to PD and promise its sustainability.

## DISSEMINATION OF INNOVATIONS

Everett Rogers' groundbreaking study on the diffusion of innovations (Rogers) is a seminal work in the rate of adoption of innovations. It has the advantage of being recognized as a robust frame from which to examine innovation, and stands the test of time. If one of my concerns is the adoption of PD in organizations, certainly Rogers' framework can be of assistance. In the chart below, we have the five adoption attributes: relative advantage, compatibility, complexity, triability, and observability. In addition to the three organizations, an ideal organization is presented based in part on the Plexus Institute Grant Proposal for PD research (Plexus), which will serve as the standard or reference point vs. the actual observed practice in the three cases. In this light, PD is seen as an innovation (in change methodology) which in turn brings about social innovations.

	<b>Ideal Case</b>	<b>Waterbury</b>	<b>VAPHS</b>	<b>Merck</b>
<b>Relative Advantage</b>	PD is more favorable than status quo.	Present	TBD	Present but some are questioned
<b>Compatibility</b>	Internally-generated PD practice	Present	Problematic	Present
<b>Complexity</b>	PD relies on the community to solve the issue without special resources.	Present	TBD	Present
<b>Triability</b>	Trial of PD practice in a safe environment	Present	TBD	TBD

<b>Observability</b>	Positive Deviance inquiry and practicing the PD behavior are observable	Present	TBD	TBD
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Relative advantage: according to Rogers (Rogers, Plexus 2005a) the innovation has to be perceived as more favorable than the competing status quo. Ideally, then PD is advantageous because it highlights positive deviants with innovative practices, and it does so without appeal to special resources. At Waterbury, this was indeed the case. Medical reconciliation was a non-issue until the PD approach made it an issue, and then it proceeded to identify patients and families, and staff members with better ideas. At Merck, PD is recognized as offering different solutions but their implementation has yet to be seen. Some managers question whether these practices can be easily transmitted from the stellar reps. And for VAPHS it's still too early to tell.

Compatibility: the innovation has to be compatible with the community's existing values and the past experiences of potential adopters. In the ideal case, PD, as the innovation, is compatible because it provides local solutions from within. And the PD's are within the community. At both Merck and Waterbury, PD fits within the value system of the organization. At VAPHS, although leaders are aware of potential issues as they try to merge PD with the older TPS initiative, the issue of compatibility may prove to be crucial for adoption.

Complexity: in terms of understanding and use, the complexity of the innovation should be low as perceived by potential adopters. Ideally, then, PD is simple to understand apply. However, first time use does have its learning curve. At Waterbury and Merck employees are in effect leading the effort with scant supervision.

Trialability: is the degree to which the innovation may be experimented with on a trial basis. PD encourages practice above all; first by identifying PD behavior and then by having the PD behavior demonstrated and practiced. This attribute is present in the Waterbury case study, and to be determined in the others.

Observability: is the degree to which the results of the innovation are visible to others. This is a true strength of the PD approach as observation is made possible at several points of the process, including the identification of PD practices and then during the adoption of these practices. The results obtained at Waterbury are evident.

In an ideal case, Positive Deviance would seem to meet all of Rogers attributes for rapid adoption, but for Complexity. It may be the case that as an emerging method for organizational change, PD may need a few cycles of use before it meets the requirements of low Complexity -- in Rogers use of the term.

Waterbury Hospital, an actual case, does seem to meet in practice all of the attributes, including to some degree the requirement of low complexity.

Does this application of Rogers framework to PD mean that PD should exhibit a rapid adoption rate? There are too few cases of organizational change using PD to assess the criticality of the complexity attribute. For example, I would like to see a second application at Waterbury Hospital, without their recourse to Jerry Sternin, to be able to make a bolder claim.

Another of Rogers' notions is that of diffusion networks, where opinion leaders use their social networks to promote innovations and lower the risk of rejection among early adopters. The Plexus Institute may be playing this role in healthcare networks today, and as a consequence we may see more PD applications in the near future.

## Part 5: Conclusions

I was tempted to headline this last part as “Tentative Conclusions”, but then all conclusions are tentative or temporary until someone comes up with better, more refined, more persuasive conclusions. I propose to walk through lessons learned or propositions, a discussion of original hypotheses and alternate hypotheses, limitations of my investigation, and some topics for further research.

### LESSONS LEARNED

Proposition #1: *In Positive Deviance, it takes a while to get the problem right.*

With any new technology or innovation the match between problem and solution takes a while, and some trial and error, to be effected. At Waterbury and Merck the initial proposed problem sets simply did not work and were discarded.

