Using Problem-Based Wisdom to Transform Governance Oversight to Insight

The Innovation of Problem-Based
Learning and Healthcare
Boards of Directors

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► Abstract

Small-group “problem-based learning” (PBL) has been used for decades to educate physicians about creatively solving diagnostic and therapeutic dilemmas. A similar approach may be helpful to healthcare organizations’ boards of directors as they seek innovative ways to compete in an increasingly complex and competitive landscape. Close examination of PBL demonstrates that it relies on many of the key principles underlying the “wisdom of crowds” and “generative governance.” This paper provides an example of a board evaluating a new technology initiative, and reviews the published literature that demonstrates how usual governance in the boardroom can be supplemented with PBL-based wisdom of small groups and generative discovery.

Mary Smith was initially thrilled when she was first asked to join the board of a large healthcare organization. She knew little about medicine, but was confident that her business acumen would complement the other directors’ skills. However, she soon

Editor’s Note: We often look hard at the CEOs of healthcare companies and ask: why cling to today’s revenue models and fail to build discovery for tomorrow? In this peer-reviewed article, **Dr. Jaan Sidorov** shifts the focus up the ladder of corporate governance: How do boards of directors, or trustees, begin to guide transformation? A member of the editorial board of our sister publication, *Population Health Management*, **Dr. Sidorov**, takes a creative approach—a framework for discovery at the highest level.

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discovered that while the enterprise had a prestigious reputation for clinical efficiency and innovation, things were different in the boardroom: whenever a complicated issue arose, the C-suite executives and the directors were prone to engaging in lengthy discussions that failed to identify the underlying value propositions or risks.

In **John le Carré's** spy thriller *Tinker Tailor Soldier Spy*, Soviet spy-master Karla is quoted as describing any committee as an “animal with four back legs.”¹ While small groups ideally exist to organize expertise efficiently and facilitate decision-making, the reality in many business settings is that executive leaders are prone to consuming hundreds of thousands of person-hours in meetings with little to show in enduring customer value.^{2,3} Boards of directors inside and outside the healthcare industry are just as vulnerable to this problem. As increasing regulation and demands for greater accountability have driven board meetings to more than 80 hours per director per year,⁴ so has interest in finding a meeting framework that results in greater governance efficiency and impact.⁵

This is especially true for healthcare boards of directors. Often made up of experts from a wide range of business disciplines, they are ultimately responsible for leading their organizations in the face of transformative payment reform, consumerism, government oversight, globalization, and innovation. As service delivery, insurance, pharmaceuticals, and technology continue to evolve, high-performance decision making in the boardroom is more important than ever in achieving financial success, high-quality clinical outcomes, visionary strategy, strong community relationships, regulatory compliance, and a talented C-suite.⁶

“As service delivery, insurance, pharmaceuticals, and technology continue to evolve, high-performance decision making in the boardroom is more important than ever.”

► The Necessary Versus Sufficient Ingredients of Effective Healthcare Boards of Directors

While Mary personally admired the Board Chair, Bill Jones, she often wondered if he was suited to that position. He often deferred to the more senior board members, one of whom seemed to dominate the discussions. If there was a non-routine recommendation from the CEO, it was often given a detailed review but always approved with little to no modification.

The amount of published and online literature on board effectiveness across multiple business settings outside of healthcare is testimony to the widespread concern about the topic. While academics, consultants, and business experts

have varying emphasis on the elements that make for high-performing corporate governance, most advocate for providing the right combination of *information, individuals, leadership, support, and organization.*

The same is true for governance in healthcare settings. For example, a report from the CENTER FOR HEALTHCARE GOVERNANCE emphasizes the importance of preparation with “key” pieces of information for board members who possess the requisite core competencies, high accountability, access to online technology, and reliance on a focused agenda.⁷ One in-depth literature review of what leads to high-quality non-profit hospital oversight suggests that boards should rely on multiple information sources, members with clear motives, effective leadership, dashboard metrics, and disciplined meetings.⁸ Other more immediate issues include attaining gender and racial diversity,⁹ as well as being sensitive to local constituency representation while also recruiting members with deep health industry competency.¹⁰ There is a considerable body of research indicating physician participation is associated with increased healthcare organizational performance,¹¹ while others have argued that nurses should be routinely considered for board membership.¹²

Yet, even if all these ingredients are present, truly insightful boardroom meetings are still the result of an alchemy that is difficult to create on-demand. When complicated issues arise, every process and skill described above is still no guarantee against resorting to obsolete heuristics, circular reasoning, over-attention to detail, or dominance by a strong-willed individual. The result can be meddling in day-to-day management or, alternatively, the generation of “group think” that fails to recognize a new value proposition or misses an emerging enterprise risk.

