

## **Neurology Departmental Analysis, Executive Summary**

### Criteria for Conversion of Division to a Department

1. The Dean of the School of Medicine has the responsibility to authorize an analysis to consider division conversion to Departmental status.

#### 2. Reserve Funds

Divisions that are in consideration for Departmental status should have financial reserves in University accounts equal to or greater than 10% of their projected all mission yearly budget.

#### 3. Department Leadership

The Dean of the School of Medicine has discretion in selecting a new chair for a new Department. In most cases an interim chair will be appointed (often the existing division chief) and a search for the new chair of the Department will begin at the discretion of the Dean.

#### 4. National Model

We recognize that the division/structure at Duke may differ from structure that may occur at other schools. If greater than 90% of Medical schools in this country classify a functional group as a Department (instead of a division) our School of medicine will likely re-evaluate our own structure relative to that Department.

#### 5. Clinical Practice

The clinical practice must be broad-based and comprehensive and represent an important clinical resource for our patients commensurate with other clinical programs at Duke. The clinical practice must be self sustaining from a financial point of view (immediately upon separation) without requiring subsidy from the School of Medicine. Subsidy from the health system (hospitals) may be necessary or encouraged based on synergy with the system.

#### 6. Research

Within 5 years the new Department must be top 10 in the country in external funding for research in like Departments. The research must be financially self-sustaining (with the assistance of internal financial subsidy from clinical dollars via a 5b mechanism, or other intra-departmental dollars). Medical School subsidy will occur at the discretion of the Dean.

#### 7. Education

The new Department must have an ACGME (and ICGME) approved postgraduate training program that is free standing from other Department educational programs. The primary training program in the new Department should be top 10 calibers within 5 years of separation. Funding for all GME positions (ACGME and non-ACGME approved) must be defined and accounted for. Residents, clinical fellows and research fellowships must be funded through defined mechanisms (hospital, School of Medicine GME pool, external sources, clinical dollars, etc). If positions cannot be financially supported by defined sources, the educational programs must be down-sized when the new Department is created.

8. Impact of separation on other Departments (or centers or health system entities)  
If there are winners and losers when a division separates as a new Department, are the losses manageable or has irreparable harm been done to the Department (or entity) that has been negatively impacted?

9. Administrative Support

Any new Department must carry on all the functions of established Departments. The new Department may purchase services from existing Departments for infrastructure that they choose not to reproduce (examples include research administration, credentialing, GME oversight, financial management).

10. All Missions Budget.

The all missions budget for the new Department must be projected over five years and have no projected subsidy requirement from the School of Medicine.

**Application of the criteria for new Departmental Status of the Duke Division of Neurology**

1. National Model

Neurology has been a division of Medicine at Duke since its inception. However, at the national level all of the top 30 US News and World Report listed Neurology programs are stand alone departments. Furthermore, almost all of the remainder of Neurology programs in the country is stand alone departments. At any other academic medical center, our neurologists from Duke, who lead their subspecialties, would be division chiefs. The lack of departmental status and individual status for the leaders in Duke Neurology hurts the reputation of both the institution and individuals and is a constant disadvantage in recruitment. It is also possible that grant funding is affected by this disadvantage of reputation.

Duke Neurology faculty includes national and international leaders in stroke, neurocritical care, movement disorders, epilepsy and clinical neurophysiology, myasthenia gravis, amyotrophic lateral sclerosis, electromyography, Alzheimer's disease, neuromuscular ultrasound and neurological education. These faculty members have leadership appointments in national societies and routinely teach courses in their areas at national meetings.

2. Clinical Practice

The clinical faculty practice of the Division of Neurology is functionally separate from the Department of Medicine. While subspecialty neurologists may fulfill a general care function, it is as neurologists without any integration into medicine call schedules such as medicine ICU, inpatient ward or clinic. Duke Neurology has formed 9 active divisions plus the VA Service. The expansion of understanding of disease mechanisms and therapeutics in Neurology has resulted in the need for fellowship training in all but 2 of

our divisions (General Neurology and VA Neurology) and further growth in specialties is occurring including areas such as Sports Neurology and Neurology Hospitalist.

Overall volume has increased particularly in the outpatient arena. It is anticipated that inpatient volume will also increase as our Neurological ICU increases from 16 to 24 beds and our 2 inpatient services move with the Neuroscience ICU to the 8<sup>th</sup> floor of the Duke Medical Pavilion.

We have extended our practice to include all 3 Duke Hospitals where all neurological consultations are provided by Duke Neurologists. All 3 Duke Hospitals have JCAHO accreditation for stroke center care under our leadership.

Clear subspecialty areas of growth include Multiple Sclerosis, neurocritical care and stroke, memory disorders and movement disorders. Duke Neurology is partnered with Neurosurgery (vascular, epilepsy, movement disorders), Psychiatry (neuropsychiatry), Pediatric Neurology (epilepsy, neuromuscular disease), and Sports Medicine (concussion).

Department status will assist with the recruitment of future leaders of this program as well as neurologists to practice at a growing number of locations to meet our access needs in the community.

