Transforming Practice Organizations to Foster Lifelong Learning and Commitment to Medical Professionalism

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ABSTRACT

Practice organizations will increasingly engage in activities that are the functional equivalents of continuing medical education. The authors maintain that if these activities are properly structured within practice organizations, they can become powerful engines of socialization to enhance physicians' lifelong learning and commitment to medical professionalism. They propose that this promise can be realized if new or reformed practice organizations combine education and service delivery and institutionalize processes of individual and collective reflection. The resulting "institutions of reflective practice" would be ones of collegial, experiential, reflective lifelong learning concerning the technical and normative aspects of medical work. They would extend recent methods of medical education such as problem-based learning into the practice setting and draw on extant methods used in complex organizations to maximize the advantages and minimize the disadvantages that practice organizations typically present for adult learning. As such, these institutions would balance the potentially conflicting organizational needs for, on the one hand, (1) self-direction, risk taking, and creativity; (2) specialization; and (3) collegiality; and, on the other hand, (4) organizational structure, (5) coordination of division of labor, and (6) hierarchy. Overall, this institutionalization of reflective practice would enrich practice with education and education with practice, and accomplish the ideals of what the authors call "responsive medical professionalism." The medical profession would both contribute and be responsive to social values, and medical work would be valued intrinsically and as central to practitioners' self-identity and as a contribution to the public good.

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A major goal of medical education is to teach or help students learn how to be professionals and lifelong learners. As traditionally formulated, the mission of education is to endow graduates with the motivation and skills to maintain existing competencies, to acquire new ones, and to remain steadfast in their commitment to professional values. So equipped, they are to cross the thresholds of their residency programs and enter practice as individuals who are able to maintain themselves as competent professionals.[1]

Yet, increasingly, these graduates do not and will not practice as individuals. Fewer of them will work in solo or two-physician practices[2, Table A-23]; more will work in large group practices or in hospitals, government, and academic centers[3,4]; and most will work in service-delivery "networks" of some sort.[5,6] In such circumstances, it is inaccurate to continue to assume that they learn primarily as individuals and remain professional principally by virtue of individual character and moral choice. Instead, it is essential to understand that in a practice world in which financial incentives and management techniques are routinely deployed by organizations to control clinical discretion, physicians now learn and act within organizations.

Two implications follow. First, continuing medical edu-

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cation (or mis-education) will occur within these organizations[7] because today's medical practice organizations have strong incentives to engage in activities, including partnerships with academic medical centers,[8] that are the equivalents of continuing medical education (CME) in all but name. Second and related, this form of continuing education has the potential to be extremely powerful because organizations that employ or contract with physicians are intentionally or unintentionally likely to be powerful engines of socialization. The question concerns the values to which this power is put, and whether these organizations will implicitly foster a "hidden curriculum" that is counter to the best values of medical education,[9] continuing or otherwise.

We have previously written that medical schools must broaden their missions to encompass more than preparing graduates; their missions should include the task of institution-building. More particularly, we have warned that the values of the service-delivery market will reach back into medical education to shape the values of that education, including its commitment to professionalism, and we have urged that medical education must reach out into the practice world to create new organizations—or to change existing ones—that will merge education and practice and be committed to the values of professionalism.[10] In this article, we extend that theme by discussing how new or reformed practice organizations can bring education into practice in order to institutionalize what we call "reflective practice." The resulting "institutions of reflective practice" would link individual reflection with processes of collegial reflection to enhance and sustain lifelong learning and commitment to medical professionalism. Because these changed organizations would also develop and nurture numerous connections with communities, they would be responsive to community values in a scheme we call "responsive medical professionalism."[10,11] As such, we believe that the institutions of reflective practice are crucial in maintaining professionalism.