In other words, having the right information, membership mix, leadership, organization, and support are necessary, but are not sufficient in assuring that boards maximize their company’s ability to compete in today’s healthcare landscape.

► Wisdom of Crowds

Tomorrow's agenda included a proposal to create a health technology company. While she was no expert on the topic, Mary was aware that past efforts to “bolt” innovation onto the pre-existing medical delivery systems rarely met expectations. A quick GOOGLE search confirmed her suspicions. Thanks to informal past conversations with many of her board members, she knew that each of them had, in the course of their business careers, developed a frontline familiarity with the difficulty of altering pre-existing workflows in customer-facing settings. Could their individual insights be marshaled to increase the likelihood that this initiative would be successful?

While boards of directors benefit from having the right information, individuals, leadership, organization, and support, little has been written on how to adapt these resources, when the need arises, to tap the collective wisdom of its members. The phenomenon of group wisdom was first documented by **James Surowiecki** in 2005 when he noted that the decision making of intelligent crowds is smarter than the most knowledgeable expert.¹³ As input from the group is assembled and summarized, individual biases and errors are cancelled, and its mean answer is remarkably close to the truth. This “whole is greater than the sum of its parts” problem solving has been used in remarkable ways. WIKIPEDIA's open editing has provided an expert information source that is one click away.¹⁴ Prediction markets have demonstrated to be remarkably accurate in assessing geopolitical and financial risks.¹⁵ Crowd sourcing has been used externally by businesses to foster innovative product development¹⁶ and internally to engage employees in finding new efficiencies.¹⁷ Last but not least, the collective wisdom of HEALTH 2.0 has empowered patient insights that surpass that of an expert physician.¹⁸

Yet, while WIKIPEDIA, prediction markets, crowd-sourcing, and HEALTH 2.0 are important innovations that leverage the intelligence of large groups, is there a way to generate the wisdom of small crowds in healthcare governance settings?

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► The Medical Education Innovation of PBL

Mary reflected on her legal experience. She was aware of many examples of courtroom juries getting it wrong, but knew of research that has demonstrated that

informed, small-group decision making can get the right answer more often than widely appreciated.¹⁹ As one of her colleagues had wryly noted in the past, a jury of “six Forrest Gumps can still beat one expert.” Mary’s additional research revealed that many of the physicians working in her organization had been educated using a compelling version of small-group decision making.

In 1969, educators at MCMASTER UNIVERSITY MEDICAL SCHOOL first used “information processing theory” to place students in small groups for open-ended problem solving.^{20–22} This innovation led to PBL in which students meet with a facilitator to analyze a therapeutic dilemma, prioritize and assign learning objectives, use self-directed learning to gain missing information, and use reasoning skills to reflect on and achieve consensus on treatment options.²³ Over the many decades since, PBL has been widely adopted in graduate and postgraduate medical education. With more than three million references in GOOGLE SCHOLAR and more than 300 books on AMAZON.COM, significant evidence demonstrates it results in improved performance on national tests of medical knowledge²⁴ and greater competency,²⁵ while also fostering greater participant engagement²⁶ and satisfaction.²⁷ Even more importantly, when there is a diverse group of learners participating in open and informed vigorous discussion, it’s not unusual for new ideas to emerge that surprise even the *medical-faculty* facilitator.²⁸

This dynamic may sound familiar to non-medical business leaders who have seen effective small groups in action. While PBL *per se* has not been used outside of education, other authors have affirmed the merits of “group knowledge” in business settings.²⁹ In the field of healthcare administration, a process of “collective wisdom” has been applied to the creation of best clinical practices.³⁰ And while not explicitly identifying any specific process, an important *Harvard Business Review* article on “What Makes Great Boards Great” points to the use of a virtuous cycle of respect, trust, information sharing, and spirited give and take that result in the directors learning to “adjust their own interpretations.”³¹

3
million references to
problem-based
learning in the
literature found on
Google Scholar

300
books featuring PBL
found on Amazon

PBL By Numbers

► Generative Governance

Mary wondered if, rather than ending with a “go or no-go” decision on the launch, it couldn’t be used to open a discussion on the topic of technology and its fit with existing clinical patient-facing workflows. She contacted Bill and asked if each of

the directors could also be asked to share their insights and experiences by “thinking aloud” about the proposal with questions that hadn’t been asked and risks that had not yet been identified. When she asked if this was ultimately a “tech” or a human resource challenge, he readily agreed to her suggestion.

