Supplemental Information

METHODS: VIEWS ON CP DIAGNOSIS SURVEY

This is a voluntary research survey examining medical professionals' views on the criteria for making a CP diagnosis. The survey should take 5 to 10 minutes to complete. Your responses will be collected anonymously. By responding to this survey, you agree to participate. You are under no obligation to participate and can choose to not respond.

1. Do you primarily treat (a) children (aged <18 years old), (b) adults (aged ≥18 years old), or (c) both children and adults?
2. Are you board certified or currently in training to become board certified in any of the following medical specialties? (select all that apply)
   a. Neurology
   b. Pediatrics
   c. Physical medicine and rehabilitation
   d. Orthopedics
   e. Neurosurgery
   f. Nursing
   g. Physical Therapy
   h. Occupational Therapy
   i. Speech Therapy
   j. Other

Although items f to j were included in the survey that was sent out, these specialists were ultimately not considered in the final analysis on the basis of comments received from many of these specialists noting discomfort with being the primary arbiters of a CP diagnosis (see Limitations section).

1. Do you have a medical subspeciality?

   Yes

   What is your subspecialty?

   _____

   Did you undergo fellowship training in this subspecialty?
2. Yes
3. No

   No
4. How long have you been in practice?

   Currently in training

   <1 year

   1 to 5 years

   6 to 10 years

   >10 years
5. What is your primary practice setting? (select all that apply)
   a. Academic
   b. Private
   c. Inpatient
   d. Outpatient
6. Where is your primary practice setting?
   a. United States
   b. Canada
   c. Other
7. What percentage of your practice involves caring for those with a persistent and nonprogressive motor disability?
   a. <10%
   b. 10% to 25%
   c. 25% to 50%
   d. 50% to 75%
   e. >75%
8. Are you a member of any of the following professional organizations? (select all that apply)
   a. No professional organization membership
   b. Cerebral Palsy Research Network
   c. Child Neurology Society
   d. American Academy for Cerebral Palsy and Developmental Medicine
   e. American Academy of Pediatrics
   f. American Academy of Neurology
   g. Association of Academic Physiatrists
   h. American Association of Neurologic Surgeons
   i. Congress of Neurological Surgeons
   j. American Academy of Orthopedic Surgeons
   k. Association of Child Neurology Nurses
   l. American Physical Therapy Association
   m. American Occupational Therapy Association
   n. American Speech-Language-Hearing Association
   o. Other

HYPOTHETICAL SCENARIOS

Four hypothetical scenarios follow, each describing a different child.

For each scenario, please indicate whether you think it is possible to make a diagnosis of CP in this child at this time. If not, please briefly explain why not.

For your reference, the most recent consensus definition of CP is as follows: "A group of permanent disorders of the development of movement and posture, causing activity limitation, that are attributed to non-progressive disturbances that occurred in the developing fetal or infant brain."[11]

SCENARIOS 1 TO 3

Scenarios 1 to 3 are each about a different 5-year-old boy who has the following shared chief complaint, birth history, and MRI findings.

Shared Information for Scenarios 1 to 3

A 5-year-old boy presents to you for walking difficulties. He was born at 30 weeks' gestation after an unremarkable pregnancy, with labor precipitated by preterm premature rupture of membranes. He had a 7-week NICU stay primarily to manage feeding immaturity. Brain MRI done at 4 years old revealed bilateral periventricular T2 hyperintensities.

Scenario 1

This child has had gross motor developmental delays but no regression and has gradually gained milestones. He began walking at 2 years old and has always used a walker to ambulate. He has spasticity and hyperreflexia in both legs on your examination.

Is it possible to make a diagnosis of CP in this child at this time?

1. Yes
2. No

Please briefly explain why not.

_____

Scenario 2

This child was walking normally and attaining age-appropriate developmental milestones until he turned 4 years old. Since then, he has had progressively increasing tone in his legs such that he now has to use a walker to ambulate. He has spasticity and hyperreflexia in both legs on your examination.