We first describe the goals of responsive medical professionalism, particularly the task of linking individual and collective reflection—the function that the institutions of reflective practice are to perform. We also delineate the crucial role that reflective practices are to play in the organizations through which the goals of responsive medical professionalism can be attained. We then discuss how these organizations must be designed to account for the fact that they must connect individual practitioners as adult learners. In the third section, we pull these strands together and specify in a more detailed manner what the institutions of reflective practice should consist of.

THE ROLE OF REFLECTIVE PRACTICES

Responsive Medical Professionalism

In other work we present the model of responsive medical professionalism, which we only summarize here.[10,11] The model's starting point is that medical professionalism is an ethical system supported by an appropriate institutional infrastructure. In other words, medical professionalism encompasses both aspirations regarding the nature and organization of medical work and an institutional framework that supports attainment of those aspirations, which cut across both the technical and normative features of medical work. Its four major ideals are that (1) medical professionals and the medical profession should strive for mutual interdependence with patients and society; (2) medical professionals should both respond to and partially create social values; (3) medical work should be valued intrinsically as part of the individual and collective self-identity and as a contribution to the public good; and (4) medical work should be organized collegially. The institutional framework, in turn, has three characteristics designed to realize these ideals. The organizations necessary to attain responsive medical professionalism should (1) merge education and practice; (2) make collegial, experiential, reflective, lifelong learning a part of education and practice; and (3) maintain close linkages with communities through regular processes and relationships that balance modes of representative and participatory democracy.

These elements together constitute a seamless web. Linkages with communities provide the means by which society informs medicine of its values and concerns, across both the technical and normative aspects of medical work, and by which medicine in turn helps shape those values and concerns. The professional interaction, learning, peer pressure, and peer review provided by collegial processes of reflection ensure that this information about values and concerns pervades daily work. Finally, the integration of education and practice, combined with linkages to community settings, enables the organizations to conduct more of education and practice in community-based settings; to place greater emphasis on primary and ambulatory care and caring, prevention, long-term care, and behavioral problems such as substance abuse; and to make education and practice more sensitive to patients' social and cultural situations.

Institutionalized Processes of Reflection

Institutionalized processes of reflection are the crucial glue that melds the elements of responsive medical professionalism outlined above. This melding occurs because these processes create an organization of connected colleagues, bring

organizational values and culture to bear on what are otherwise isolated doctor–patient encounters, and link those encounters to social values and interests. Organizational practices must both encourage individual reflection on the technical and normative aspects of work and provide means by which individual reflection is linked to an institutionalized process of group reflection. The overall process is therefore recursive, in that individual reflection contributes to group reflection, which in turn feeds back into individual reflection. The group maintains an identity that is more than the sum of the individuals who compose it,[12] and the individual practitioner is not collapsed into the group.

To explicate this recursive process, we begin with individual reflection. Donald Schön in particular showed that professional work consists of solving problems that present themselves as "messy indeterminate situations," which call for professional improvisation to account for similarities to and differences from prior experience.[13] Professional competence in the immediate performance of work has two components: (1) "knowing-in-action," which is the spontaneous, skillful, and dynamic execution of work and is used to address similarities with prior cases; and (2) "reflection-in-action," used when the professional becomes aware that knowing-in-action cannot address the unique features of a case and must be supplemented by on-the-spot experimentation in a seamless combination of tacit knowing, acting, and reflecting. A competent professional must also engage in "reflection-on-action," which is a process of reflecting on the prior performance of work outside of the immediacy of work demands.

