Evidence-Based Management Implications for Nonprofit Organizations

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The article reviews evidence-based management and its implications for practice and teaching. My focus is on strategic decision making in nonprofit organizations. Evidence-based management is a process that includes framing the question, finding evidence, assuring accuracy, applicability, and actionability of evidence until the evidence is the best available.

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LL MANAGERS MAKE DECISIONS based on evidence. In this article I argue that managers of nonprofits should consider improving the quality of such evidence so that it is the best available. The purpose of the nonprofits and the communities they serve may be much more fully achieved if managers use evidence-based management (EBMgmt). Rousseau (2012a) defined EBMgmt as: "the systematic, evidence-informed practice of management, incorporating scientific knowledge in the content and process of making decisions. ..." (3).

Instead of deciding on an organizational intervention and seeking to find evidence to support an intervention, the EBMgmt process starts with a management challenge that is translated by stakeholders into an answerable question. Hsu and his colleagues (2009) suggested

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six EBMgmt steps for managers to consider in the process of making a well-informed decision:

- 1. Framing the question behind the decision
- 2. Finding the sources of information
- 3. Assessing the accuracy of information
- 4. Assessing the applicability of information
- 5. Assessing the actionability of information
- 6. Determining whether the information is adequate

Management challenges include the demand to improve financial performance, quality, and/or access. Research questions in response to improving financial performance, include, for example: How will merging with another church or school or hospital affect the attendees, students, or patients per person costs of serving them.

After selecting an answerable question, the next step is gathering evidence from the research literature, from best practice organizations, and from local management research. Stakeholders in an evidence-based process team ask questions about the accuracy, applicability, actionability, and adequacy of the evidence (Hsu 2009). The process team reviews findings to reach consensus on what is the value-added of the evidence and what are its limitations.

My experience is that EBMgmt is not commonly used by non-profits. If evidence-based management facilitates better decision making, why don't nonprofit managers use it? Here are some reasons:

- Nonprofit managers may not have heard of the term; or, they are calling what they do by another term, such as good management.
- There is a cost in carrying out the process. Costs now seem more probable than future benefits.
- Managers perceive that EBMgmt will require too much time. If the process is too lengthy, then the decision window may pass before the process is completed (Rundall, personal communication 2013).
- Management has to be persuaded and trained to convert from current decision-making processes to a new method. Managers and board members may be satisfied with current ways of making decisions, do not see the need for additional steps such as "framing the question," and take new methods as criticisms of their own decision-making behavior.
- The process of evaluating alternative interventions doesn't usually lead to conclusions of a one best way of intervening. Rather, for each alternative intervention (including "doing nothing"), probabilities of outcomes are based upon more or less predictable relationships between interventions and desired outcomes.

Politics complicates decision making as the choice among alternatives and may affect the interests of any dominant coalition. (A starter

set of reading about evidence-based management is provided in the appendix.)

Learning from Medicine

Evidence-based management originated in evidence-based medicine (EBM), where many interventions have been analyzed to see whether they predictably improve health outcomes (Barends, ten Have, and Huisman 2012). Hindrances that block the further development of evidence-based management today are said to be the same hindrances that blocked the development of evidence-based medicine two decades ago (Barends et al. 2012). Physicians have feelings they do not readily admit and often don't recognize (Groopman 2007). For these and other reasons, including financial interest, physicians do not always use the interventions that have evidence-informed positive predictable outcomes. But the EBM paradigm has become widely accepted in medical care and is usually practiced in teaching settings. Evidence-based nursing has had parallel results (Cullum, Ciliska, Haynes, and Marks 2008).

Contributions of Organizational Behavior to EBMgmt

Much less may be known about management than about medicine. But there are subfields within management science that have well-developed research literatures that can be used for evidence-based decision making. For example, Rousseau (2012b) cited how evidence has been used, for example, in hiring talent, motivating people, and setting a vision. In hiring talent, Rousseau shows that managers often rely on unstructured interviews while structured interviews using well-designed job-related questions have been shown to be good predictors of job performance. Latham and Locke (2002) have found the existence and acceptance of challenging performance goals to be a central factor in influencing individual and group performance, whereas the effects of individual-level pay for performance have been shown to be limited. Kirkpatrick (2009) has shown how top managers who set a vision for their organization typically outperform executives who do not.

Systematic Review and Critical Topics Analysis

Systematic literature reviews set a high standard in using evidence to inform practice. Systematic reviews differ from traditional narrative reviews by adopting a replicable, scientific, and transparent process (Briner and Denyer 2012). Systematic reviews minimize bias, providing more-or-less exhaustive searches within identified

time periods and an audit trail of reviewers' decisions, procedures, and conclusions (Transfield, Denyer, and Smart 2003). The usefulness of reviews is, of course, limited by the amount and quality of the published research. Systematic reviews allow managers to draw conclusions about what is known and not known about the evidence on answerable questions. Limitations are acknowledged and the review process is made explicit.

