

APP UTILIZATION CASE STUDIES

The Practice Management and Technology Subcommittee compiled the following case studies of how APPs are integrated into care teams of neurology organizations of different sizes and settings. The case studies are not recommendations but examples of different APP models that have improved access to care for a particular organization.

Questions? Email practice@aan.com

Academic Center	
Why APPs?	"APPs allow extension of the care team. Some function in the clinical research area as well."
APPS as Part of a Care Team	APPs are dedicated to one specialty area
APP Work Model	See established patients only.
Other Clinic Services and Responsibilities	<ul style="list-style-type: none"> • Manage between-visit questions • Oversee medication refills • Address urgent needs

Large Private Practice	
Why APPs?	As a way to expand capacity in order to meet the service demands of our growing community.
APPS as Part of a Care Team	<ul style="list-style-type: none"> • Ratio of 1 APP:1 MD is most cases • In certain cases where the patient demand warrants (e.g., sleep and pain clinics), our physicians supervise 2 APPs • Each APP has a designated supervising physician
APP Work Model	APPs see established patients (physicians also see established patients as part of their normal practice)
Other Clinic Services and Responsibilities	<ul style="list-style-type: none"> • Administer injections (TPI/ONB) • Botox • Skin biopsies
Getting Patient Buy In	"The physician and APP form a designated care team and we immediately begin educating patients about this relationship and how it allows us to provide the appropriate care they deserve (this is a key step). The physicians and APPs collaborate. In many cases, patients prefer to continue seeing the APP almost exclusively as a strong bond is formed."

Rural Multispecialty Center	
Why APPs?	Added APPs due to limited outpatient neurologists.
APPS as Part of a Care Team	Help inpatient neurologists
APP Work Model	<ul style="list-style-type: none"> • Rotate between in and outpatient services • Outpatient clinic templates are 15-20 patients per day • See new consults with an active discussion of testing, treatment and executing the treatment with one of the Neurologists <p>"Inpatient services schedules recently reduced to ½ day 3x per week to improve patient access in the outpatient setting and to help answer the many day-to-day issues our Neurology patients call with."</p>

Academic Center	
APPS as Part of a Care Team	<p>APP to Physician ratio varies by subspecialty: Ratio of 1 APP:1 MD is most cases</p> <ul style="list-style-type: none"> • Memory - 1:1 • Headache - 1:3 • Movement - 1:4 • Epilepsy - 1:12 • Stroke - 1:6
APP Work Model	<ul style="list-style-type: none"> • Sees established patients only • Inpatient coverage: <ul style="list-style-type: none"> - 2 APPs manage stroke floor - 2 APPs cover neuro ICU - 1 APP covers EMU <p>“Our hospital is community based and APP run. Our neurology consult service has 2 APPs working with one provider. We have a total of 3 APPs to cover the day shifts from 6-6 on the weekdays. Contingent APPs cover 1:1 with provider on the weekend, 6-2.”</p>
Other Clinic Services and Responsibilities	Epilepsy and movement APPs perform DBS/VNS programming

Medium Private Practice	
Why APPs?	<ul style="list-style-type: none"> • Expand capacity in order to meet the service demands of our growing community. • Allow our MDs to focus on new patient referrals.
APPS as Part of a Care Team	<ul style="list-style-type: none"> • 8 APPs:4MDs • All APPs support all MDs • Try to keep consistency between patients and APPs
APP Work Model	<ul style="list-style-type: none"> • Inpatient service: 1 APP supports child neurologist in rounding and documentation • All APPs see general neurology and none subspecialize • See established patients <p>“We are piloting a program in which we triple book new patients all day and have one MD and two APPs see new patients. The APPs do the notes and work up and the MDs follow each patient behind them and supervise with assessment and planning.”</p>
Other Clinic Services and Responsibilities	<ul style="list-style-type: none"> • Injections • Toxins for migraine only
Getting Patient Buy In	<p>“Having the MD and APP see patients together for new patient consults, introduces the care team at the first visit, and instills a trust as the patient has follow up visits with the APP. It also builds confidence in the APP to develop treatment plans for new patients and builds trust with the MD as they train the APP to evaluate new patients and new problems.</p> <p>In many cases, patients prefer to continue seeing the APP almost exclusively, but do rotate through with the physicians on an every 1-2 year basis.”</p>

Academic Center: Inpatient Services	
APPS as Part of a Care Team	6 full time APPs, growing to 8
APP Work Model	<ul style="list-style-type: none"> • Weekdays: 1 APP staff inpatient stroke service, cross covers general neurology from 4:30-7:30pm each day • Weekends: 1 APP on neurology service • Average of a 5-patient assignment <ul style="list-style-type: none"> - Mixture of new and established patients based on need and census - Fully responsible for all direct care of those 5 patients (assessment/notes/orders/patient teaching/discharge). - Helps coordinate the care for the remainder of the inpatient stroke team, including other responsibilities listed below.
Other Clinic Services and Responsibilities	<ul style="list-style-type: none"> • Ensure stroke metrics are met in accordance with hospital policy and Get With the Guidelines • Coordinate stroke work up is done in a timely manner • Patient teaching • Making sure patient has necessary outpatient resources (therapies, further cardiac monitoring, outpatient testing) • Schedule stroke follow up

Academic Center	
APPS as Part of a Care Team	<ul style="list-style-type: none"> • Child: 7 APPs • Adult: 16 Apps
APP Work Model	<ul style="list-style-type: none"> • Child: <ul style="list-style-type: none"> - APP-led new onset seizure clinic; usually have same day EEG - Each APP has a specialty and sees new patients in that are • Adult: established only
Other Clinic Services and Responsibilities	<ul style="list-style-type: none"> • Child: <ul style="list-style-type: none"> - 2 APPs infuse - 2 NPs involved with research, including launching gene therapy research study • Adult: <ul style="list-style-type: none"> - Botox for headache - Muscle biopsies - Assist with Duopa - Headache: nerve blocks - Research - Assist with other multidisciplinary clinics (speech, OT, social work, etc.) - Epilepsy: setting up functional neurology clinic with psychiatry providers - Assisted with URMC's stroke certification and has been nominated for local chapter of the American Heart Assoc.

Academic Center	
APPS as Part of a Care Team	<p>APP:Physician ratio varies based on specialty Child: 7 APPs</p> <ul style="list-style-type: none"> • MS: 2 APPs: 7 MDs • Headache: 4 APPs: 2 MDs, 1 fellow • Epilepsy: 2 APPs: 9 MDs
APP Work Model	<p>See new and established patients based on specialty</p> <ul style="list-style-type: none"> • MS: 60 minutes per patient; sees return only • Headache: 10-16 patients/day; sees return only • Epilepsy: 60 minutes new, 30 minutes return
Other Clinic Services and Responsibilities	<ul style="list-style-type: none"> • Headache procedures • MS responsibilities: <ul style="list-style-type: none"> - Follow up visits alternate with attending for medication safety monitoring - Plan follow up visits for short reassessment after med changes - Sees acute add-on visits for change in neuro status, concern relapse, or other needs - Performs phone visits for certain consent needs - Provides inbox coverage for attending not on site or out of the office - Is the infusion suite on-site provider - Liaises with RN team for urgent patient needs which may fall into scope of APP to ensure faster turn around and off-load attending • Epilepsy responsibilities: <ul style="list-style-type: none"> - Educates patients prior to surgery or inpatient EEG monitoring - Quality improvement - Educates floor nursing - Helps triage patient calls to clinic