Is it possible to make a diagnosis of CP in this child at this time?

1. Yes
2. No

Please briefly explain why not.

_____

Scenario 3

The child has had speech and gross motor developmental delays but no regression and has gradually gained milestones. He is able to understand simple commands and is nonverbal but communicates with some sign language. He began walking at 2 years old and has always used a walker to ambulate. He has spasticity and hyperreflexia in both legs on your examination. His older brother has a similar phenotype with no history of prematurity. Given this, genetic testing was done, revealing that both brothers carry biallelic pathogenic mutations in *ADD3*, which has a known association with nonprogressive spasticity and intellectual disability.

Is it possible to make a diagnosis of CP in this child at this time?

1. Yes
2. No

Please briefly explain why not.

_____

SCENARIO 4

A 5-year-old boy presents to you for walking difficulties. He was born at 40 weeks' gestation after an unremarkable pregnancy and delivery. He also has a history of epilepsy. He has global developmental delay but no regression and has gradually gained milestones. He can ambulate short distances using a walker but primarily uses a wheelchair. He has diffusely low tone and hyporeflexia on your examination. Brain MRI done at 4 years old was normal. He was found to have a chromosome 1q microdeletion that has a known association with nonprogressive motor symptoms.

Is it possible to make a diagnosis of CP in this child at this time?

1. Yes
2. No

Please briefly explain why not.

_____

Thank you for your participation in this research survey!

Have a nice day!

RESULTS: RESPONDENT QUOTES

Respondent Quotes in Which a Genetic Diagnosis Was Cited as a Reason for Not Making a Diagnosis of CP

Scenario 3

1. "Depends. I would say something along the lines of he has CP secondary to X genetic disorder. But I would only do that for the school. Otherwise the diagnosis is X genetic disorder."
2. "For insurance purposes I would diagnose CP, but he has a genetic disorder. So he meets the criteria for CP, but is not 'typical' CP."
3. "Has a more specific genetic diagnosis; CP dx [diagnosis is] used for school and services but is he would be atypical since CP is structural."
4. "By theory no but practically speaking, yes. I consider CP a diagnosis of exclusion and if there is an underlying reason theoretically a specific diagnosis is made. However, for ease of

understanding by schools, etc I will often add the CP diagnosis to benefit patient and family."