### 3. Research

Duke Neurology has a moderate sized research platform. There are several other areas at Duke conducting neuroscience research including Neurobiology, Psychiatry, Neurosurgery, and the Duke Institute for Brain Science. A Department of Neurology can be the centerpiece of neuroscience research to help coordinate activities in these areas and link the clinical material to the basic science. While the criteria for conversion mentions a Department at Duke should be aiming for the top 10 ranking in research dollars, we believe it is important to recognize this broad distribution of neuroscience research at Duke as opposed to a more traditional institution where most of the neuroscience research will be clustered in a Department of Neurology alone. Our research goals should be in the aggregate.

Duke Neurology already has its own independent SBR and will not need Medicine infrastructure for clinical research.

Our basic science faculty is integrated into the basic science community at Duke and significant opportunity exists to develop programs across the continuum of clinical care, translational and basic research through more coordinated planning and recruitment between departments.

Basic research is not financially self-sustaining with assistance only from an internal financial subsidy 5b. To meet goals of a Top 10 ranking we will need to negotiate a subsidy from the Medical School. Total direct funding in annual external research support was 5.3M last year with the NIH totaling 2.2M of that amount.

### 4. Education

Duke Neurology already has a free standing Adult Neurology residency program that has been running independently from Medicine training programs. Neurology runs its

own core 2nd year Duke Medical School rotation. Additionally, Duke Neurology runs 4 ACGME approved and 4 ICGME approved Neurology fellowships with plans to expand into other subspecialty areas. Neurology runs its own Education office providing the infrastructure for these educational programs. Training programs in general and specialty neurology lead to Duke trained neurologists who are critical to recruitment efforts for the expanding the Duke Neurology practice.

Our GME programs are well thought of nationally. Our Duke residents have a 98% first time pass rate on American Board of Psychiatry and Neurology credentialing exam. Our residents match at fellowships at the best programs in the country or complete fellowships at Duke. We routinely fill our programs and recruit our residents and fellows for faculty positions.

#### 5. Other Department Impact

The current DOM and its chair support the creation of an independent Department of Neurology. The financial, clinical, education, space, research, and administrative impact on the DOM have been estimated. There is no significant negative impact. Opportunities for joint clinical and research programs between Neurology and Medicine will be enhanced by a strong Department of Neurology.

#### 6. Administrative Support

To meet the expanded reporting and budgeting responsibilities required by the SOM and dictated by mission based budgeting by division (9 neurology divisions), administrative staffing within the new Chair's Office will have to increase by 1 Financial Analyst. The cost of this additional finance support will be paid from the SOM contribution to departments for administrative costs. Additional cost approximates \$64,000. It is our intent to purchase some administrative support from the DOM in finance and in HR for a 2 year period at \$75,000 per year.

#### 7. All Missions Budget

A mission based budget has been projected for a five year period and is included in this analysis. This 5 year budget anticipates Meaningful Use revenues and projects Neurology's cost of the EPIC system. We project small profits in each year with the exception of FY17 where a loss of \$47,000 is forecast. Overall, we project a 5 year profit of \$234,000.

#### 8. PDC Divisional Accounts

Neurology has already established sub-ledger accounts within the PDC for each of the 9 Divisions of Neurology (Neuromuscular, Headache, Movement Disorders, MS and Neuroimmunology, Epilepsy and Sleep, Behavioral Neurology, General and Community Neurology, Critical Care, and Stroke).

What are the risks if Neurology stays a division?

The risk of Neurology staying a division of Medicine is largely reputational. Duke Neurology remains the only Division of Neurology within the top 20 Neuroscience programs in the 2012 US News and World Report rankings. Number 8 in 2011, we fell to 14<sup>th</sup> in 2012. Although currently successful, as a Division, recruitment of certain neurology subspecialties has been impeded as has the recruitment for our residency program. Neuroscience remains a clinical growth area of key strategic importance to Duke University Health System, and as such, the recruitment plans for new neurologists and extenders needs to be aggressive. It is considered essential to bring Duke Neurology to a position as a Department in line with the other top Neurology programs in the country.

What are the risks of Neurology becomes a department?

The risks to the School of Medicine are several:

- (1) Financial: The SOM will have a financial exposure if the new Department of Neurology fails to meet its budget. While a division of Medicine, the budget gap falls to them. As an independent department the budget gap will fall to the School especially when viewed in the light of the fact that Neurology has very little strategic reserves. However, the current clinical practice is, and is expected to remain quite profitable. The Division currently has faculty controllable general research reserves of \$1.5M. To protect the school from such a financial loss, Neurology and the SOM need to enter substantive discussions about funding for Neurology's there missions. We are very confident in the high patient demand for our clinical programs and in our capacity to deliver quality services. Allocations from the SOM for our clinical mission costs are not needed. Support and further development of the research programs will be needed to augment by the School if national standings are to improve. All financial support for education must be modeled; unexpected losses must be covered by the division reserves.
- (2) Strategic: The Division of Neurology currently contributes to a portion of the Department of Medicine 5b transfer. Once Neurology becomes a Department, the Department of Medicine will need to restructure its 5b to match its new department size.