

Management Training of Physician Executives, Their Leadership Style, and Care Management Performance: An Empirical Study

Sudha Xirasagar, MBBS, PhD; Michael E. Samuels, DrPH;
and Thomas F. Curtin, MD

Objective: To examine associations between management training of physician executives and their leadership styles, as well as effectiveness in achieving disease management goals.

Study Design: Cross-sectional national survey.

Methods: Executive directors of community health centers (269 respondents; response rate = 40.9%) were surveyed regarding their perceptions of the medical director's leadership, and for quantitative information on the center's achievement of clinical (mostly disease management) goals. The dependent variables were the medical director's scores (as perceived by the executive director) on transformational, transactional, and laissez-faire leadership, effectiveness, satisfaction with the leader, and subordinate extra effort, using an adapted Multifactor Leadership Questionnaire (43 items; 5-point Likert scale). The independent variable was the medical director's management training status.

Results: Compared with medical directors with <30 days of in-service training, medical directors with an MHA, MPH, or MBA, or ≥30 days of in-service training, had 0.32, 0.35, 0.30, 0.36, and 0.37 higher scores on transformational leadership, transactional leadership, rated effectiveness, satisfaction, and subordinate extra effort, respectively, and 0.31 lower score on laissez-faire leadership (all $P < .001$). Medical directors without management degrees but with ≥30 days of in-service training had 0.34, 0.36, 0.50, and 0.47 higher scores on transformational leadership, transactional leadership, rated effectiveness, and satisfaction with the leader (all $P < .02$). Our data previously had demonstrated that medical directors' transformational leadership significantly influences achievement of disease management goals.

Conclusion: Training may enable physician executives to develop leadership styles that are effective in influencing clinical providers' adoption of disease management guidelines under managed care.

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Translating research findings into sustainable improvements in clinical and patient outcomes remains a substantial obstacle to improving the quality and safety of healthcare.¹ Although each physician individually may not vary much in his or her practice pattern across patients, a group of physicians practicing *autonomously* compound the institution-level variation by the number of physicians in the group.² Variations in practice patterns often manifest as cost or quality problems. Practice variations arise because medicine is not an exact science, often involv-

ing judgment-driven application of a basic knowledge of the medical sciences. Evidence-based guidelines and protocols, illustrated by disease management programs, represent a critical managed care strategy to minimize undesirable practice variations.

With more than 75% of healthcare decisions driven by physicians,³ influencing physician practice patterns is critical. Lane and Ross observed that "physician leadership is critical for attaining balance among conflicting pressures for quality of care versus cost containment, prevention versus high technology medical intervention, and application of specialized versus primary care."^{4(p229)} Kirz noted that "the challenge for physician leaders will be to balance the needs of professionals with the business and accountability requirements of a permanently competitive and resource constrained service industry."^{5(p25)} The challenge for managed care organizations is to facilitate high-quality, evidence-driven care that also is cost effective and satisfying to patients.

Physician leadership can be a vital complement to evidence-based practice guidelines and computerized reminders for influencing provider practice patterns.⁶⁻¹¹ However, there is no clarity on "how to best assist the future medical staff" in acquiring the needed leadership competencies.¹² It is also not clear whether training actually impacts leadership styles or the achievement of managed care goals that require organization-wide adoption of evidence-based medical practices. Lacking such empirical evidence, not many organizations commit resources for physician leadership development.

A pilot study has shown that federally funded Community Health Centers (CHCs) whose medical

From the Department of Health Services Policy & Management, Arnold School of Public Health, University of South Carolina, Columbia, SC (SX); the Department of Family Practice and Community Medicine, University of Kentucky College of Medicine, Lexington, Ky (MES); and the National Association of Community Health Centers, Inc, Washington, DC (TFC).

Address correspondence to: Sudha Xirasagar, MBBS, PhD, Research Assistant Professor, University of South Carolina, Arnold School of Public Health, Department of Health Services Policy & Management, Columbia, SC 29208. E-mail: sxirasagar@sc.edu.

directors use a transformational leadership style have superior disease management outcomes.¹³ CHCs are the nation's healthcare safety net, providing care to the nation's underserved, rural, and inner-city populations. Disease management collaboratives for selected, high-volume, chronic medical conditions represent managed care initiatives by the US Health Resources and Services Administration (HRSA) to improve CHCs' clinical performance. Under each collaborative, population-based goals are established (eg, a target mean value for glycosylated hemoglobin [A1C], representing consistent blood sugar control among diabetics), along with care protocols and center-wide processes to achieve the goals. This paper examines the association between the CHC medical directors' management training and their leadership style, as well as effectiveness in achieving disease management goals.