At least early in student training, this process of reflection is often dyadic, because many competencies that a student must learn cannot be taught didactically in a classroom or through group learning. Instead, students must watch as a "coach" demonstrates the performance of work while providing a narrative that *reflects upon* how the work is being performed, a process that resembles "show-and-tell." Students must likewise engage in the performance of work as their coach watches and coaches. Through this combination of a coach's showing and telling and a student's performing and being coached, the coach and the student together engage in what is effectively a shared pattern of reflection-in-action. This form of learning prepares students to engage in knowing-in-action, reflection-in-action, and reflection-on-action over a lifetime of professional development. Furthermore, it models collegiality, which is a key component of professionalism's normative vision, in that the processes of coaching and learning, showing and telling, consist of collegial reflection on work.[14] This form of learning also teaches students to reflect on the multiple aspects of medical work —its cognitive, aesthetic, and normative components,[15] including the manner in which collective ethical knowledge from prior cases is extended to the somewhat similar but ultimately varying new work situations faced daily. Finally, this process also creates and reinforces a sense of control over work and teaches that medical work is to be intrinsically valued, which in turn is likely to make care more humane because it bolters medical practitioners' self-esteem and sense of personal efficacy and empowerment, thereby ameliorating stress, enhancing morale, and increasing job satisfaction.[16–18]

Yet, for at least two reasons this dyadic model has serious limitations. First, medical practice increasingly occurs in the context of teams. Hence, students and practitioners alike must learn the skills of knowing-in-action, reflection-in-action, and reflection-on-action as group processes, often involving many types of health care professionals. Second and somewhat related, students and practitioners must learn how to become organizational actors in the way we have described. If professional work is to be organized collectively, then the organizations within which medical professionals work must engage in institutionalized processes of reflection, in which individual reflection feeds into group learning and group learning feeds back into individual reflection. Further, as we have stated above, such an institutionalized process is the means by which social values are brought to bear on individual encounters. The biological metaphor commonly used in organizational theory is apt: like a cell wall the "boundary" around the professional organization must be permeable, allowing the "organism" to maintain its distinctiveness against the social environment while it simultaneously draws from and contributes to that environment.[10, pp. 6,7] This is the first ideal of responsive medical professionalism stated above, which can now be reformulated as the medical profession's obligation to draw on the social stock of values available outside the profession in society and to contribute to those normative resources. In turn, each individual medical professional is a distinctive "organism" that both draws from and contributes to his or her environment, which is primarily the medical organization within which he or she works. Individual and collective reflection on the technical and normative nature of medical work are the processes by which (1) individual practitioners learn from and contribute to the organization's learning; (2) the organization learns from and contributes back to the individual practitioners and outward to society; (3) and society in turn learns from medical organizations and contributes back to them, all in a process of continuing circulation.

Extending Models of Learning into Practice

Some forms of problem- or case-based learning in medical schools teach skills of individual and collegial reflection on the multiple dimensions of medical work and prepare stu-

dents for group processes, some of which are multidisciplinary. Under the guidance of a mentor or tutor, teams of students analyze a series of cases, which may be presented as paper cases, computer simulations, standardized patients, and real patients. Learning is collegial, self-directed, experiential, and reflective.[20–24]

However, these models of learning must be extended into the practice of medicine (this extension is part of the linkage between practice and education we have in mind). Precedents for making practice reflective within groups exist. For example, a recent study of clinical work used numerous tools to facilitate clinicians' collegial reflection upon their practice.[25] An explicit goal was to help them articulate what they do, thereby engendering reflection as a component of the task of articulation. Therapy sessions were videotaped and viewed collectively by the clinicians, who engaged in numerous kinds of reflective exercises such as noting places in which therapists got "stuck" in carrying out some therapeutic activity and identifying the strategies the therapists used to extricate themselves from these situations. Although there were many similarities in the clinicians' observations, each also recounted something not discerned by others. As the study documents through ethnography, these methods helped the clinicians become more perceptive of their practice, to articulate what it is that they do—including the values and beliefs implicated, to understand the manner in which their sessions unfold in response to unexpected contingencies, and to understand and accept the complexities of their practice. Similar examples include using problem-based learning, role-playing, audio- and videotaped feedback, and simulations to hone the skills of established practitioners, albeit on a fairly small scale.[26–33] The point is that many of the innovative methods (videotaping, group feedback, role-playing, the use of mentors, and the like) that are now being used in medical education—to teach students how to engage in peer review, to be teachers themselves, to interview, communicate with, and educate patients, and to be sensitive to their own and patients' values and patients' psychosocial situations[34–40]—can be used in practice organizations as means to institutionalize reflective practice in the manner we propose. These organizations would thereby combine education and practice and use reflective practices as a primary vehicle to allow education to inform practice, practice to inform education, and to create, overall, a community of medical practice that is linked to communities in society.