5. "Genetic disorder, again with use CP label to obtain services."
6. "Highly likely a genetic disorder."
7. "I would diagnose the genetic disorder with spasticity. I don't call it CP if it's actually something else."
8. "I have never heard of this and did some reading. OMIM [Online Mendelian Inheritance in Man] classifies this as a gene with the CP phenotype. The child fits the definition of CP. I still would diagnose with *ADD3* as my primary diagnosis and depending on exam would think pyramidal weakness, spasticity would be other terms. CP was a fine diagnosis 100 years ago. I completed my training 32 years ago and my mentors, some of the greats in the field, were long past the term CP for most processes. It serves a purpose with some patients. It does not allow for a deep understanding. Thank you for educating me about this gene!"
9. "He likely has an identified genetic condition, and symptoms aren't from fetal development or birth."
10. "He has a [CP] phenotype and a genetic dx."
11. "Genetic cause."
12. "Genetic disorder."
13. "Familial inheritance."
14. "Genetic diagnosis, not truly CP but sounds that long-term prognosis will be the same."
15. "Genetic dx puts child in different dx category."
16. "CP diagnosis which excludes genetic etiology."
17. "Genetic disorder, not perinatal injury to brain."
18. "Has a known genetic disorder. [This] is 'like' CP."
19. "He has a genetic d/o [disorder], not CP."
20. "Cerebral palsy is not considered genetic."
21. "This is a genetic disorder."
22. "Could be genetic or both."
23. "Genetic etiology is proven."
24. "Genetic cause not brain damage."
25. "CP results from perinatal brain injury, not genetic abnormality."
26. "The hereditary and genetic overlay changes the diagnosis."
27. "Genetic cause to spasticity."
28. "Positive genetic testing."
29. "A little controversial, but as [there] is a genetic condition to explain his spastic diplegia that would be the most appropriate diagnosis."
30. "There is a genetic cause so the PVL [periventricular leukomalacia] may be incidental."
31. "Genetic testing + for different disorder."
32. "Genetic?"
33. "Would be c/w [consistent with] genetic spastic paraparesis, a different condition from CP."
34. "Static encephalopathy is not hereditary. CP is a clinical diagnosis made in the absence of an underlying genetic or other organic etiology."
35. "It's not CP but a genetic disorder."
36. "With a specific genetic diagnosis/syndrome, this would be the more appropriate diagnosis."
37. "Symptoms explained by genetic diagnosis."
38. "Would just use the genetic diagnosis, not [CP]."
39. "Has different genetic cause for findings."
40. "He has a genetic disorder that may be ongoing."
41. "The presence of genetic disease should move this out of the rubric of cerebral palsy. If it's genetic there is likely a progressive component of some sort and we need to separate this from CP which is more useful if thought of as an injury model."
42. "This is a familial genetic disorder. Not due to injury to a developing brain causing CP."
43. "It is a genetic disorder."
44. "Better explained by his genetic diagnosis, however management is the same as for a child with CP."
45. "May be genetic etiology."
46. "Family history."
47. "Genetic diagnosis."
48. "Cerebral palsy is a bad term. This patient has a genetic form of intellectual disability and has spastic diplegia."
49. "Genetic."
50. "Genetic diagnosis due to pathogenic *ADD3* mutation is a more definitive diagnosis and more appropriate term to use."
51. "Genetics."
52. "The genetic test and fam hx [family history] point to that as etiology."
53. "This could be due to his genetic diagnosis and not his prematurity or PVL."
54. "This is a genetic syndrome."
55. "This is genetically mediated."
56. "The diagnosis of CP does not, in and of itself, include language and cognitive disabilities. This patient has a genetic disorder of intellectual disability."
57. "Genetic origins."
58. "Genetic abnormality; protein issue."
59. "Genetic testing."
60. "Neurologic deficits explained by the pathogenic mutation."
61. "Genetic."

62. "Genetic."
63. "Known genetic cause for tone abnormality that may be progressive in nature."
64. "Because of the genetic diagnosis."
65. "This appears to be more of a genetic disorder than an insult to the developing brain."
66. "This sounds like a genetic diagnosis."
67. "While the child may have hallmarks of CP, he has genetic markers suggestive of another condition. His treatment and supports may not be much different than a child with a typical presentation of CP. There are lumpers and splitters in the field of CP and some lumpers who group all children with similar presentations as CP, regardless of their diagnosis (whether metabolic or genetic conditions). [T]here are splitters, who would prefer to have a diagnosis being specific to ensure that genetic conditions have been addressed and preventable causes ruled out."
68. "Not non progressive more genetic or hereditary."
69. "Might be CP, might be a genetic disorder."
70. "Familial spastic paraplegia."
71. "Genetic issue not CP."
72. "He has a known genetic mutation related to his phenotype."
73. "Known Genetic cause of symptoms."
74. "Symptoms related to the genetic condition."
75. "While he has clinical symptoms, his positive genetic testing and hereditary trend are not consistent with cerebral palsy."
76. "CP explains the non progressive spasticity, but does not explain etiology. I guess the general neurologists would call it CP, but given my genetics training feel that is too much of a bucket diagnosis."
77. "Genetic diagnosis."
78. "I consider CP to be the result of an injury to the developing brain, not a genetically determine abnormality of brain development."
79. "Child likely has a genetic diagnosis, I use CP specifically to indicate a child whose problems are related to injury around the time of birth."
80. "Has genetic etiology diagnosed; might meet criteria, but there is a better explanation of constellation of symptoms."
81. "I would actually say yes but wanted to clarify. Non-progressive motor = CP but I hesitate [because] I believe CP has a non-genetic connotation to some."
82. "Genetic testing pend."
83. "Sibling with similar issues."
84. "Genetic."
85. "Genetic explanation not related to perinatal events."
86. "This is the area that needs further clarification [and] discussion. If you [include] all the genetic disorders which can give non progressive problems, then CP diagnosis becomes very messy. Would you diagnosed [*sic*] the kid with Down syndrome with hypotonic CP?"
87. "Underlying genetic dx with [CP] phenotype."
88. "This child has a genetic disorder with motor features similar to CP."