METHODS

Data on the leadership styles of CHC medical directors were collected in fall 2002 by anonymous mail survey of executive directors of all 663 CHCs in the contiguous United States, with a response rate of 40.9% (269 respondents). Respondents rated their medical director's leadership behaviors and effectiveness, using an adapted Multifactor Leadership Questionnaire (MLQ-5X Short).¹⁴ The 45-item survey¹⁴ was adapted to 43 items,¹³ based on a pilot survey of South Carolina CHCs and comments from national experts. Respondents were asked to judge how frequently each statement fit the medical director on a 5-point Likert-like scale (0 = not at all; 4 = frequently, if not always). We also requested information on the center's clinical performance and the medical director's demographics, specialty, and management training status. Survey solicitation was supported by a letter from the National Rural Health Association. The study was approved by the University of South Carolina's institutional review board.

Past studies have shown that self-ratings are invariably inflated, and are poorly correlated with subordinate and supervisor ratings.^{15,16} Intuitively, subordinate ratings would seem best suited to measure an executive's leadership style and effectiveness. However, subordinate and supervisor ratings are highly correlated.^{15,16} The logistics and political acceptability of an exploratory study favored surveying supervisors (executive directors) rather than subordinates. CHC medical directors are salaried employees, accountable to their executive directors, who in turn, are accountable to HRSA for the CHC's performance. Executive directors rely on the medical directors' clinical leadership to complement their own organizational lead-

ership role to achieve the center's clinical service goals. They may send their medical directors for in-service training organized or recommended by the National Association of Community Health Centers (NACHC) or the National Rural Health Association. Under the circumstances, the executive director's responses should be accurate concerning the medical director's leadership style and management training exposure.

Leadership Style Definitions

Bass and Avolio's Full Range of Leadership model classifies all interpersonal managerial behaviors into 3 styles: transformational, transactional, and laissez-faire leadership. Transformational leadership deals with influencing subordinates to act on hitherto latent (higher) motivations for exceptional performance and ethically inspired goals, transcending self-interest. It has 4 components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Its distinctive emphasis is on stimulating followers' intrinsic needs for intellectual and motivational growth toward higher goals, followed by facilitation of such growth through individualized mentoring or coaching relationships. Transformational leadership appears to be uniquely positioned to address the managed care challenge of ushering in widespread adoption of evidence-based practices by providers to achieve population-based disease management goals. Providers have to balance fiduciary accountability to the patient with the collective fiscal accountability demands of managed care organizations, while adjusting individual treatment plans for unique biological, cultural, and psychological needs.

Transactional leadership is establishing a credible social exchange process of rewards for performance with subordinates. It has 2 components: contingent reward and management-by-exception. Contingent reward is exchanging valued (verbal or tangible) rewards for good performance. Management-by-exception deals with intervening when standards or performance goals are not met. A laissez-faire leader is perceived as indifferent to follower actions and organizational outcomes, and avoiding responsibility to address important issues.

Survey item scores were aggregated based on findings from analysis of exploratory factors to produce transformational, transactional, and laissez-faire leadership style scores, as well as perceptions regarding the medical director's effectiveness, satisfaction with the leader, and subordinate extra effort.¹³

We evaluated associations of the 3 leadership styles and the 3 subjectively rated measures of leader effectiveness (dependent variables) with the medical director's management training status (the key independent variable), using multiple regression analysis.

Defining Management Training Status

Management training was operationalized in 2 formats in order to distinguish between formal degree programs in public health or management (MPH, MHA, or MBA) and in-service training. Most in-service training is provided or organized by NACHC or the National Rural Health Association. Two questions were used to gain information on training status:

1. Does the medical director have an MBA/MPH/MHA/PhD in management? (Response categories: yes, no)
2. Total number of training days at management training workshops/seminars in the last 3 years/during your tenure.
(Response categories: 0, 1-7, 8-29, 30-89, and 90+ days).

Physicians with formal degrees have sacrificed earning opportunities and made additional financial investment in such education, and may be differently motivated for leadership roles. Selection bias could invalidate conclusions about associations between leadership styles and management education. To address these issues, we defined a second variable as “in-service training” to examine the effect of in-service training among medical directors without a management degree. In-service training is received without significant personal investment and often is initiated by the executive director. We also accounted for training duration, which may impact the assimilation and practice of leadership concepts.