Standard practice in systematic reviews (Briner and Denyer 2012) is to convene a review advisory group to:

- Refine the review question
- Identify interventions and populations to be included
- Set priorities for outcomes to be assessed
- Help interpret the findings of the review
- Comment on the review protocol and draft report
- Advise on the dissemination plan and help disseminate the findings

Systematic reviews may be inappropriate to study messy problems in which causes of different outcomes are not feasible to isolate or where inconclusive evidence is identified in a systematic review. Barends, Rousseau, Jelly, and Carrol (2012) have developed a rough and simplified method of systematic review, "critical topics analysis (CAT)," that has greater applicability for managers and is more feasible, if less comprehensive. Managers often lack adequate resources to do systematic reviews and lack training in finding and analyzing the evidence.

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Experience in Teaching

For six years, I have taught a capstone course in which students apply EBMgmt in a master's program in a school of public policy and management. I use a team approach, four to five students on a team. Most students do these projects in hospitals over two fifteenweek semesters. Benefits of the capstone projects to sponsors include the focusing of answerable questions, the collection of data helpful in analyzing alternative recommendations, and the development of analytical abilities in their managers (whose tuition they reimburse for in the program). (Examples of answerable questions of other 2011–12 capstone projects are listed in the appendix.)

Case Example of Hourly Nurse Rounding Practices

One group's research question for the 2011–12 capstone course was how to improve hourly nurse rounding policy implementation to achieve sustainability and better outcomes of care. Hourly rounding is an eight-step, scripted, proactive approach used by nurses when taking care of inpatients. Hospitals that have implemented hourly rounding have reported reduced falls and pressure ulcers, fewer call

lights, and better control of pain. (See, for example, Bursell, Ketelsen, and Meade 2006). The capstone team examined the current processes for hourly rounding, identified opportunities for improvement, and made recommendations aimed at providing sustainable positive patient outcomes. The capstone team's literature review confirmed the positive impact of hourly rounding. They then studied two years of hospital internal data, which indicated a lack of full implementation of hourly rounding and inconsistent level of falls reduction (as related to rounding or not). The student team observed nursing practice, conducted nurse focus groups, and interviewed patient care directors (first-line nurse managers). Observations were completed on four inpatient adult medical-surgical units. The team made recommendations as follows:

- 1. The hospital should implement a second phase of their hourly rounding rollout, emphasizing potential benefits to nursing staff that will increase buy-in. Education should focus more on *why* rather than *how*. Signs should be posted in the patient's room indicating that a member of the nursing staff will be in to check on them at least once an hour for their care and comfort.
- 2. The most important step in the rounding process is to reemphasize asking patients about toileting needs.
- 3. Documentation should be reduced.
- 4. Hourly rounding needs to remain a focus of senior leadership. (Adoremus, Cassai, Leach, Rio, and Tallon 2012).

After receiving the recommendations, the hospital sponsors suggested that these conclusions and recommendations would not have been as focused and nuanced if an evidence-based process had not been used. For example, as a result of reviewing the process, senior leadership became more certain that nursing staff supported hourly rounding as a way to improve patient care but that they needed help with several specified aspects of implementation.

The Politics of EBMgmt

Evidence is not sufficient to change people's behavior. Politics and culture critically affect the use and success of EBMgmt. Hodgkinson (2012) calls for unmasking (in the decision-making process) "the illusion of rationality assumed by a dominant coalition obscuring underlying fundamental differences of interpretation, purpose and power among key stakeholders. ..." In seeming to manage uncertainty, managers and boards do not typically rely on scientific research (Hodgkinson 2012, 409). Spender (1989) found that managers adopt industry recipes and share mental models of what works and doesn't work acquired through participation in organizational social networks. Hodgkinson (2012) recommended involving a wider range of stakeholders, including senior, middle,

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and junior managers, front-line employees, unions, government officials, consumer groups, management consultants, pressure groups, and applied scientists. Maximal inclusion should always be considered, but realistically it should be reserved for very important operational and strategic decisions that involve high costs and would be difficult to undo at a later time.

It is the quality of argument or storytelling by the persons presenting the evidence that persuades stakeholders. It is often necessary to convince the CEO or the decision maker to act based on the highest-quality evidence available and to learn that such a process is in the organization's (and in his or her own) best interest. The fairness of the process and its scientific underpinning, or the logic of driving forces and related assumptions given insufficient evidence, are legitimating factors here.

Conclusions

Given sufficient time and trust, EBMgmt can lead to better decision making. Organizations must make decisions quickly, and there are no short cuts to effective decision making in nonprofit organizations. The EBMgmt process helps managers think through what are the answerable questions to achieve desired outcomes and to obtain the best available evidence. How to improve emergency department waiting times? How to find suitable jobs for high school graduates? How to increase church attendance? These are all complex challenges. If not suitably framed, questions about these challenges cannot be effectively answered. For those questions that are answerable, the evidence cannot always be found in the research literature. There is a cost in learning from best practice (How adaptable are lessons learned from "best practice" organizations to the local environments?) and in conducting an organization's own management research. But evidence-based management is a low-cost way to help nonprofit managers and boards get better available evidence for strategic decision making. Evidence does not tell managers what to do but rather allows them to make more informed decisions.