Scenario 4

1. "1q."
2. "Chromosome abnormality would be the diagnosis."
3. "Chromosome disorder."
4. "Genetic."
5. "Genetic disorder."
6. "Genetic dx would put him in a different category."
7. "Genetic etiology."
8. "Genetic syndrome, not perinatal brain injury."
9. "[Has] known genetic disorder."
10. "He has a chromosomal abnormality that explains his signs & symptoms; this is not CP."
11. "I would not consider cerebral palsy genetic."
12. "Genetic disorder, low tone, no MRI findings, not premature."
13. "Genetic disorder."
14. "Same answer as on previous question." ("For insurance purposes I would diagnose CP, but he has a genetic disorder. So he meets the criteria for CP, but is not 'typical' CP.")
15. "Genetic."
16. "Genetic factor."
17. "Normal MRI, genetic cause."
18. "Has Chromosomal Disorder and hypotonia- call it what it is."
19. "Hypotonic CP is an old fashioned diagnosis that I think should be replaced by the genetic/muscle disease causing it."
20. "Chromosomal abnormality rather than perinatal injury."
21. "Does not meet criteria. There is a genetic anomaly that explains the findings."
22. "Genetic cause."
23. "Genetic condition."
24. "Genetic condition found to explain child's symptoms."
25. "Genetic diagnosis and normal MRI."
26. "Genetic disorder."
27. "Genetics."
28. "He has a genetic diagnosis."