For statistical analysis, medical directors were classified in 2 ways. The variable “management education” classified medical directors into 2 categories: those with an MHA, MPH, or MBA or ≥ 30 days of in-service training, and those without a management degree and with ≤ 29 days of in-service training. (There was no difference in style and effectiveness scores between those with a degree and those with ≥ 30 days of in-service training. Moreover, statistical power was lost when these 2 groups were separated.)

The second variable, “in-service training,” excluded medical directors with management degrees and classified the remaining medical directors into 3 categories: ≥ 30 days of in-service training (category 1); 8-29 days of in-service training (category 2); and 0-7 days of in-service training (category 3). The thresholds were based on a combination of reasoning and statistical power of the data. Intuitive expectancy suggests that fewer than 7 days of training may not establish leadership competencies. Initial in-service training focuses on procedural issues, with marginal exposure to management and leadership. In comparison, ≥ 30 days of in-service training

Table 1. Demographic Characteristics, Leadership Style, and Management Training of the Sample Medical Directors and Executive Directors (269 Respondents*)

Characteristic	Value
Executive directors (survey respondents)	
Age, y (mean ± SD)	51.9 (7.37)
Male, n (%)	130 (51.6)
Female, n (%)	122 (48.4)
Medical directors	
Age, y (mean ± SD)	45.1 (8.58)
Male, n (%)	193 (71.7)
Female, n (%)	73 (28.3)
Specialty, n (%)	
Family practice	138 (51.3)
Internal medicine	59 (21.9)
Other	72 (26.7)
Management education, n (%)	
MPH, MHA, or MBA	31 [†] (12.5)
In-service training	
≥ 90 days	4 (1.6)
30-89 days	18 (7.3)
8-29 days	77 (31.0)
1-7 days	92 (37.1)
0 days	26 (10.5)
Mean survey scores (SD)[‡]	
Transformational leadership	2.95 (0.68)
Transactional leadership	2.50 (0.68)
Laissez-faire leadership	1.31 (0.79)
Rated effectiveness	2.79 (0.79)
Satisfaction with the leader	2.80 (0.83)
Subordinate extra effort	2.52 (0.92)

*Numbers for each variable differ due to missing responses.

[†]A few medical directors with an MHA, MPH, or MBA degree also had in-service training, and are not counted again among the in-service training categories.

[‡]All responses were on a 5-point Likert-like scale, where 0 was “not at all,” 1 was “once in a while,” 2 was “sometimes,” 3 was “fairly often,” and 4 was “frequently, if not always.” The survey items were adapted from the Multifactor Leadership Questionnaire (Form 5x-Short).¹⁷

implies various types of training, providing significant exposure to and reinforcement of leadership and personal management concepts.

New medical directors’ training starts with a day of orientation training, devoted to job descriptions and CHC procedures. During the next year, it is recommended that they receive a week’s training on “managing ambulatory care,” which provides introductory management training with some leadership content. Other training sessions are provided at state and national conferences. This training

pattern favors 0-7 days of in-service training as a category for medical directors who are less likely to have developed leadership competencies (10.5% of medical directors had 0 days of training, and 37.1% had 1-7 days of training). **Table 1** shows that only 1.6% had ≥ 90 days of training, requiring that the top 2 categories be collapsed into a ≥ 30 -day category for statistical viability. The 0- to 7-day category offers a statistically viable contrast to the ≥ 30 -day group. The group in between serves as a buffer to separate 2 “extreme” groups for statistically robust comparisons.

We also tested the association between training and percent achievement of the center’s priority clinical goals, calculated based on targeted and actual status of the CHC’s clinical service goals.¹³ Of 269 respondents, a subset of 68 executive directors provided usable information to calculate the degree of clinical-goal achievement. The reported information related to disease management goals for diabetes (A1C levels), prenatal care, mental health, and the elderly.

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RESULTS

Table 1 provides information on the demographic characteristics, leadership styles, and management training of the surveyed medical directors and executive directors. Executive directors had a mean tenure as executive directors of 9.17 years; their mean total tenure at the CHC was 11.2 years. Medical directors received the highest scores for transformational leadership (2.95 ± 0.68) and the lowest for laissez-faire leadership (1.31 ± 0.79).