CONNECTING INDIVIDUAL PRACTITIONERS THROUGH ADULT LEARNING

To create such institutions, we must recognize that medical professionals learn as adults, and thus their learning occurs within the contexts of their past experience, their contemporary practice situations, and their ideals concerning what they should know. Their learning is thus not an isolated or individual experience but occurs as medical professionals live their lives, work in organizational settings, and respond to technical challenges and professional norms. This situation provides an opportunity to connect individuals within organizations, to integrate lifelong learning into daily practice, and to spark reflection on the values implicated by medical work, all of which would represent great improvements over traditional, non-interactive forms of CME such as lectures (particularly if these forms of CME are not combined with modes of practice-setting implementation).[41–44]

In thinking about the structures and processes of these organizations, it is useful to emphasize how adults approach learning. Adults have (1) relatively independent self-conceptions; (2) practical experience to draw upon; (3) an orientation toward learning that is related to their social roles; and (4) a desire to engage in learning that will be useful to them in a relatively short time frame.[45] However, what adults often lack is a set of skills for learning *as adults*. In other words, while they have a strong sense of themselves, of what they know, of what they want to learn, and why they want to learn it, they often lack an understanding of how they can learn outside a structured educational setting characterized by expert teachers and unequal relationships between teacher and student. This teacher-centered model conflicts with their sense of themselves, their motives for learning, the fact that they work within (often complex) organizations, and the fact that in their relationships with peers and students they perform as both teachers and learners.

As a result, the medical practice organizations we propose must carefully facilitate lifelong professional development (particularly if that development is to be consistent with the ideals of professionalism). Three lessons drawn from theories of adult learning are relevant here.

Learning in Context

Learning should be set within medical professionals' work settings and be experiential—not in the sense that it must necessarily be "hands-on,"[46, p. 15] but in the sense that it both derives from medical practice and also engages the problems that medical professionals face in daily work. Medical professionals are highly motivated to learn if that learning seems useful, particularly in the short term, and occurs within their practice settings. Such learning is more meaningful to them than is the acquisition of information out of context and apart from an applied situation, and it enables them to draw readily on their previous experiences, which necessarily inform their approaches to and interpretations of current experiences.[47]

Self-directed, Collegial, and Reflective Learning

Learning should be self-directed, collegial, and reflective; none alone is sufficient. From Knowles we understand that adult learners engage in "self-diagnosis" in which they (1) construct models that encompass the desired "competencies or characteristics" of performance; (2) engage in a process of self-assessment based on their own experiences in light of the models; and (3) measure the difference between present characteristics and the desired models.[45, p. 87] As they traverse this process, learners draw on both their own experiences and their understanding of professional norms and technical standards to determine their learning goals. They then evaluate their own knowledge and performances in relation to those goals and recognize the differences between their present and desired abilities.

There is both danger and opportunity here. One danger is that self-direction is "potentially individualistic"[48, p. 15] if the learner and the professional community fail to acknowledge the social nature of learning; a second is that self-direction is potentially isolating for learners if it is not situated within a collaborative learning community. The potential for these problems to exist is particularly acute in medicine because medical knowledge has traditionally been represented as existing outside practitioners' social relations and as being employed by individual doctors, who are seen as having relationships only with their patients, not other doctors.[10,14] Moreover, while medical professionals are socialized early to deal psychologically with the consequences of the uncertainty of their work,[49] they are also "trained for certainty"[50] in the sense that they are implicitly taught and are expected to demonstrate authoritative expertise before both patients and peers. The result can be that medical professionals are reluctant to identify areas in which they fail to possess the competencies they desire.