29. "He has a genetic syndrome; there was not an insult to an immature brain thus not meeting the definition for CP."
30. "No because it can be attributed to the chromosomal abnormality."
31. "Similar to the last question, I feel that having a specific genetic diagnosis/syndrome should use this for the primary diagnosis."
32. "Symptoms from genetic syndrome."
33. "Would just use genetic diagnosis, not [CP]."
34. "Would use genetic diagnosis to explain exam findings."
35. "He has a genetic disorder, not solely perinatal."
36. "As for scenario 3, I am inclined to limit CP to injury and would separate out genetic conditions."
37. "This [patient's neurologic] problem is a genetic disorder."
38. "Genetic disorder. He may receive services that patients with CP get."
39. "Better explained by genetic diagnosis."
40. "Maybe genetic etiology, other global deficits."
41. "Genetic cause."
42. "Again, he has CP by definition. I still feel there are better ways to describe his illness. I would @this [say this] child has a 1q deletion resulting in hypotonic CP manifested by weakness of all skeletal muscle groups, as well as the cause of his intractable focal epilepsy…but then the term CP becomes redundant."
43. "Genetic diagnosis."
44. "Cerebral palsy is a bad term. Patient has a known genetic disorder."
45. "Has a more specific genetic diagnosis; could use CP as a secondary diagnosis."
46. "Probable genetic etiology."
47. "Patient with normal MRI and genetic diagnosis to explain motor disability."
48. "Genetics."
49. "sx [symptom] etiology likely the 1q microdeletion and or epilepsy."
50. "He has no history of any insult to his brain. This is more likely due to his genetic diagnosis associated with epilepsy."
51. "This is a genetic syndrome."
52. "Genetically mediated."
53. "This is due to a genetic syndrome and not a brain injury at or around birth."
54. "Chromosomal deletions are not CP."
55. "Chromosomal disorder; does not meet criteria."
56. "Chromosome abnormality."
57. "Deficits explained by microdeletion."
58. "Genetic."
59. "Genetic."
60. "Genetic cause."
61. "Genetic diagnosis."
62. "I would think this would be diagnosed as a chromosomal disorder rather than CP particularly given the lack of brain lesions."
63. "Sounds like a genetic disorder."
64. "While he has an intellectual disability and motor impairment, he does not have CP. Again, he has symptoms and signs similar to children with CP and the treatment and intervention may not be much different from children with CP, however, his microdeletion may be the cause of his global developmental variation."
65. "Chromosome anomaly."
66. "Genetic disorder diagnosed."
67. "Genetic problem."
68. "He has a chromosomal abnormality and no sign of a cerebral lesion leading to the diagnosis."
69. "Normal birth, normal MRI, no spasticity, chromosome [abnormality]."
70. "Unsure. Questioning if this genetic condition meets given definition of CP. I need to know more about the micro deletion."
71. "We have not defined the certain cause of the abnormal tone, but without some alteration to the early brain structure, I don't think this can be defined as CP. I would call this abnormal tone due to the chromosomal abnormality."
72. "Chromosomal defect can explain hypotonia, isolated hypotonic CP not as common as other types."
73. "Depends on definition of CP; if genetic causes/hypotonia are considered CP then yes."
74. "Low tone. Chromosomal abnormality known."
75. "Normal brain MRI and identifiable genetic cause of movement disorder (hypotonia) and developmental delay."
76. "This is a [typical] child with [psychomotor chromosomal] issues, where low tone interferes but is low-movement patterns would be anticipated normal, just weak, slow and poor alignment, needs [orthotics] but [consequences] are different."
77. "Does not fit the typical clinical pattern, also, many clinicians exclude a diagnosis of CP in cases of known genetic causes of non-progressive motor impairments."
78. "Genetic related."
79. "Hyporeflexia and known genetic anomaly."
80. "Known chromosomal abnormality."

81. "Central hypotonia from chromosomal abnormality."
82. "Genetic etiology with normal MRI and low tone. I would not call this CP. The diagnosis would not be useful for prognosis or planning as the presentation is very different from 90+% of patients with CP."
83. "Low tone, hyporeflexia, normal MRI and 1q deletion."
84. "Chromosomal syndrome."
85. "Chromosome."
86. "Chromosomes abnormal."
87. "Genetic abnormality is more specific. Do: developmental delay secondary to [chromosomal]…"
88. "He has a genetic diagnosis."
89. "I don't know enough about this syndrome's pathophysiology. Does the microdeletion cause a brain lesion/disturbance or does it impact other parts of the neuromotor system?"
90. "Normal MRI, better diagnosis of genetic syndrome."
91. "Injury to developing brain causing non progressive motor symptoms = CP. Genetic disorder contributing to hypotonia does not fit this paradigm."
92. "Nl [normal] MRI and chromosomal defect."
93. "Despite his chromosomopathy, the pathogenesis of his motor disability is not clear."
94. "Will not meet definition of CP, has a chromosomal aberration with defined microdeletion syndrome."
95. "I would like to see some spasticity to vaguely apply CP diagnosis even if it is proper. Schools/insurance are not kind to such kids. In this case genetic diagnosis should be adequate to gain access to services."
96. "Not clear whether a genetic mutation would be considered a non progressive brain injury."
97. "His diagnosis is 1q microdeletion syndrome."
98. "Genetic disorder."
99. "Same as scenario 3…since you have a cause, then my understanding is we would not call this CP. If we are talking about for purposes of getting services then phenotypically he fits the description of CP."
100. "Motor activity limitation due to cognitive level; genetic condition better explains his presentation."
101. "MRI was normal and he has a known genetic disorder."
102. "This child [has] a global delay related to a chromosomal defect."
103. "Hyporeflexia and diffuse hypotonia with microdeletion. BUT, you potentially could say that phenotypically he has CP with a genetic etiology, as opposed to the other 3 children who have PVL as an etiology for their CP."
104. "Hypotonia and intellectual disability are common in chromosome disorders eg, Down Syndrome."
105. "There is a genetic reason for his low tone and hyporeflexia."
106. "This is a difficult case, because although there is a subtype of hypotonic CP, there is little consensus on that definition. I would likely order EMG [electromyogram] to exclude peripheral nerve disease associated to the genetic mutation."
107. "Would need to rule out genetic [etiology] first due to normal MRI and hypotonia."