Of 248 medical directors with training information, 31 (12.5%) had an MHA, MPH, or MBA degree. Among those with a management degree, 2 (6.7%) had 1-7 days of in-service training, 17 (31%) had 8-29 days, and 11 (8.9%) had ≥ 30 days. Among those without a management degree, 47.6% had either zero or 1-7 days of in-service training, 30.4% had 8-29 days, and 8.8% had ≥ 30 days.

Management Training Versus Leadership Style and Perceived Effectiveness

General linear modeling using Tukey’s test of significance was applied to examine associations between leadership style and management education/training. Specialty, age, sex, tenure as the CHC medical director, and total tenure at the CHC were used as control variables. Age served as a control for clinical experience, and tenure as the medical director for management experience. We also controlled for the durational impact of interpersonal associations (including before becom-

ing the medical director) by using total tenure at the CHC as a control variable. None of the control variables were significant, singly or in combination. To conserve statistical power, these insignificant variables were deleted. Management education and in-service training were used, respectively, as single independent variables to examine whether management training predicted leadership styles and effectiveness.

Table 2 shows that medical directors with an MHA, MPH, or MBA degree or ≥ 30 days of in-service training were significantly more likely to have a transformational leadership style (0.32 higher mean score) than those without a degree and with fewer than 30 days of in-service training. The former group also were significantly more likely to have a transactional leadership style (0.35 higher mean score), and significantly less likely to have a laissez-faire leadership style (0.31 lower score). **Table 3** shows that medical directors with a management degree or ≥ 30 days of in-service training also were perceived as more effective (0.30 higher rated effectiveness score), and as eliciting extra effort from subordinates (0.37 higher subordinate extra effort score). Their executive directors were more satisfied with their role performance (0.36 higher score on satisfaction with the leader). Because of insufficient numbers, we could not test for the effect of each type of degree (MHA, MPH, or MBA).

Table 2 shows that among medical directors with in-service training only, those with ≥ 30 days were significantly more likely to have a transformational leadership style (0.34 higher mean score) than those with negligible or no in-service training (0-7 days). Medical directors with ≥ 30 days of in-service training also were significantly more likely to have a transactional leadership style (0.36 higher mean score) than those with negligible or no in-service training. Their lower score on laissez-faire leadership (0.22 lower) was however, not statistically significant. They also were perceived as significantly more effective than those with negligible or no in-service training (rated 0.50 higher on effectiveness and 0.47 higher on satisfaction with their leadership; see Table 3). For subordinate extra effort, the difference (0.36 higher score) was not statistically significant.

Statistical analysis showed insufficient power to detect differences in achievement of disease management goals due to management education and in-service training.

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DISCUSSION

This study examined empirical associations between CHC medical directors’ management education and their supervisors’ perceptions of their leader-

ship style and effectiveness. The survey questions on management education captured information on formal degrees in management and public health, as well as duration of in-service training. We found that those with either a management degree or significant in-service training were perceived to rank significantly higher than those without training on those behaviors collectively defined as transformational leadership.

Earlier, we documented an empirical association between transformational leadership and clinical performance of the center with respect to chronic disease management and prenatal care outcomes.¹³ Our current analysis had inadequate statistical power to assess the direct association between training and the center's care management performance. We have the 2 concurrent sets of findings: (1) that leadership style predicts subjective measures of effectiveness as well as the centers' clinical performance and (2) that management training predicts leadership style as well as subjective measures of effectiveness. Together, they suggest that management training of physician executives may significantly impact their ability to influence providers' clinical performance in the desired direction, an important ingredient for the success of managed care. Transformational leadership has been documented to enable superior organizational performance in almost all settings that it has been tested, examples being industrial research teams,¹⁸ the US military,¹⁹ and financial institutions.²⁰

It could be argued that the executive director's prior knowledge of his or her medical director's training may predispose the executive director to attribute leadership effectiveness. However, not only were medical directors with more training perceived as more effective, they also were perceived to manifest behaviors that collectively constitute transformational leadership, a style that is validated to produce superior outcomes in a variety of settings, as outlined above.

Importantly, transformational leadership correlates with objective measures of CHCs' clinical performance, as reported earlier.¹³ Therefore, it appears unlikely that single-source response bias drove our finding of an association between the medical directors' training status and leadership styles as well as effectiveness.

There is no documentation on associations between healthcare managers' training and their leadership styles as perceived by supervisors or coworkers in the organization. Past studies on training effectiveness have examined self-assessed behavioral changes, as well as self-assessed managerial effectiveness.^{21,22} Our finding opens up an important area of investigation with major implications for managed care.