By contrast, the fact that adult learners engage in self-diagnosis of their learning requirements presents great promise because, as stated above, medical professionals increasingly work within organizations. In that context, when individual medical practitioners recognize the gaps between their ideal and actual practices they are led, first, to be curious about and evaluative of their peers' performances, and, second, to recognize that their colleagues are evaluating them in turn.[51] If this process remains tacit, colleagues often fail to learn from one another.[51,52] However, if the organization makes this process overt, it has enormous power to promote the lifelong development of the medical professionals who work within it. The way to make this process overt is to institutionalize processes of collegial reflection.

The potential gains are enormous. Collegial, experiential, reflective learning gained from and applied within a practice setting allows medical professionals to analyze and discuss different approaches to medical work and can help individuals understand how their own and others' backgrounds and experience shape their current actions, beliefs, feelings, and values. Within the organization, such practices can be used not only to teach new skills but also as a way to build a body of shared experience and knowledge in a group of learners, thereby promoting cooperative and collegial relations, creating consensus where appropriate (but with parallel or complementary tasks), and facilitating the airing and managing of conflicts when consensus is neither possible nor appropriate. These results are particularly important in an age of great specialization, for they enable generalists and specialists to teach each other what they do. Moreover, such collective exercises are the necessary means by which social values learned by the organization through democratic processes[10,11] can be brought to bear on individual medical work.

Collegial Reflection as Organizational Structure and Culture

This point leads us to our third lesson. None of this organizational potential can be realized unless the collegial, experiential, reflective practices that the medical practice organization institutionalizes are simultaneously challenging and "non-threatening."[48, p. 22] To some extent, adult-learning models of reflection-as-learning, or reflection as part of the learning process, provide a guide to what is required. In adult learning, properly conducted reflection has three stages: returning to experience; attending to beliefs, feelings, and values; and re-evaluating experience.[53] After an event, the reflective learner or practitioner contemplates the experience. In describing that experience aloud, in writing, or just in thought, individuals are supposed to attend to the beliefs, feelings, and values that accompany its recounting and determine whether those beliefs, feelings, and values are conducive or obstructive to understanding and improving performance.[53,54] Reflection is always a conscious process, one that requires the full attention of the practitioner. To this degree, it should not be assumed that reflection is natural and a part of everyone's skill set. This process can be done alone, of course, but reflection with facilitators or peers strengthens the process by ensuring that reflection is conscious. Debriefing ("returning to experience") with facilitators or peers can "provide a check" for accuracy and objectivity.[53, p. 43] Creating groups of people with similar training or specialty backgrounds enables professionals to compare their responses. These groups can help individual practitioners better understand the decisions they make, show them that other possible approaches exist, and help them be open to those alternative approaches. In addition, peers become central to the learning process, which can help create an environment in which individual and collective

self-diagnosis and critical self-reflection are respected and safe parts of professional practice. For reflection to be part of the learning process, people in organizations must make time for "collective inquiry"[55] and continuous reinforcement. This requires finding appropriate time and space for regular meetings, assuring a safe context in which that reflective activity can actually occur, and aligning individual and group incentives with the value of these activities.

However, these adult-learning models are insufficient because they do not describe the needed organizational structure and processes in a sufficiently detailed way. Experiential learning requires moving from concrete experience through the reflective observation of that experience to constructing an abstract conceptualization of the experience and then engaging in active experimentation.[47,56, p. 40] This process can be threatening within organizations, particularly hierarchical ones, because the results are not guaranteed; learners can interpret the situation in unpredictable ways and produce unexpected solutions or draw unexpected conclusions.[47] Problems designed for the classroom are well structured with one correct solution. The problems of real life, by contrast, can have multiple causes and diverse solutions. They allow for individuality and are contextual.[57] This situation demands greater preparation and flexibility on the part of supervisors or colleagues, who may have to negotiate answers they had not expected. It also demands that the organization legitimate the questioning of established ways and, potentially, entrenched interests. Accordingly, to succeed—in fact, to exist—an organization that institutionalizes reflective practice must be structured in a particular way.