Respondent Quotes in Which Hypotonia Was Cited as a Reason for Not Making a Diagnosis of CP (Only Applicable for Scenario 4)

1. "Genetic disorder, low tone, no MRI findings, not premature."
2. "Has Chromosomal Disorder and hypotonia- call it what it is."
3. "Hypotonic CP is an old fashioned diagnosis that I think should be replaced by the genetic/muscle disease causing it."
4. "Normal birth, normal MRI, no spasticity, chromosome [abnormality]."
5. "Chromosomal defect can explain hypotonia, isolated hypotonic CP not as common as other types."
6. "Depends on definition of CP; if genetic causes/hypotonia are considered CP then yes."
7. "Low tone. Chromosomal abnormality known."
8. "Normal brain MRI and identifiable genetic cause of movement disorder (hypotonia) and developmental delay."
9. "This is a [typical] child with [psychomotor chromosomal] issues, where low tone interferes but is low-movement patterns would be anticipated normal, just weak, slow and poor alignment, needs [orthotics] but [consequences] are different."
10. "Central hypotonia from chromosomal abnormality."
11. "Genetic etiology with normal MRI and low tone. I would not call this CP. The diagnosis would not be useful for prognosis or planning as the presentation is very different from 90+% of patients with CP."
12. "Low tone, hyporeflexia, normal MRI and 1q deletion."
13. "Injury to developing brain causing non progressive motor symptoms = CP. Genetic disorder

contributing to hypotonia does not fit this paradigm."

14. "I would like to see some spasticity to vaguely apply CP diagnosis even if it is proper. Schools/insurance are not kind to such kids. In this case genetic diagnosis should be adequate to gain access to services."
15. "I am not sure. Although am aware 1q micro deletion fits this presentation of motor delays and hypotonia, I am not sure if hyporeflexia is part of this phenotype, raising the possibility of a co-existing neuromuscular disorder. In the absence of this, my practice has been to not diagnosis cerebral palsy in the setting of hypotonia alone at 5 years of age."
16. "Hyporeflexia and diffuse hypotonia with microdeletion. BUT, you potentially could say that phenotypically he has CP with a genetic etiology, as opposed to the other 3 children who have PVL as an etiology for their CP."
17. "Hypotonia and intellectual disability are common in chromosome disorders eg, Down Syndrome."
18. "There is a genetic reason for his low tone and hyporeflexia."
19. "This is a difficult case, because although there is a subtype of hypotonic CP, there is little consensus on that definition. I would likely order EMG to exclude peripheral nerve disease associated to the genetic mutation."
20. "Would need to rule out genetic [etiology] first due to normal MRI and hypotonia."
21. "Should call it by the specific condition, low tone."
22. "No increased tone."
23. "No spasticity. Full term. Simple hypotonia, perhaps hypotonic type CP in some circles."
24. "Low tone and seizure disorder will mean that his treatment and prognosis will differ [substantially] from the CP phenotype."
25. "Low tone is atypical."
26. "[CP] should not be hyporeflexic. Hypotonic [CP] is dx exclusion. Could still have nmd [a neuromuscular disorder]."
27. "Not enough risk factors or findings, I don't use the Dx hypotonic CP."
28. "For me this is more of a global developmental delay. I wonder if lower motor neuron is affected."
29. "Very atypical for CP to have hypotonia. Normal brain MRI."
30. "He has hypotonia and hyporeflexia."
31. "I do not give the diagnosis of CP when the primary motor findings are hypotonia and motor delay. The hyporeflexia also argues against the diagnosis somewhat. If he were ataxic or dyskinetic, that would change things."
32. "Given low tone and hyporeflexia and a normal MRI, it is unclear whether the localization for the motor deficit is in the cerebrum, cerebellum, spinal cord, or peripheral nervous system/ muscle."
33. "Central origin suspected. [Global] delays hypotonia dec DTRs [decreased deep tendon reflexes]."
34. "Clinical features of hypotonia."
35. "Hypotonia and hyporeflexia inconsistent with the dx."
36. "Motor development is consistent with cognitive development and he only has hypotonia. Similar to Down syndrome."
37. "This is a global impairment syndrome with hypotonia…so not the characteristics of CP. However, management would not be different if the label of 'CP' were affixed to his situation."
38. "Thought longer about this one. Children with cerebral palsy can be hypotonic (central and/or peripheral) but I don't typically consider global hypotonia as cerebral palsy. For example, I don't diagnose children with [t] risomy 21 with CP."
39. "Unclear that his hypotonia is related to a difference in brain development with normal MRI."