References

Adoremus, A., M. Cassai, J. Leach, A. Rio, and K. Tallon. 2012. "Review of Current Hourly Rounding Nursing Processes at NYPH," New York. Unpublished.

Barends, E., D. Rousseau, B. Jelly, and W. Carrol. 2012. Evidence-Based Management: Three New Approaches to Teaching the Practice of Management. Professional Development Workshop presented at the Academy of Management Annual Meeting 2012, Boston. http:// www.cebma.org/presentations/.

- Barends, E., S. ten Have, and F. Huisman. 2012. "Learning from Other Evidence-Based Practices: The Case of Medicine." In *The Oxford Handbook of Evidence-Based Management*, edited by D. Rousseau, 25–41. New York: Oxford University Press.
- Briner, R. B., and D. Denyer. 2012. "Systematic Review and Evidence Synthesis as a Practice and Scholarship Tool." In *The Oxford Handbook of Evidence-Based Management*, edited by D. Rousseau, 112–29.
- Bursell, A. L., L. Ketelsen, and C. M. Meade. 2006. "Effects of Nursing Rounds on Patients' Call Light Use, Satisfaction and Safety." *American Journal of Nursing* 106 (9): 58–70.
- Cullum, N., D. Ciliska, R. B. Haynes, and S. Marks. 2008. Evidence-Based Nursing: An Introduction. Oxford: Blackwell.
- Groopman, J. 2007. How Doctors Think. Boston: Houghton Mifflin.
- Hodgkinson, G. P. 2012. "The Politics of Evidence-Based Decision-Making." In *The Oxford Handbook of Evidence-Based Management*, edited by D. Rousseau, 404–20.
- Hsu, J., L. Arroyo, I. Graetz, E. B. Neuwirth, J. Schmittdiel, T. G. Rundall, P. F. Martelli, R. McCurdy, M. Gibso, and P. Curtis. 2009. "Methods for Devloping Actionable Evidence for Consumers of Health Services Research." In *Evidence-Based Management in Healthcare*, edited by A. R. Kovner, D. J. Fibe, and R. D'Aquila, 83–96. Chicago: Health Administration Press.
- Kirkpatrick, S. A. 2009. "Lead through Vision and Values." In *Handbook of Principles of Organizational Behavior*, 2nd ed., edited by E. A. Locke, 367–87. Malden, MA: Blackwell.
- Latham G., and E. A. Locke. 2002. "Building a Practically Useful Theory of Goal Setting and Task Motivation." *The American Psychologist* 57:705–17.
- Rousseau, D. M. 2012a. "Envisioning Evidence-Based Management." In The *Oxford Handbook of Evidence-Based Management*, edited by D. Rousseau, 3–24. New York: Oxford University Press.
- ———. 2012b. "Organizational Behavior's Contributions to Evidence-Based Management." In *The Oxford Handbook of Evidence-Based Management*, edited by D. Rousseau, 61–78. New York: Oxford University Press.
- Spender, J-C. 1989. Industry Recipes: The Nature and Sources of Managerial Judgment. Oxford: Basil Blackwell.
- Transfield, D., D. Denyer, and P. Smart. 2003. "Toward a Methodology for Developing Evidence-informed Management Knowledge by Means of Systematic Review." *British Journal of Management* 14:207–22.

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Appendix: Sources of Further Information

Readings on Evidence-Based Management

Briner, R. B., D. Denyer, and D. M. Rousseau. 2009. "Evidence-Based Management: Concept Cleanup Time?" *Academy of Management Perspectives* 23:19–32.

Latham, G. P. 2009. Becoming the Evidence-Based Manager. Boston: Davies Black.

Pfeffer, J., and R. I. Sutton. 2006. Hard Facts, Dangerous Half-Truths, and Total Nonsense: Profiting from Evidence-Based Management. Boston: Harvard Business School Press.

Rousseau, D. M. 2012. "Envisioning Evidence-Based Management." In *The Oxford Handbook of Evidence-Based Management*, edited by D. Rousseau, 3–24. New York: Oxford University Press.

Rundall, T. G., P. F. Martelli, R. McCurdy, I. Graetz, L. Arroyo, E. B. Neuwirth, P. Curtis, J. Schmittdiel, M. Gibson, and J. Hsu. 2009. "Using Research Evidence When Making Decisions: Views of Health Services Managers and Policymakers." In *Evidence-Based Management in Healthcare*, edited by A. R. Kovner, D. J. Fine, and R. D'Aquila, 3–16. Chicago: Health Administration Press.

Research Questions for Other MPA 2011–12 Capstone Projects Using Evidence-Based Management for Nurse Leaders

- What kind of nurse-driven community outreach programs should be implemented for the communities served by the hospital?
- What are the opportunities to improve patient outcomes while reducing costs, length of stay, and early mobilization of ICU patients at the hospital?
- What factors influence behavior of staff who are asked to donate organs at the hospital?
- How can we improve the discharge process for short-stay urology patients at the hospital?

Website of Center for Evidence-Based Management

http://www.CEBMA.org.