Population Health Matters

Discovering Solutions Hiding in Plain Sight

For many of our healthcare challenges, there *already* exist successful behaviors and practices *within our communities*. Utilizing a process that helps our communities discover these practices so that they choose to make them their own (or modify them to work in their unique context) can lead to improvements at a fraction of the costs of inventing something new, with a much higher likelihood of sustainable success.

This improvement framework is called Positive Deviance (PD). It was originally described in the 1950s when researchers identified that some very poor families had well-nourished children. This epidemiological finding became a method for stimulating change in the 1990s when researchers from Tufts University, Jerry and Monique Sternin, worked with villages in rural Vietnam where children were suffering from malnutrition.

The Sternins helped the villagers appreciate that there were a few well-nourished children in their village, even within the poorest families. They then facilitated a discovery process so the families whose children were malnourished could learn how the PD families were able to provide nutrition for their children. Any practice that even one family was unable to do because of barriers they faced was discarded and referred to as "TBU"- true but useless. The Sternins then helped the villagers acquire the skills to reliably incorporate the handful of truly PD practices into their daily lives. All were simple and virtually free practices. For example, one practice involved mixing into the staple of rice for children, the shrimps, crabs, and greens that adults added to their rice. Though most families initially felt these foods were inappropriate for children, years later researchers discovered that 85% of the children in these villages had become well nourished, and that the

younger siblings born into these families had avoided malnourishment.¹

In 2006 the Sternins were invited to join a collaborative effort to explore how PD might contribute to solving intractable problems in healthcare. My current organization, Plexus Institute, brought new insights from science about change in complex systems, advances in network science, and a host of other processes for engaging frontline staff in creative problem solving. What emerged is now being called Adaptive Positive Deviance (APD). Sometimes the behaviors that become successful are those that already exist, but that are not widely known within the community. This is classic PD. In other cases, the members of community take elements of what is working for their peers and modify them to fit their local context through a process of experimentation and learning (APD).

The initial APD work in healthcare focused on reducing MRSA (Methicillin-resistant Staphylococcus aureus) transmission within hospitals. Funded by the Robert Wood Johnson Foundation and in collaboration with the Centers for Disease Control and Prevention, six institutions (including VA Pittsburgh Healthcare System; Albert Einstein Medical Center, Philadelphia, PA; University of Louisville Hospital; Billings Clinic, Montana; Johns Hopkins Hospital and Franklin Square Hospital Center, both in Baltimore, Maryland) learned how to use APD. During this time, I was the Chief Quality Officer at Einstein and participated in the training. We learned how to facilitate "Discovery and Action Dialogues (DADs)": 20 to 40 minute small group discussions designed to uncover PD practices, bring more people into the work, and foster action and ownership of the challenge of MRSA transmission by the front line staff. Other

organizations focused on different interactive methods, like improvisation and role play, to highlight the practices that worked and uncover the barriers that were faced.

In a conversation with Curt Lindbergh, PhD (August 2013), it was revealed that the ultimate results of the initiative were impressive in 3 of the 6 hospitals, where sustainable reduction in MRSA infections of over 70% have occurred.¹ As opposed to many change initiatives which begin with an organization-wide focus, this work was initiated with pilot units and volunteer participation. It then evolved in an organic fashion, with progress occurring more in phases than by steady incremental improvement.² Changes in social networks also occurred during the initiative. As people asked and answered the question, "Who else needs to be involved?" the social networks of people being viewed as resources regarding MRSA prevention got larger and denser- in other words, smarter.³ More people became involved in the work and more solutions were identified and created.⁴

For APD to be effective, leaders need to act differently. One of the common leadership responsibilities is to ensure that the organizational policies and procedures (which they helped develop) are followed. What if there are different behaviors that are occurring on the front lines that can lead to better outcomes? In many organizations, practices that deviate from policy are referred to as "workarounds" and are not supported and may even be suppressed. In an organization using APD, leaders must create the conditions to enable the continuous discovery of new behaviors that will lead to better results. Those discoveries will not come from the top of the organization, or from outside the organization, but rather from the front lines where the work is being done.

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In addition to the MRSA initiative mentioned above there are other examples of successful application of APD to serious healthcare challenges. The dialysis unit at AtlantiCare in New Jersey reduced central line-associated bloodstream infections by over 50% through APD-guided improvements.⁵ In a conversation with Mark Munger (August 2013), Allina Health in Minnesota has significantly reduced postoperative pain as reported by patients using APD. A consortium of university hospitals in Canada has successfully utilized APD for a number of patient safety challenges.⁶ Billings Clinic, a Top 100 hospital recognized by Truven Health and Becker's, has committed to APD as an organizational framework for change.

Let's think about the goal of achieving the "Triple Aim,"- the point where optimal health outcomes, healthcare experiences, and reduced healthcare expenses intersect.⁷ Our improvement focus is typically on "opportunities" (poor performance) and "best practices" (what has worked for someone else somewhere else). What if we flipped this focus 180° and looked for our own PD practices? What is already working well for us, in our context? Are there any patients with multiple co-morbidities who seem to be doing much better than expected? Are there any clinicians whose outcomes seem to be really impressive in areas where others are struggling? How are they accomplishing these results?

We need to create the conditions to connect the people with the problems -- the patients and the clinicians whose outcomes aren't optimal -- with those individuals whose PD practices enable them to achieve better results. We need to ask that population of patients and clinicians, "What would it take for you to adopt these practices that are already working for these peers?" The population would then be choosing to adopt these behaviors because they've seen the benefits in their peers and they decide this can work for them, too. This process would not require new technology, new therapeutics, or other new inventions. It requires the time to convene people and learn, and it requires trust. We need to trust in the PD process. We need to trust that the solutions already exist even though we may not currently be able to see them. They are waiting to be discovered and implemented by the people who need them the most.

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