Respondent Quotes in Which the Potential Practical Benefit of a CP Diagnosis Was Cited

Scenario 3

1. "Depends. I would say something along the lines of he has CP secondary to X genetic disorder. But I would only do that for the school. Otherwise the diagnosis is X genetic disorder."
2. "For insurance purposes I would diagnose CP, but he has a genetic disorder. So he meets the criteria for CP, but is not 'typical' CP."
3. "Has a more specific genetic diagnosis; CP dx [is] used for school and services but is he would be atypical since CP is structural."
4. "By theory no but practically speaking, yes. I consider CP a diagnosis of exclusion and if there is an underlying reason theoretically a specific diagnosis is made. However, for ease of understanding by schools, etc I will often add the CP diagnosis to benefit patient and family."
5. "Genetic disorder, again with use CP label to obtain services."
6. "There is discussion as to whether this should qualify. In California/ insurance purposes I do diagnoses."
7. "Many cases are like this – [CP] might help with services but a molecular diagnosis like this should dominate."

Scenario 4

1. "Genetic disorder. He may receive services that patients with CP get."
2. "Same answer as on previous question." ("For insurance purposes I would diagnose CP, but he has a genetic disorder. So he meets the criteria for CP, but is not 'typical' CP.")
3. "Same as scenario 3…since you have a cause, then my understanding is we would not call this CP. If we are talking about for purposes of getting services then phenotypically he fits the description of CP."
4. "There is academic controversy about this. For treatment purpose I will and clarify why."
5. "I would like to see some spasticity to vaguely apply CP diagnosis even if it is proper. Schools/insurance are not kind to such kids. In this case genetic diagnosis should be adequate to gain access to services."
6. "Given that Brain MRI is normal; thus not truly fulfilling criteria/ definition, however, [I] would have to admit that [I] may have some similar patients who [I] have given CP hypotonia diagnosis - just to be able to get services."
7. "MRI is normal. Part of the definition of CP is insult to the developing brain. For practical purposes, I might end up calling this child CP anyway so school and other entities have a category they understand and give the child the services he needs."
8. "Would not think of this as CP but rather motor delay that may continue to improve with independent walking, based on the definition one [should] think of it as CP, I would mainly diagnose CP in this child if he needed the diagnosis to get therapy services."

