

# Benefits of Medical Media in Pediatric Neurology Office.



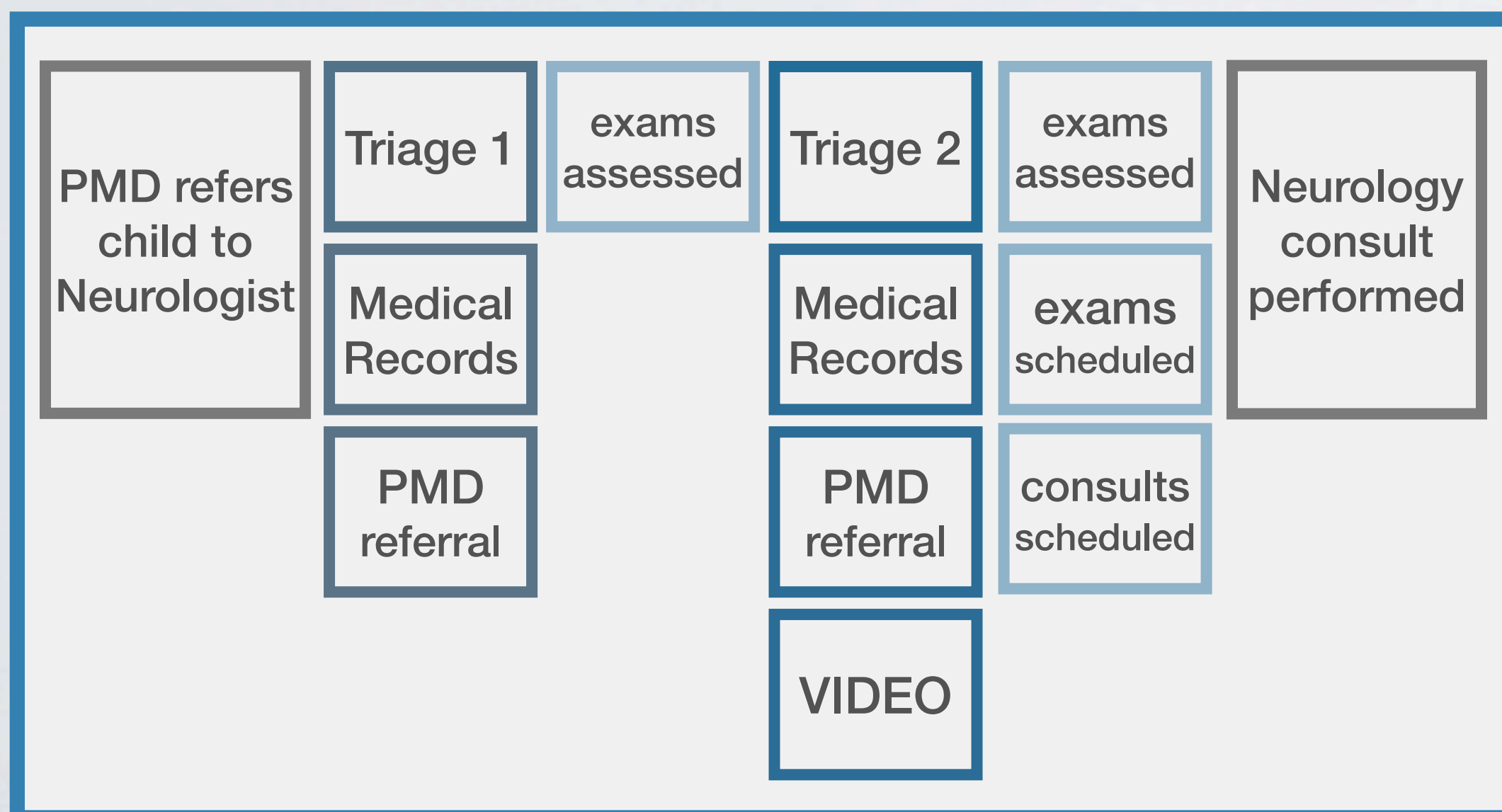
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## Background

The shortage of pediatric neurologists has been called a crisis by both the American Academy of Neurology and the Child Neurology Society. Pediatric neurologists are often asked to urgently see patients for questionable episodes. Until today there was no HIPAA compliant platform to share medical videos.

## Objective

An effective triage system is an integral part of scheduling patients in pediatric neurology practices. Referrals accompanied by video documentation augments the traditional triage system, allowing more effective use of limited resources for patients with suspected paroxysmal disorders.



## References

**The Child Neurology Workforce Study: pediatrician access and satisfaction.** Bale JF Jr, et al. ; J Pediatr. 2009 Apr;154(4):602-606.e1. Epub 2008 Dec 3.  
**Telemedicine and neurosciences.** Ganapathy K.; J Clin Neurosci. 2005 Nov;12(8):851-62.