Proposition #2: *The champion or change agent is not selected or appointed, but rather emerges.* In every one of the three cases, the change agent self-selected. At Waterbury, Dr. Cusano isn't even a hospital employee, At VAPHS, Dr. Lloyd is a retired surgeon who works just as much for the CDC (The Federal Centers for Disease Control and Prevention) as for the MRSA Collaborative. Andres Bruzual at Merck volunteered for the PD experiment when he attended a Jerry Sternin presentation.

Proposition #3: *The CEO does not have to be actively involved in the PD initiative for it to move forward (but it helps if they are, at the right time).* Dr. Jain's involvement at VAPHS was crucial in getting sanction for the MRSA Reduction Initiative. John Tobin at Waterbury and Grey Warner at Merck introduced the concept of PD to their respective organizations. But once the projects initiated, the leaders stepped back to some degree. This was also the case for the change agents.

Proposition #4: *For PD to sustain itself, reinforcing mechanisms are a good thing.* Measurement is central to a good PD initiative. It should be simple, agreed to by

the community, and visual or accessible for all to see and appreciate. But other reinforcing mechanisms also help. At VAPHS for instance, the MAGNET certification and its professional councils made up of nurses can serve to institutionalize PD practices. At Waterbury, external JCAHO standards will be widely communicated as these are being modified to include medical reconciliation guidelines.

Proposition #5: *The positive deviant isn't always who you think it is.* It isn't always clear at the outset at what level the deviance takes place or who's responsible for it. Take the case of patients and medical reconciliation at Waterbury Hospital. First, is the deviance taking place in one unit or several? And then, within given units, is it apparent in one patient or several? And once the deviance is identified, who is responsible...the patient, the family, the attending nurse? And as Tony Cusano pointed out, the culture of the place or the profession may be need to be changed. For example, the prevalent notion that patients go to hospitals to be healed and bear no responsibility for after-care is flawed and dangerous.

Proposition #6: *Positive Deviance thrives on stories (e.g. Jerry in Viet Nam), so an appropriate, locally-developed icon helps to crystallize the process.* At Waterbury, the pink card...at VAPHS, uncooked macaroni....at Merck it's more conceptual, possibly the notion of living dialogue or innovation. These icons have a symbolic purpose which is to remind participants of what the initiative is all about. They are also generative in that they help to perpetuate awareness, at least among the participants in the initiative: "why are we doing this."

Proposition #7: *Positive Deviance requires that you both honor and leverage the local culture.* At VAPHS, the fact that most if not all of the patients are ex-military personnel helps create an audience for PD practices: "you don't want to spread the bacteria to a fellow-veteran, do you?" And John Tobin, at Waterbury, is quite adamant that he favors change efforts and methods which are germane to a care-giving culture.

Proposition #8: *The notion of empowerment in PD is made possible through self-awareness.* In his wonderful little book on rural education in Brazil, Paulo Freire, talks about the first time an illiterate peasant walked up to him and said: “I know I can’t read but after listening to you, I know that I’m a human being.” (Freire) Similarly, PD sets the stage for self-discovery and awareness via conversations in the workplace about how work gets done and the problems these practices create.

Proposition #9: *Be mindful of PD, it changes the change agent.* This was certainly the case at Merck and probably at Waterbury; it’s too early to tell at VAPHS. Andres Bruzual was very direct in his communication: “...the process has changed me...I listen more...have more patience...”

Not a proposition, per se, but more of an observation is that while most of the claims made about PD seem to bear out in practice, the claim to be resource-neutral is problematic. In all three cases, the approach required considerable resources. It is true that these resources for the most part, were not special or expert-driven....they were all found within the system. Just the same, not requiring special resources doesn’t mean that resources are not required.

## **REJECTED HYPOTHESES?**

Does Positive Deviance, then, only work in communities, and only in developing countries, and only if sanctioned by an NGO? No. Waterbury Hospital in Connecticut, a private not-for-profit institution, defies all of these assertions. And you only need one positive case to disprove a negative universal hypothesis. The issue, though, is what if there’s only one case? Work at Merck and VAPHS, while progressing rather steadily, is still not sufficiently completed to be able to fully evaluate the outcomes of their respective initiatives.

