Sub-specialization in Anatomic Pathology Drives Consolidation and Quality

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Full disclosure - we (CellNetix) are a large, highly sub-specialized pathology group. That said, we will explain why pathology sub-specialization (and larger group size) can and will lead to increased quality, decreased costs, improvements in patient care and safety, and is advantageous for hospitals, medical practices, and provider groups of all sizes.

Progress in modern medicine is driven by specialization. Serious illness is invariably referred to a specialist or a team of specialists who have the depth of knowledge to offer precise and accurate treatment and diagnosis. Unlike many other medical specialties, anatomic pathology is partner-focused, in that diagnoses are not delivered directly to the patient but to the referring provider. As medicine in general becomes more specialized, the demand for sub-specialized pathology diagnostics grows.

CellNetix is a highly sub-specialized 44-physician partnership that emerged from four Washington groups that had been servicing their hospitals, physicians, and communities for over 40 years. No venture capital was involved in startup of CellNetix, just some concerned doctors who saw where pathology was headed and felt they could better advance patient care and their chosen profession as a combined and larger entity.

CellNetix’ core belief is that the future of anatomic pathology is fundamentally tied to the ability to provide sub-specialized diagnostics. Here is why:

Training, Experience & Science

Subspecialization enables pathologists to deliver more accurate, timely, and precise diagnoses and to consultatively confer with clinical colleagues on difficult cases or those requiring correlation of clinical and pathology findings. The modern practice of pathology requires a vast knowledge database and involves complex pattern recognition. Fellowship training/certification melds the broad knowledge database and experience of general pathology, with the vertical depth of particular subspecialties, required by today’s modern
practice of medicine. Accuracy, speed, efficiency, cost effectiveness, and ultimately, the quality of patient care, all increase with specialized experience and training.

Communication

Pathology is a relationship-driven medical specialty. Because of this, clinical specialists find it easier to discuss complex cases with a pathologist who is familiar with the lexicon and who has a relevant depth of experience commensurate with the clinician. Also, when dealing with a large sub-specialized pathology practice, the providers’ chances of interacting with the same pathologist on many cases are actually increased; this leads to improved patient care.

Standardization

Specialty diagnostic teams promote knowledge-sharing, internal consultation, and allow collaboration and standardization in terminology and reporting. Only a sole practitioner can promise that the same pathologist will sign out every pathology report. One of the inherent challenges of a service-driven specialty such as pathology is to deliver a consistent report, regardless of the author. Sub-specialization dramatically increases the odds of success.

Cottage Industry

Like most other specialties, 80% of anatomic pathology groups in the country are small – it is essentially a cottage industry. This will not last because clinical subspecialties such as breast, gynecology, gastroenterology, hematology, urology, dermatology, neurosurgery and other specialized hospital and clinic-based practices are starting to demand specialized pathology partners. Consolidation in pathology will follow radiology, where paradigm shifts and fast-growing technical requirements quickly changed the profile of a successful group. As pathology practices generally serve hospitals as well as outreach clients, only large pathology groups can successfully accommodate all demands for specialty diagnostics (see table below).

New Case Allocation Process (sub-specialized pathology practice)

Under this model, cases arrive in the pathology laboratory and staff allocate these by sub-speciality: Breast cases to breast pathologists, gastroenterology (GI) cases to GI pathologists, genitourinary cases (GU) cases to GU pathologists, etc. Other types of cases that are suitable for general review are spread out among the pathologists.

Challenges

Even in larger groups, the distribution of case types can vary on a daily basis – this collides with conflicting conference, vacation, and business schedules to mean at some point the specialty diagnostic team model is stretched. Having a larger pool of sub-specialists, on each particular specialty diagnostic team, mitigates this problem.

Commoditization

As a pathology group that has an ac-

<table>
<thead>
<tr>
<th>Sub-specialty</th>
<th>Board Certification or Fellowship Training</th>
<th>Number at CellNetix</th>
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<tbody>
<tr>
<td>Dermatopathology</td>
<td>Yes</td>
<td>4</td>
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<tr>
<td>Hematopathology/Flow Cytometry</td>
<td>Yes</td>
<td>5</td>
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<td>Gynecological Pathology</td>
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<td>3</td>
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<td>Breast Pathology</td>
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<td>7</td>
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<tr>
<td>Genitourinary Pathology</td>
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<td>5</td>
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<tr>
<td>Neuropathology</td>
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tive sales force, we are often faced with a sobering reality: no matter what we offer hospitals and health care providers in terms of sub-speciality depth, IT capabilities, quality, service, cost, etc., loyalty to the incumbent is a very powerful glue (remember pathology is relationship driven, and unfortunately relationships sometimes trump patient care). Every sale is a displacement sale, and pathology can be perceived as a commodity, or as a black box from which “lab results” emerge. The reality is that in these changing times, pathology practices, their lab capabilities and overall quality can and do vary greatly; all pathology is not the same.

Most pathology groups and/or organizations choose not to invest in science, informatics, telepathology and sub-specialists, and have staffing plans geared towards economy and not towards quality, patient safety or turn-around time. These groups preferring instead to increase the per-pathologist profit distribution or shareholder stock appreciation. Unusual is the group or organization which invests in technology, expanded test menus, specimen tracking, quality control, and sub-specialization. Both cost the same to the patient. Which would be your preference for pathology services? We would argue that “quality will out” and that longevity will be the reward for groups and organizations willing to invest in all these things which bring added value to the practice of pathology.

**Telepathology**

At CellNetix, not all our pathologists are in the same building. We serve large hospitals and small hospitals and have some hospitals where there is only one pathologist. Telepathology enables us to provide sub-specialty expertise to all our sites while still maintaining a local presence and local relationships. Within seconds, any of our pathologists can consult with a sub-specialist for a second opinion at no cost to the patient or client.

**CellNetix New Case Allocation Process**

The reality of this fast emerging sub-specialization trend is that during the transition period, hospitals and providers who do not appreciate, or who are indifferent to the difference, are okay with generalist service and 20th century technologies. Those hospitals and providers who are aware, demand service and quality commitments and seek out groups that can meet them. As with many environments from hospitality to retail, there is nothing like a demanding client to elevate the level of service! At CellNetix we are able to commit to these more demanding clients because of our size and depth and sometimes because not everyone makes the same demands at once. If they did, we would adapt and the rate of change in pathology would accelerate! There is no such thing as a properly run pathology practice being “too large”. In fact, large is the idea! Our “high-maintenance” clients communicate to an increasingly savvy patient base that they leverage sub-specialized pathology expertise. This is happening today, and some hospitals and clinics readily perceive the patient care and partnership advantages of engaging a highly sub-specialized pathology group. They are seeing more patients, higher profits, and lower costs because of it.

**The Patient**

It is important to stress that the primary beneficiary of the movement towards sub-specialization in pathology is the patient. Typically, the patient takes the diagnosis they are given by their clinical physician and does not know enough to
question whether it is excellence or inertia that governs the direction of their pathology work. We believe the chances of a “positive outcome affecting pathology report” are increased by the training and subsequent experience that sub-specialization brings. We encourage our hospital and clinic clients to place higher expectations and demands on us and their other pathology partners. We believe sub-specialization in anatomic pathology can save lives and reduce healthcare costs and that this trend will continue to direct pathology groups toward consolidation.