## Methods

For the purpose of triage, patients were twice dichotomized into urgent vs. non-urgent groups. A child neurologist reviewed primary medical doctor (PMD) referrals and medical records without, and subsequently with, videos of 19 children between the ages of 6 months to 7 years. CaptureProof™ was the medical media platform used to organize and review the videos. Following a comprehensive history and physical exam a diagnosis was established for each patient.

- ✦ Referral from Primary Medical Doctor to child neurologist
- ✦ **Triage 1** - Review Primary Medical Doctor referral and medical records.
- ✦ **Triage 1** - Dichotomized: Urgent vs Non-urgent
- ✦ **Triage 2** - Review Primary Medical Doctor referral, medical records and video on CaptureProof™
- ✦ **Triage 2** - Dichotomized: Urgent vs Non-urgent
- ✦ Pre-appointment exams performed based on **Triage 2**.
- ✦ Appointment scheduled based on **Triage 2**.
- ✦ Full neurological exam performed and diagnosis established for each patient.

	Triage 1	Triage 2
Urgent patients	18	4
Non-urgent patients	1	15
EEGs assessed	18	4

## Results

Review of Primary Medical Doctor referrals and medical record without video resulted in 1 non-urgent patient referred for tics, 18 urgent patients referred to rule out seizures, and 18 pre-appointment EEGs scheduled. The review of medical records with videos resulted in 15 non-urgent patients: (4) gratification disorder, (2) paroxysmal tonic upgaze (PTU), (6) stereotypies, (1) staring, (2) tics; 4 urgent patients: (1) absence seizure, (2) infantile spasms, (1) unclear, and 4 pre-appointment EEGs scheduled.

## Conclusion

CaptureProof's easy to-use, non-invasive, secure system for real life patient monitoring at a fraction of the cost of current standards will benefit patients from the very first event through diagnosis and treatment. The study demonstrated the usefulness of media in pediatric neurology practices proving that it: a) allows for faster and more accurate diagnosis, b) reduces the need for costly tests, ER/office visits, and lengthy hospital stays, c) optimizes treatment modalities and d) results in better care at a fraction of the cost of the current standard of care for patients.

	Reason for referral	Triage 1		Video findings	Triage 2		Diagnosis
		Dichotomize	Pre-appointment exam		Dichotomize	Pre-appointment exam	
<b>Patient 1</b>	rule out seizures	urgent	EEG	gratification disorder	not urgent	none	gratification disorder
<b>Patient 2</b>	rule out seizures	urgent	EEG	gratification disorder	not urgent	none	gratification disorder
<b>Patient 3</b>	rule out seizures	urgent	EEG	stereotypies	not urgent	none	stereotypies
<b>Patient 4</b>	rule out seizures	urgent	EEG	absence seizure	URGENT	EEG	absence seizure
<b>Patient 5</b>	rule out seizures	urgent	EEG	paroxysmal tonic upgaze (PTU)	not urgent	none	paroxysmal tonic upgaze (PTU)
<b>Patient 6</b>	rule out seizures	urgent	EEG	gratification disorder	not urgent	none	gratification disorder
<b>Patient 7</b>	rule out seizures	urgent	EEG	tics	not urgent	none	tics
<b>Patient 8</b>	rule out seizures	urgent	EEG	stereotypies	not urgent	none	stereotypies
<b>Patient 9</b>	rule out seizures	urgent	EEG	stereotypies	not urgent	none	stereotypies
<b>Patient 10</b>	rule out seizures	urgent	EEG	infantile spasm	URGENT	EEG	infantile spasm
<b>Patient 11</b>	tics	NOT URGENT	none	tics	not urgent	none	tics
<b>Patient 12</b>	rule out seizures	urgent	EEG	gratification disorder	not urgent	none	gratification disorder
<b>Patient 13</b>	rule out seizures	urgent	EEG	unclear findings	URGENT	EEG	stereotypies
<b>Patient 14</b>	rule out seizures	urgent	EEG	paroxysmal tonic upgaze (PTU)	not urgent	none	paroxysmal tonic upgaze (PTU)
<b>Patient 15</b>	rule out seizures	urgent	EEG	staring	not urgent	none	staring
<b>Patient 16</b>	rule out seizures	urgent	EEG	stereotypies	not urgent	none	stereotypies
<b>Patient 17</b>	rule out seizures	urgent	EEG	infantile spasm	URGENT	EEG	infantile spasm
<b>Patient 18</b>	rule out seizures	urgent	EEG	stereotypies	not urgent	none	stereotypies
<b>Patient 19</b>	rule out seizures	urgent	EEG	stereotypies	not urgent	none	stereotypies