INSTITUTIONALIZING REFLECTIVE PRACTICE

Creative Tension

Stated generally, the organization that institutionalizes reflective practice should maintain creative tension among seemingly inconsistent goals. The processes of reflection should be designed, first, to structure individual and collective learning while facilitating self-direction, risk taking, and creativity; second, to retain the advantages of intra- and interprofessional specialization while ameliorating difficulties such as the fragmentation that specialization creates; and third, to achieve the advantages of organizational hierarchy while simultaneously creating and sustaining collegiality among a company of equals.

Part of the necessary task clearly involves the creation of organizational processes that maintain or improve performance by enhancing "*knowledge acquisition* (the development or creation of skills, insights, and relationships), *knowledge sharing* (the dissemination to others of what has been acquired by some), and *knowledge utilization* (integration of learning so that it is assimilated, is broadly available, and can be generalized to new situations)."[58, p. 363] [Italics added.] However, these processes—found in some important organizational models[59]—are insufficient because they take organizational goals and values as a given. In such cases organizational learning is properly termed "single loop" because organizational experience is utilized only to find better means to achieve preset goals and values.[60, p. 7] By contrast, an organization that institutionalizes reflective practice, designed to realize the ideals of responsive medical professionalism, must constantly engage in processes of reflecting upon goals and values as it both responds to and contributes to social values.[10,11] Hence, it must engage in what have been aptly termed "double-"[60] and "triple-loop learning."[61] The former makes goals and values subject to reflective challenge,[60] thereby highlighting both questions of technical medical competence and the ends to which that competence is to be used. The latter in turn raises questions concerning power,[61] particularly whether medical and social values are being treated as equals or if one is being subordinated to another. These two loops of learning must be crucial components of institutional reflection because the basic model is that individual doctors and patients, as well as collective medical and social actors, are to be engaged in a mutual process of value creation and application, not in a process in which one tries to dominate the other (e.g., both autonomy and paternalism are wrong).[11]

Some Illustrative Organizational Templates

To some extent each practice organization must find its own way in creating these processes because the institutionalization of reflective practice must itself be a reflective process in which iterative rounds of reflection set in motion and sustain the necessary practices. Hence, it is inconsistent with our model for us to provide an organizational blueprint. Further, we have been unable to find much literature that describes practice organizations' institutionalization of the types of reflective practices we propose. Although we expect to find more examples when we are able to conduct further empirical investigation, one of the points of this article is that practice organizations (and medical education) are by and large not taking advantage of the possibilities available to them. However, by drawing on examples from other contexts—particularly experiments in industrial democracy conducted in the Scandinavian countries—we can briefly provide something in the nature of templates that medical practice organizations might use to institutionalize reflective practice. We believe these analogies are apt because our basic model is that the relationships among medical colleagues within an organization are to be largely democratic.

Our research reveals that a number of organizations have

created homogeneous, heterogeneous, and vertical "groups," or "circles," that have overlapping memberships.[62,63] Homogeneous circles extend horizontally across an organization. Following this example, medical organizations could create circles composed of medical professionals of similar experience, training, skills, and tasks (e.g., one specialty or related specialties), thereby providing relatively safe environments for peers to reflect upon work and problems they share.[63] The "pods" that David Blumenthal of Harvard Vanguard has described[64]—groups of eight to 12 primary care physicians who meet regularly to engage in continuing education and to discuss complications and deaths, hospitalizations, and high-cost patients—appear to be examples of such homogeneous circles. By contrast, heterogeneous circles cut across different kinds of peers. Because of this variety, collective reflection in these circles is less safe and less familiar, and involves medical professionals in greater risk taking. Concomitantly, it is in this context that much of the organizational learning potential and dynamism exist, because such circles draw on the specialization of function that comprises distinct professional tasks and specialties while also eliciting dialog and learning among diverse types of colleagues.[63] Finally, vertical circles cut across an organizational hierarchy, crossing managerial and other functions. While the ultimate ideal of responsive medical professionalism is that work be organized collegially,[10,11] the vertical form of organization accounts for the fact that at least some degree of hierarchy is inevitable in complex organizations, such as an academic medical center or a large group-practice organization, while also ensuring that all levels of colleagues can participate in creating and reflecting on organizational values and goals by bringing them together within a vertical cross-section of the organization.[62,65]