It should be noted that CHC medical directors' in-service training is acquired at the initiative of the execu-

Table 2. Association of Management Education/Training With Leadership Style*

Leadership Style Variable	Mean Score Difference	Model R ²
Transformational leadership versus:		
Management education [†]		0.04
Difference between categories 1 and 2	0.32 [‡]	
In-service training [§]		0.02
Difference between categories 1 and 3	0.34 [‡]	
Difference between categories 1 and 2	0.26	
Difference between categories 2 and 3	0.08	
Transactional leadership versus:		
Management education [†]		0.05
Difference between categories 1 and 2	0.35 [‡]	
In-service training [§]		0.04
Difference between categories 1 and 3	0.36 [‡]	
Difference between categories 1 and 2	0.12	
Difference between categories 2 and 3	0.24	
Laissez-faire leadership versus:		
Management education [†]		0.03
Difference between categories 1 and 2	-0.31 [‡]	
In-service training [§]		0.007
Difference between categories 1 and 3	-0.22	
Difference between categories 1 and 2	-0.23	
Difference between categories 2 and 3	-0.01	

*Training was the independent variable in the final models. Because none of the control variables were significant, they were excluded from the models.

[†]Includes medical directors with an MHA, MPH, or MBA degree. Category 1: MHA, MPH, or MBA, or ≥30 days of in-service training. Category 2: 0-29 days of training alone without a management degree.

[‡]P < .01 for management education models and P < .05 for in-service training, using Tukey's test. All responses were on a 5-point Likert-like scale (see second footnote of Table 1 for a definition of this scale).

[§]Excludes medical directors with an MHA, MPH, or MBA degree. Category 1: ≥30 days of in-service training. Category 2: 8-29 days of in-service training. Category 3: 0-7 days of in-service training.

Table 3. Association of In-Service Management Training With Leadership Effectiveness

Leadership Effectiveness Variable	Mean Score Difference	Model R ²
Rated effectiveness		
Management education*		0.04
Difference between categories 1 and 2	0.30 [†]	
In-service training [‡]		0.02
Difference between categories 1 and 3	0.50 [†]	
Difference between categories 1 and 2	0.46 [†]	
Difference between categories 2 and 3	0.04	
Satisfaction with the leader		
Management education*		0.03
Difference between categories 1 and 2	0.36 [†]	
In-service training [‡]		0.03
Difference between categories 1 and 3	0.47 [†]	
Difference between categories 1 and 2	0.26	
Difference between categories 2 and 3	0.08	
Subordinate extra effort		
Management education*		0.03
Difference between categories 1 and 2	0.37 [†]	
In-service training [‡]		0.01
Difference between categories 1 and 3	0.36	
Difference between categories 1 and 2	0.33	
Difference between categories 2 and 3	0.03	

*Includes medical directors with an MHA, MPH, or MBA degree. Category 1: MHA, MPH, or MBA, or ≥30 days of in-service training. Category 2: 0-29 days of in-service training alone without a management degree.

[†]*P* < .001 for management education models and *P* < .02 for in-service training, using Tukey's test. All responses were on a 5-point Likert-like scale (see second footnote of Table 1 for a definition of this scale).

[‡]Excludes medical directors with an MHA, MPH, or MBA degree. Category 1: ≥30 days of in-service training. Category 2: 8-29 days of in-service training. Category 3: 0-7 days of in-service training.

utive director, mostly as per NACHC's recommended schedule. The schedule is as follows:

1. One-day orientation training for new medical directors, provided by NACHC (9 programs a year), covering job descriptions and CHC procedures.
2. One-week training on "managing ambulatory care" in Boston, Massachusetts, provided by a medical director of a model CHC, covering managerial skills in a CHC context and touching on leadership issues.
3. Regular participation in the state primary care association conferences during the first year to network with effective medical directors and form supportive relationships with peers.
4. NACHC's annual Issues and Policy Forum meetings, where medical directors are exposed to management issues and the national political context of healthcare for underserved populations.

5. The annual Community Health Institute training by NACHC on the mission and vision of CHCs, providing insights for improving the value and quality of CHC services.

Although this is NACHC's recommended schedule, the decision to send the medical director for training rests with the executive directors. Given the CHCs' financial pressures and challenging service obligations, executive directors have to trade off the short-term training costs against the uncertainties of the impact of this training on the medical director's long-term executive role performance. Each week of training entails approximately \$2500 to \$7500 in direct training costs, and about \$7000 in lost clinical revenue at the medical director's clinic site.

