

# Sharing Care in the ACO Era

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## ABSTRACT

The United States is confronting an impending shortage of healthcare providers. Once provider reimbursement is driven by bundled payments (accountable care organization [ACO] model) instead of piecework (fee for service), opportunities will arise to redefine roles of physicians, nurse practitioners, physician assistants, pharmacists, care coordinators, registered nurses, patient educators, and medical assistants. A key issue will be delegation of tasks to efficiently deliver care at “top of license,” while also mitigating the inherent risks of missing an obscure diagnosis or failing to recognize specific complicating factors in patient management. The authors present a novel conceptual model for delegating patient management on intersecting axes of “complexity of care” and “certainty of diagnosis.” We offer clinical examples in each of the 4 possible quadrants of care and outline possibilities for efficient patient flow by an appropriate team member in both primary care and subspecialty practices.

The United States is confronting an imminent shortage of physicians, advanced practice registered nurses, and physician assistants that will significantly impact our approach to providing healthcare in the future.<sup>1,2</sup> Contributing causes of personnel shortages include an aging provider population, reduced average physician work hours, and increased demand afforded by expanded insurance coverage under the Patient Protection and Affordable Care Act. The primary care provider gap, estimated at 16,000 physicians and advanced practitioners in a recent Senate report,<sup>3</sup> is predicted to triple by 2025.

Although attention has centered on provider shortfalls in primary care, healthcare consumer demand is expected to exceed provider supply in many medical subspecialties during the current decade.<sup>4</sup> With salaries essentially constrained by governmental and third-party payer reimbursement, and workforce augmentation limited by the refractory period inherent to training, the classic supply-and-demand principles cannot easily correct the imbalance. Regional shortages,<sup>5</sup> already realized in some areas, are expected to deepen as physicians seek opportunities where geography or case mix allows higher reimbursement.<sup>6</sup> Although educating and training more providers may gradually improve supply, ongoing provider attrition and accountable care principles mandate a more deliberate, organized, and nimble approach to the allocation of provider roles in meeting clinical demands.<sup>7</sup> The shift from fee-for-service payment to an accountable care organization (ACO) model offers an opportunity to restructure how healthcare is delivered.

The Institute of Medicine recommends that healthcare team members utilize their full legal scope of practice<sup>8</sup> while applying evidence-based research to provide efficient patient-centered care. One approach—expanding the role of nurse practitioners and physician assistants (both groups are considered advanced practice clinicians, or APCs)—has been limited by antiquated scope-of-practice regulation in many states.<sup>9</sup> The quality of care provided by APCs has generally been found similar to that of resident physicians in inpatient settings and to primary care physicians in ambulatory venues. Patient satisfaction has been largely equivalent or superior to that found with physicians.<sup>10,11</sup> Despite the limitations of such studies, such as oversampling of patients with previously diagnosed common conditions<sup>10</sup> or exclusion of complex patients,<sup>11</sup> it appears that the capabilities of physicians and APCs are complementary if not equivalent for many patient encounters. In one cross-sectional sur-



vey, patients preferred the physician for therapeutic recommendations, prognostic information, and other “medical” aspects of care, but preferred the nurse practitioner for education and advice on dealing with their disease.<sup>12</sup>

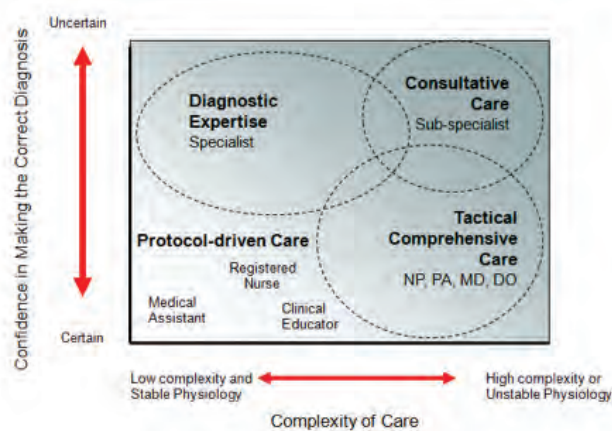
Parsing the division of labor between physicians and APCs has not been without controversy.<sup>13</sup> Even though more than 80% of APCs work with physicians and nearly half of physicians work with APCs, these groups do not necessarily agree on issues such as leadership of medical homes, hospital admitting privileges, or payment for clinical services.<sup>14</sup> Moreover, both physicians and APCs may be performing many tasks that could be more efficiently handled by registered nurses, medical assistants, practice facilitators, and care managers in a well-functioning primary care team.<sup>15</sup> A thicket of inconsistent state regulations regarding APCs<sup>16</sup> and payment rules in a fee-for-service environment currently restrict the possibilities of a thoroughly new approach to internal medicine and adult subspecialty care. A model is needed that redefines professional roles based on the uncertainty present in many patient encounters as well as the expertise needed with highly complex patient presentations.