The nature of these circles of medical professionals can vary according to the type of tasks the groups undertake.[66] Circles might be temporarily formed around a particular problem, while others might be permanently established to reflect on recurring ones. Depending upon the degree of participation deemed warranted, and whether tasks addressed are limited or comprehensive, some circles might be fairly small while others might be very large—extending up to a meeting of the whole. Sometimes the circle's members might be drawn from representative homogeneous, heterogeneous, or vertical organizational cross-slices, while other times full democratic participation might be appropriate. We suspect that medical organizations generally will use mechanisms such as job rotation, representation, and direct democracy to balance the simultaneous and conflicting needs for specialization and generalism, for expertise and collegiality, and for hierarchy and equality.[11] The overall goals are to take advantage of horizontal specialization while avoiding problems of balkanization; to bring expertise to bear within the organization while avoiding the dominance of an elite; and to create processes to garner the advantages brought by vertical specialization while avoiding the concentrations of power and rigidity it can also bring.

The particular collective exercises used within different circles, groups, or other organizational fora will likewise vary. In some instances the tools deployed for collective reflection that were mentioned above—videotaping, role-playing, the use of narrative, simulations, and the like—will be warranted. Some learning can be self-directed because medical professionals are highly motivated. However, in other instances we expect that skilled external facilitators will be needed, particularly where issues to be addressed—curricular reform or the reorganization of clinical services, for example—threaten established modes of learning and practice or entrenched power.[61,67,68] In such cases, strong institutional defense mechanisms must be overcome or at least ameliorated,[60] and the use of power must be revealed (although it might not necessarily be overcome).[61] We can also speculate that there might be variations among age cohorts, as younger medical professionals educated through means such as problem-based learning might be more skilled (hopefully) in self-directed, experiential learning in groups. Their continuing development, therefore, might require less facilitation than that of the older medical practitioners.

One other important point is worth noting in conclusion. Organizational models often talk of the need to create a "shared vision" or some similar notion.[59] Not only is this concept organizationally naïve, but it is inconsistent with the model of responsive medical professionalism and our concept of an institution of reflective practice. Organizational practices should not be homogenizing; nor should they be about manufacturing harmony or consensus, though consensus might often be the result. Rather, collegial practices of reflection are to be used to reveal value and power conflicts and to manage the tensions that result,[61, pp. 108–09,119] as well as to create and support the trust that medical professionals must have in one another and the organizations within which they work if they are to serve their patients and society. We repeat: the values of an individual medical practitioner are not to be collapsed into the values of the organization, nor are medical organizations' values to be collapsed into social values. Rather, each is to remain somewhat distinctive while members of a practice organization engage in dialog regarding the technical and normative dimensions of medical work. We believe that this vision builds upon the individual medical professional's obligation to treat each individual patient as a unique person[69] while simultaneously responding to social values.[10,11] We also believe that this vision draws its primary strength from our society's democratic traditions.

CONCLUSION

We have no illusions that it will be easy to implement what we have proposed here. Changing busy practice organizations is difficult enough, without introducing novel concepts of "reflection," which sound as if they slow the pace of work or threaten the bottom line without adding any immediate value. Accordingly, implementation can occur only if policymakers, purchasers, managers of practice organizations, and leaders in medicine come to the view that education in the practice setting is both a professional responsibility and a public good—that it should be a mixed private and public investment rather than a mere cost of production that can, if possible, be sloughed off onto others.