While financial performance is important, healthcare delivery is dominated by non-profit organizations that are typically overseen by large volunteer boards that are focused on mission, non-financial metrics, long-term goals, and budgeting. In the landmark book *Governance as Leadership: Reframing the Work of Non-Profit Boards*, authors **Richard Chait**, **William Ryan**, and **Barbara Taylor** describe

three modes of governance: *fiduciary*, *strategic*, and *generative*.³² While **Chait et al.**’s insights can likewise apply to smaller for-profit boards that are focused on meeting investor expectations, profit and loss, stock price, and fulfilling short-term goals, *Governance as Leadership* is salient for both for-profit and non-profit health organization boards that have an ultimate responsibility for achieving the “Triple Aim.”³³ *Fiduciary* and *strategic* are familiar modes for boards, and appropriate

for the majority of time spent in oversight of existing programs or approving new initiatives in response to a well-defined opportunity or threat. But neither mode is suited to boards seeking to make sense of the non-linear issues that are simultaneously challenging any company’s assumptions and planning. When these concerns arise, the authors recommend that boards consciously shift to a *generative* mode of governance. In other words, boards can step back to reframe significant challenges, search for questions in lieu of answers and brainstorm to seek new insights, new discoveries, and new possibilities.

“ While financial performance is important, healthcare delivery is dominated by non-profit organizations that are typically overseen by large volunteer boards. ”

► Problem-Based Insight

While Mary was fearful that her instincts about technology would be undermined, she was pleasantly surprised by the generative discussion that followed. Bill made sure that everyone had an opportunity to contribute. One physician board member wondered whether provider concerns about patient privacy³⁴ could slow adoption of the initiative, while another asked if this could be paired with the company's growing investment in "big data" and generate greater patient as well as organizational buy-in.³⁵ The open discussion that included the CEO and CIO and CLO led to the decision to make additional financial resources available to management to seek ideas from the workforce on how to best implement the technology. Many of the directors complimented Bill on a rewarding meeting. Mary silently wondered how to keep the momentum going.

As noted above, the elements that are necessary for successful board function are the right information, individuals, leadership, support, and organization. While they are useful in traditional fiduciary and strategic *oversight*, they fall short in generating governance *insight*. Given its decades-long success in medical education, the medical innovation of PBL is a readily transferable wisdom-generating innovation that can offer a competitive advantage to healthcare enterprises:

“The elements that are necessary for successful board function are the right information, individuals, leadership, support, and organization.”

- *Right Information:* The value of PBL is greatest when all the information that everyone would want is *not* universally available, nor can it be predigested in background reading materials. In this kind of environment, it's up to each member to capitalize on their personal expertise to assemble the intelligence prior to or during the meeting, and to share it equally and freely for the benefit of the other directors.
- *Right Individuals:* In addition to possessing the requisite fiduciary and strategic skills, board members need the temperament to transition, when appropriate, to group discovery. While diversity brings many other strengths to governance, problem-based wisdom is one more reason to bring a range of ages, races, genders, educational backgrounds, professional qualifications, life experiences, and personal attitudes to the boardroom.
- *Right Leadership:* In order to support problem-based wisdom, chairs need to “step back” from being a directive leader to serving as a collaborative facilitator in a process characterized by less prescribing and more perception. His or her skill set now includes assuring that each member's potential contribution is maximized.
- *Right Support:* Since this process can touch on or be driven by organization, culture, or the environment, PBL is one more reason why directors may access “front-line” workers, persons with institutional memories and subject-matter experts inside and outside the organization.
- *Right Organization:* Board charters can document the option of using wisdom-generating governance that is supported through the use of a “problem-based” method of inquiry. This can spell out the need for exploration under the guidance of a trusted lead committee member that analyzes challenges by assembling necessary information, prioritizing and assigning questions for later consideration, and applying reasoning skills to understand the questions and achieving consensus on how to answer them.

► Summary

PBL has been successfully used to acculturate young physicians to tackling dilemmas with a lifetime commitment to education, teaming, and group discovery. While primarily an educational innovation, the process of PBL is readily adaptable to healthcare boards of directors that, when circumstances warrant, need to leverage their individuals' collective knowledge. The approach of problem-based wisdom can bind the *theories* of crowd wisdom and generative governance with the process of board meetings. The result can help healthcare directors clarify underlying issues, create insights, identify new objectives, and ultimately find solutions that had not been previously considered. ■■■

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