It is probably accurate to say that for profit institutions have a more difficult time finding sanction for a PD initiative (Pascale, 2005a). In these organizations in return for relatively higher salaries and benefits, and in spite of increased calls for

risk-taking and innovation, employees have to conform as leaders believe they have a right to tell you what to do. Moreover, if the environment is excessively political, or one in which internal competition is encouraged, or if managers felt compelled to be the only problem-solvers then a PD intervention is probably a waste of time. (Bruzual, 2005b)

I believe that the spread of PD in development work is due to several factors -- the two most salient being the scarcity of resources in the developing world (Pascale, 2005a) and the effects of an extensive diffusion network. As Marian Zeitlin and her colleagues, mostly academics, published the results of their work in the late 1980's, it became available to the development community of practitioners....among them Jerry Sternin. Once Jerry and the Save a Children NGO had their first few successes in the early 1990's, opinion leaders took over in creating a critical mass for the spread of PD in this arena.

And hence, here lies the *lack* of spread or diffusion in the developed world of organizations. We have a bias in our organizations regarding the role of investment and resources. Anything worth doing, goes the assumption, requires substantial amount of investment or resources. So surely an approach which claims not to require resources – whether it actually does or not is quite another matter -- cannot be taken seriously. The other part of this argument has to do with diffusion networks. In the U.S., Six Sigma did not really take off as an improvement methodology until Jack Welch of GE fame came out in favor of it publicly and industry networks like the American Society for Quality became diffusion conduits. Thus far, PD was being tried, is being tried, in individual and disparate organizations. We still don't know, for example, how many organizations have PD experiments underway. Either it is being done under the radar of senior management, or it's seen as a competitive advantage, or the efforts are very new. While the Positive Deviance Initiative at Tufts University does fill the function of a nexus for PD work in the public sector, it is too ensconced within the Nutrition Science arena to serve as a true diffusion network. More recently, as the Plexus Institute begins to play a larger part in its

deployment, PD may find the appropriate diffusion network for it to spread in the U.S. – at least in healthcare, one of the major concerns at Plexus.

## **LIMITATIONS OF RESEARCH**

The fact of the matter is that applied positive deviance is an emerging approach, with hardly any visibility in the business arena. The three cases researched are very few from which to make grandiose claims or generalizations. And my access to these three organizations came relatively late in my investigation, roughly in August 2005. Of the three cases, only one has truly completed the PD cycle, i.e. Waterbury Hospital.

With scant documented experiences of PD in organizations, I relied heavily on informal and internal reports, emails, memo's, personal communication, organizational artifacts, etc. and this activity always carries the burden of personal interpretation.

Finally, all of this may change shortly. Jerry Sternin spoke at Davos earlier this year, i.e. 2005; he and Richard Pascale are working on a book; one of their articles was published by the Harvard Business Review in May; and a several PD conferences have taken place this year, e.g. Boston and Toronto. PD may yet be the next big thing. In the meantime, it may be more practical to actually try doing PD rather than attempt to classify it. A body of knowledge needs many cases, both successes and failures, to have a certain amount of credibility and relevance.

## **FOR FURTHER RESEARCH**

Further study could take several directions:

- 1.) As more results are made available for the three organizations studied here, it would make sense to do a follow-up study when all of the results are in.

- 2.) Although apparently books are in progress, a biography of Jerry Sternin, as the acknowledged “father” of applied positive deviance, may be of interest -- particularly as a study in charisma and diffusion networks. The role of Jerry’s wife and collaborator, Monique Sternin, needs to be further clarified.
- 3.) The notion of organizational culture and metaphors (Morgan, Lakoff) and its tolerance of asset-based approaches like PD is a topic waiting to be analyzed.
- 4.) In emerging methodologies, what happens in the absence of the founder of the methodology? Or in a more direct form: no Jerry, no PD? Can the PD approach survive the first generation of activity in the public sector?
- 5.) A potentially appealing aspect of PD may be its positioning as a “non-method” method. Relying less on structure than on values, PD may have a better fit in organizations embracing a “post-methodological” outlook (Davenport).

## **CODA OF CODAS**

The beauty of social organization (Ramirez, Strati) lies in an organization’s ability to foster an appreciation for the truly good. To paraphrase Keats here may be meaningful: beauty is good and good is beauty. And when organizations can engage its members in an appreciation of supra-ordinate values, not as a monotonous rote of “living the company values”, but instead fully engaging in dialogue (Stacey, Shaw) all of the company’s stakeholders about *what* is valuable – then we are heading in the direction of becoming a good company.

Positive Deviance has the advantage over other developmental, change, and improvement approaches in that it searches for the good within. And the good is not only about good performance; it is also about what is right or good in itself. It may be possible to invoke PD to increase performance. I don’t think, though, one can use PD only to improve performance. And that is because it changes people. Focusing on the positive creates goodness. And I will make the claim with a small “g.” This is not the ultimate Goodness of the holy, it is the down to earth

and practical goodness of making workplaces more open, dynamic, representative -- and why not? -- beautiful.

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