We propose a conceptual model of care that allocates clinical roles across the independent but related spectra of *complexity of care* and relative *certainty of diagnosis* that describe most clinical scenarios (Figure). Assigning duties based on this model could help patients receive their care in the most efficient way by utilizing those healthcare workers on a team best equipped to manage a particular encounter.

In the new era of population-based, accountable healthcare, role boundaries must be less rigidly restricted, with appropriate allocation of clinical duties based on level of training, professional strengths, and scope of practice for each individual on the team. The roles of dental hygienists and dentists in team care have been well defined for years. In medicine, the overlapping yet complementary competencies have not been utilized to full advantage, partly due to protectionism and lingering “guild” mentalities and partly due to a reimbursement system that bases reimbursement on the quantity of time-based face-to-face encounters rather than the diagnostic expertise or coordination of care required. A team approach becomes financially more feasible when the importance of supervision and consultative “backup” are supported by payment methods. The Table presents discrete examples of how the 4 quadrants of complexity and certainty of diagnosis in the Figure would apply in a clinical setting.

Although most patients are neither complex in level of care nor uncertain in diagnosis, the inherent tension in provider role definition centers on the perceived risk of missing an obscure diagnosis or of failing to recognize specific complicating factors in management. Successful practices may already have implicit consultation or mentoring arrangements, whether between senior and junior physicians, or between physicians and APCs. The predicted shortage of licensed independent practitioners suggests that we should expand this model to explicitly recognize the roles of registered nurses, pharmacists, medical assistants, practice facilitators, care managers, and

**Figure. Provider Determination by Complexity of Care and Uncertainty of Diagnosis**



Patient care may be complex or not depending on physiologic stability, and the diagnosis may be certain or uncertain. Plotting each of these variables on a different axis helps define the appropriate team member provider for the patient to see. Patients with a clear diagnosis and low complexity may be suitable for protocol-driven care provided by medical assistants and registered nurses. As either uncertainty or complexity increases, effective and efficient care involves increasing levels of training and expertise. Future investigation may define how to separate patients needing diagnostic expertise versus increasing levels of comprehensive care. Consultative care from a subspecialist occurs in the realm of both diagnostic uncertainty and necessary tactical expertise.

perhaps other roles that are nascent or yet unimagined. Having a framework helps to better define which patients need higher-level services, and it allows research, continuous quality improvement to triage, and the ability to follow up on uncertainty.

Complexity of care represents a spectrum that encompasses severity of illness, the number of comorbid diagnoses, and physiologic instability. Patients with certain acute or chronic management problems, such as pharyngitis, minor lacerations, well-controlled diabetes mellitus, hypertension, or nonprogressive human immunodeficiency virus-1 infection represent examples of noncomplex issues with little diagnostic uncertainty. However, an elderly patient with multi-organ system compromise and a young patient taking multiple interacting medications are examples of complex clinical presentations. Uncertainty of diagnosis considers the clinician’s degree of confidence in making the correct diagnosis and thus implementing proper treatment. Confidence in making the correct diagnosis is a dimension independent of complexity, and one that may evolve over time. Although the Table expands on scenarios that might appear in the 4 quadrants of the Figure, we recognize that there will be patients who do not immediately fit cleanly in 1 sphere. In these cases, it makes sense to steer the patient’s initial evaluation to the most experienced diagnostician.

Even for complex patients, many aspects of routine health maintenance could be efficiently handled by medical associates, registered nurses, pharmacists (eg, medication reconciliation), and educators. Such an approach allocates the more limited number of APCs and physicians to higher-level diagnostic and therapeutic tasks.

Evaluating the patient’s complexity and the degree of diagnostic uncertainty is the key task of the initial encounter and a key driver of subsequent encounters. If a long-term relationship is to be established, the provider might either add the patient to his/her personal panel, transfer continuing care to another clinician on the team, or recommend follow-up by a patient educator, registered nurse, case manager, or other support personnel within the practice. The category (complex/not; certain/not) of a patient will often change over time. In some instances, early consultation with a subspecialist is essential, although in the ACO environment such referrals might take the form of a provider-to-provider phone call, telemedicine consultation, or eReferral<sup>17</sup> instead of a fee-for-service office visit.

Subspecialty teams would likely be organized differently from those in primary care. In an idealized primary care setting, the subspecialist physician would be engaged only when the patient’s condition has advanced enough in either complexity or uncertainty to require more advanced diagnostic skills or therapeutic experience. Subspecialty practices would likely invert the order of provider contact, since referred patients have already been designated as too uncertain or too complex for primary care alone. Although subspecialists might choose to involve an APC for initial evaluation, the referring provider (either APC or physician) is likely seeking consultative help at a higher level of expertise and views the subspecialist’s professional input as essential.