SUPPLEMENTAL TABLE 7 Selected Respondent Characteristics Possibly Contributing to the Odds of Diagnosing CP in 4 Hypothetical Patient Scenarios

Respondent Characteristic Possibly Contributing to Odds of Diagnosing CP[a]	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	OR (95% CI)[b]	*P*[c]	OR (95% CI)[b]	*P*[c]	OR (95% CI)[b]	*P*[c]	OR (95% CI)[b]	*P*[c]
Overall model	—	.316	—	.766	—	.127	—	<.0005*
Specialty								
Surgery	0 (—)	.997	1.86 (0.513–6.746)	.345	0.445 (0.188–1.057)	.067	0.643 (0.279–1.483)	.300
Physical medicine and rehabilitation	0 (—)	.997	0.760 (0.170–3.402)	.720	0.539 (0.236–1.229)	.142	0.938 (0.437–2.017)	.871
Neurology	0 (—)	0.997	0.795 (0.232–2.725)	.715	0.797 (0.368–1.727)	.566	2.808 (1.383–5.699)*	.004*
Pediatrics	Reference variable	—	Reference variable	—	Reference variable	—	Reference variable	—
Subspecialty								
Yes, with fellowship	0.292 (0.035–2.440)	.256	0.958 (0.344–2.670)	.935	1.318 (0.716–2.426)	.375	1.550 (0.845–2.844)	.157
Yes, without fellowship	0.204 (0.020–2.122)	.184	0.780 (0.192–3.167)	.728	0.971 (0.465–2.029)	.939	1.188 (0.565–2.498)	.650
No	Reference variable	—	Reference variable	—	Reference variable	—	Reference variable	—
Years in practice, y								
<5	0.843 (0.223–3.188)	.801	0.928 (0.354–2.432)	.880	1.310 (0.735–2.336)	.360	1.340 (0.777–2.311)	.293
6–10	0.388 (0.081–1.850)	.235	0.321 (0.039–2.2652)	.291	0.449 (0.202–1.000)	.050	0.489 (0.203–1.182)	.112
>10	Reference variable	—	Reference variable	—	Reference variable	—	Reference variable	—
Patient age								
Children (<18 y)	1.872 (0.0464–7.553)	.378	1.321 (0.359–4.857)	.676	1.588 (0.817–3.085)	.173	1.652 (0.830–3.287)	.153
Adult (≥18 y)	6.729e7 (—)	.999	0 (—)	.999	0.488 (0.070–3.401)	.469	0 (—)	.999
Both	Reference variable	—	Reference variable	—	Reference variable	—	Reference variable	—
Patients with nonprogressive motor disability, %								
<25	0.459 (0.069–3.032)	.419	2.726 (0.499–14.890)	.247	0.659 (0.295–1.473)	.310	0.746 (0.342–1.628)	.461
25–50	1.582 (0.219–11.422)	.649	1.849 (0.323–10.587)	.490	0.826 (0.376–1.811)	.632	1.144 (0.531–2.464)	.732
50–75	1.81 (0.276–11.887)	.536	3.151 (0.615–16.151)	.169	1.070 (0.495–2.314)	.863	0.854 (0.411–1.776)	.673
>75	Reference variable	—	Reference variable	—	Reference variable	—	Reference variable	—

PM&R, xxx; —, not applicable.

[a] Logistic regression analysis was used to determine if any of the surveyed respondent characteristics could contribute to the odds of diagnosing CP in each of the 4 hypothetical case scenarios (Table 4). Fewer respondents provided information regarding their practice setting and practice affiliation than for all other characteristics (Table 2), and neither of these 2 variables significantly predicted the odds of diagnosing CP in any scenario (Table 4). Logistic regression was repeated, excluding these 2 variables.

[b] ORs with 95% CIs are calculated relative to the reference variable indicated for each respondent characteristic.

[c] *P* values are calculated per the χ^2 statistic for the overall model and per Wald's test for each model term.

* Significant predictors of diagnosing CP in a given scenario ($P < .05$).