The validity of our cross-sectional study finding may be questioned if physicians already motivated toward managerial/leadership roles pursue in-service training disproportionately more than others. Better leadership style and effectiveness could then be due to the "management-trained" leader being intrinsically motivated toward leadership roles. The context of CHCs mitigates this source of selection bias. At CHCs, medical directors are subordinates of the executive

directors, who have exclusive authority for training decisions, although they often respond to the expressed need of medical directors. Medical directors are salaried employees; foregoing practice income during training is not an issue. They also have little flexibility to refuse training directives from the executive director, who is accountable for the CHC's performance and its survival, because grant renewal could be jeopardized by poor performance. The challenge for executive directors is that the CHC's critical performance area—healthcare outcomes—is largely the medical director's domain. Given executive directors' own exposure to management concepts and networking opportunities organized by NACHC, the National Rural Health Association, and the state primary care associations, management training of medical directors is a natural option for them to explore.

As described in the Methods section, self-selection bias is a real possibility with medical directors with

MPH, MHA, or MBA degrees, considering the personal effort, investment, and opportunity cost of lost earnings. Our variable “in-service training” was designed to circumvent this bias by excluding those with a public health or management degree. Superior leadership styles and effectiveness among medical directors with significant in-service training suggest that training (independent of intrinsic motivation) may impact physician executives’ leadership style and effectiveness.

This study’s significance is partly attributable to the administratively autonomous setting of the CHCs, which are locally initiated entities supported by federal dollars. Currently, the few documented studies on physician leadership development lack generalizability across institutions, because the context and content of training were mostly limited to a single organization,²³ with the training program designed internally to develop certain capabilities to address specific organizational challenges. These studies offer neither the scope nor the criterion validity to compare the generic impact of training across a sample of institutions. Such studies leave unanswered the question, “Is there a generic impact of management training of doctors on their role effectiveness as a clinical leader?” Our study findings suggest that physician leadership may be trainable.

Another significant line of inquiry is opened by our finding that formal management education appears to impact leadership style. A contentious issue in health-care has been whether business-centered (MBA) or health administration–centered (MHA/MPH) education is more useful for medical executives. Our data had too few medical directors with such degrees to investigate this issue. A large-scale study is needed to evaluate the specific utility of each degree type in different settings.

Study Limitations

Some study limitations make this survey a pilot effort, requiring validation by additional research. Face validity is potentially an issue, because our conclusions are based on supervisors’ assessments. To assess the relevance of leadership style and management training for *clinical* performance improvement, we need to survey clinical subordinates. Although past studies have consistently shown high agreement between supervisor and subordinate ratings, the unique dynamics of influencing traditionally autonomous providers require validation by using clinical subordinates’ perspectives. We could not concurrently survey supervisors and subordinates because of the perceived political unacceptability among medical directors of a concurrent survey.

A second limitation is confounding between the medical director’s management training and the executive director’s leadership. It is plausible that *executive direc-*

tors who have positive leadership styles and who are highly motivated to serve disadvantaged populations are more likely to pursue in-service training for their medical directors. Therefore, our findings may reflect the executive director’s leadership impact. Studies that concurrently examine the leadership styles of both the executive and the medical directors are needed to isolate the impact of training. Longitudinal studies also would help to validate our findings.

A third limitation is that the direct association of management training with disease management outcomes could not be examined due to inadequate statistical power. Most CHCs had not enrolled in, or progressed far enough in, HRSA’s disease collaboratives at the time of our survey to report measurable clinical achievements. Only 69 CHCs reported disease management performance information. A future study should yield a broader information base for robust conclusions.

Generalization of findings is limited to CHCs, which are not-for-profit entities supported by federal dollars, with an explicit mission to serve underserved populations. Their physicians are relatively isolated from the financial pressures faced by for-profit providers operating in a competitive managed care environment. Physician executives of for-profit entities are faced with multiple, often-conflicting accountabilities—to the patient, the employer, managed care organizations, self-interest, the profession, and the science of medicine. Studies are needed to examine whether training elicits similar impacts in these settings. However, the effects of transformational leadership in many for-profit business settings (eg, financial institutions²⁰) are encouraging for healthcare; management training is likely to enable better leadership styles and effectiveness among physician executives despite complex physician accountabilities.

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