Difficult as it may be, we think that this road must be taken. For good or ill, medical practice organizations will play an ever larger role in lifelong learning and commitment to medical professionalism because medical professionals will increasingly work within them and because they will continue to be subject to substantial pressures to reduce costs and improve quality. This change is both perilous and promising. On the one hand, by internalizing educational functions, providing formal continuing education units to their own staffs, and marketing "educational products," practice organizations can create an "evil twin" of what we propose in order to (1) increase corporate prestige; (2) provide an additional fringe benefit; (3) monopolize physicians' continuing education activities and thereby deflect them from learning knowledge or skills not deemed profitable; (4) render an organization's physicians more valuable as "dedicated assets" and less attractive to alternative practice organizations by enhancing organizationally specific competencies (e.g., how to use a specific organization's clinical information system) that are not transferable to other work contexts; (5) enroll unaffiliated physicians and thereby implicitly solicit referrals or the purchase of the organization's educational or disease-management products; or even (6) provide sinecure as teachers for physicians who are clinically incompetent but politically connected within the organization. Practice organizations would then become increasingly bureaucratic, subjecting professionals who work within them to escalating levels of formal rules as organizational managers attempt to exercise control over professional work. Professionals would in turn be increasingly alienated from their work, and experience cynicism, burnout, apathy, and withdrawal.[70,18] On the other hand, practice organizations do have the capacity to teach the value of medical work, the value of working within an organization composed of medical and other clinical colleagues, and the value of the organization's responsiveness and contribution to social values. By institutionalizing reflective practice, these organizations can promote lifelong learning and commitment to medical professionalism.

As such, they would have three primary characteristics. First, they would bring education into practice and practice into education. Many exciting new modes of learning are being tried in medical education, and many medical practice organizations can innovate more rapidly and effectively than can traditional academic institutions. Thus, a real opportunity presents itself to facilitate the adoption of these modes of learning in the practice setting. Accomplishing this goal might mean the merger of educational or practice organizations or the creation of organizational bridges between them.[10,11] Regardless, education is enriched by a constant interaction with medical practice, and medical practice may likewise be enriched by continuous contact with education.[71]

Second, these organizations would teach the value of professionalism both within and without more by action than by exhortation. Action here means institutionalizing numerous mechanisms through which medical work is informed by social values even as it in turn teaches society the value of medical work. As we and others have described,[10,11,72] to survive, professionalism must be reformulated around a democratic ideal, and that can occur only if medical organizations are connected to other social organizations through concrete, democratic institutions. Specific activities might include community assessments; community polling; direct democracy; focus groups; rotating lay leadership and participation in committees of educational and practice institutions; and regularized contacts with neighborhood associations. Professionalism is neither taught nor learned through preaching; rather it is taught and learned by living a professional life. This point cannot be stressed enough. The meaning of lifelong learning and commitment to medical professionalism is a lifelong engagement with individual and collective social values. The former can be achieved through good clinical practices and high ethical standards; the latter can be achieved only by institutionalizing within medical organizations the types of practices we describe.

Third, the crucial institutional practices are those that make collegial, experiential, reflective, lifelong learning a part of medical education and practice. As we have said, these organizational practices constitute the glue that pulls all the elements together. Properly structured and conducted, these practices can help the individual practitioner's performance of work excel across all the dimensions of professionalism, both technical and normative. Built in part on theories of adult learning, they help motivate professionals to engage in a constant process of self-directed experiential learning, and they provide structured means to facilitate that learning, in part by providing the means for safe risk taking. They also allow medical professionals to live an organizational life of connections among colleagues, which in turn teaches the intrinsic value of medical work and gives a sense

of control over that work, essential elements of medical professionalism.[10,11] Finally, institutions of reflective practice provide the means by which colleagues working within medical organizations can be connected with social organizations without. Through this woven fabric, medical work can be imbued both with ethical commitment to the individual patient and with social value and purpose, which is what professionalism is supposed to be all about.

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