In analogous fashion to that posited for primary care settings, an initial subspecialty visit might result in one of several pathways: immediate transfer back to the primary care provider; time-limited care with eventual referral back to the patient’s medical home; or less frequently, to longitudinal subspecialty care. The goal is to efficiently deliver the multiple elements of patient care through the most appropriate member of the healthcare team once the patient’s condition is solidly placed on the functional spectra of complexity and certainty.

With a looming provider shortage, attention needs to be focused on shared care across the professional spectrum of the healthcare team, from medical assistant to subspecialist physician. Current payment systems frequently discourage highly paid providers from delegating lower-value work because easily measured face-to-face time rather than diagnostic ability or judgment (both difficult to measure) forms the basis for reimbursement.

Disruptive innovation that moves the field forward will occur when roles are critically reevaluated and redesigned to address economic realities. The old paradigm of medical knowledge—closely held and imparted by physicians alone—has been rendered obsolete by widely available, and free information on the Internet and the utilization of APCs in the delivery of care. But the vast fire hose of knowledge must be limited, focused, and directed, which requires experience. The value proposition presently lies in the ability to synthesize evidence-based information and weigh therapeutic options with the active participation of the patient in determining the management plan.

**Table. Representative Patient Presentations Within the 4-Quadrant Model**

Diagnostic Expertise	Consultative Care
<p>Typically an internist but may be a surgeon, radiologist, or other specialist</p> <ul style="list-style-type: none"> <li>• New-onset cognitive decline</li> <li>• Symptomatic lung nodule</li> <li>• New-onset arrhythmia/palpitations</li> <li>• Fever in returned traveler</li> <li>• Vascular insufficiency</li> <li>• Any signs or symptoms where differential diagnosis is large and/or time-sensitive (eg, purpuric rash, sudden headache)</li> </ul>	<p>Specialist/subspecialist physician</p> <ul style="list-style-type: none"> <li>• Acute CVA requiring thrombolysis</li> <li>• Acute respiratory distress syndrome</li> <li>• Electrophysiology evaluation</li> <li>• Septic shock</li> <li>• Diabetes requiring pump technology</li> <li>• Renal failure requiring dialysis</li> <li>• Specialized diagnostic and procedural/surgical interventions</li> </ul>
Protocol-driven care <sup>a</sup>	Tactical Comprehensive Care
<p>Medical assistant, clinical educator, registered nurse</p> <ul style="list-style-type: none"> <li>• Vaccination</li> <li>• Acute pharyngitis</li> <li>• Uncomplicated urinary tract infection</li> <li>• Minor lacerations</li> <li>• Checkup for well-controlled diabetes</li> <li>• Checkup for well-controlled hypertension</li> <li>• Checkup for nonprogressive HIV</li> <li>• Follow-up for obesity, hepatitis C therapy, and other stable conditions</li> </ul> <p><sup>a</sup>when permitted by standing physician orders and state licensure laws</p>	<p>Primary care providers (physicians and advanced practice clinicians)</p> <ul style="list-style-type: none"> <li>• Acute systemic illness</li> <li>• Patients with 1 or more identified chronic conditions with acute or secondary chronic presentation</li> <li>• Diabetes, hypertension, asthma with multidrug regimen or requiring titration</li> <li>• Asthma or COPD exacerbation</li> <li>• Therapeutic failure after protocol care</li> </ul>

COPD indicates chronic obstructive pulmonary disease; CVA, cerebral vascular accident (stroke); HIV, human immunodeficiency virus.

The commoditization of medical care may eventually force the APCs to migrate toward middle-complexity patient care, leaving protocolized care and most health maintenance tasks to nurses and educators operating under standing orders. The most expert providers must continue to be involved in protocol design, order-set development, supervision, and quality improvement strategies, and must also direct patient care for patients with uncertain diagnoses or complexity. Cooperative agreements, effective collaborative teamwork, interdisciplinary respect, and a gradual evolution in roles<sup>18</sup> are likely to occur. Natural evolution within a defined framework will be more flexible than legislated restrictions on the scope of practice of capable providers. Turf battles will not address the impending shortage of providers. Creative cooperation between healthcare disciplines is more likely to define roles in a manner that protects patient safety, maximizes available resources, and ensures the delivery of high-value, high-quality healthcare. We believe that the framework of certainty and complexity will allow the most appropriate, efficient provider to meet patient needs and improve healthcare outcomes while maintaining cost efficiency.



**Acknowledgments:** Department of Medicine, Baystate Medical Center and Tufts University School of Medicine, Springfield, MA (TLH, AWA); Georgia Southern University, Statesboro, GA, and Duke University, School of Nursing (consulting associate), Durham, NC (DH).

**Source of Funding:** None reported.

**Author Disclosures:** The authors (TLH, DH, AWA) report no relationship or financial interest with any entity that would pose a conflict of interest with the subject matter of this article.

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