

result of receiving an influenza (“flu”) vaccination on September 26, 2010³, she developed Acute Disseminated Encephalomyelitis (“ADEM”).⁴ *See* Petition (Pet.) at 1, ECF No. 1.

The matter is before the undersigned at this time for a fact ruling on the question of the timing of ADEM symptom onset. The undersigned conducted a fact hearing on October 30, 2014, at which Petitioner, her mother, Heather Rich, her college roommate, Caramia Enrich, and her former supervisor, Aurora Tapia-Contreras, testified. *See* Transcript (“Tr.”) at 3.

Respondent asserted that Petitioner’s medical records do not show complaints consistent with ADEM until after Petitioner was hospitalized for pneumonia and a pneumothorax⁵ on December 27, 2010, and that the undersigned should therefore find that symptom onset of Petitioner’s allegedly vaccine-caused ADEM is on or after that date. Rule 4(c) Report, ECF No. 37, at 9-10. Petitioner conceded that her medical records were primarily focused on her pulmonary complaints, and that they do not affirmatively reflect any neurological problems prior to Petitioner’s admission to the hospital on December 27, 2010. *See generally* Petitioner’s Pre-Hearing Submission, ECF No. 61. However, Petitioner asserted that she has presented evidence in the form of affidavits and hearing testimony to rebut the presumptive accuracy of the medical records. Petitioner stated that her evidence shows that she was experiencing symptoms such as dizziness, nausea, lightheadedness, weakness, difficulty with word finding, heaviness in her limbs, and pain in her legs prior during the fall of 2010, and that she had reasonable explanations for why those symptoms were not discussed with any of her medical providers. *Id.*; Pet. Ex. 1 at 2-3; Pet. Ex. 16 at 1-2; Pet. Ex. 3 at 1-2; Pet. Ex. 4 at 7; Pet. Ex. 15 at 2.

³ Because written records were missing, Respondent questioned whether Petitioner actually received the vaccine alleged to have caused her injury. *See* Order, April 25, 2013. A fact hearing was held on June 24, 2013 about this issue and the undersigned issued an “Order and Ruling on Facts Pertaining to Petitioner’s Receipt of a Covered Vaccination” on July 26, 2013 [hereinafter “Order and Ruling”]. That Order concluded that Petitioner received the influenza vaccine on September 26, 2010, as stated in the Petition. Order and Ruling at 10; ECF No. 35.

⁴ ADEM is an inflammation involving the brain and spinal cord. *Dorland’s: Dorland’s Illustrated Medical Dictionary*, 613 (32nd. ed. 2012). The typical cause is an acute viral infection and “it is believed to be a manifestation of an autoimmune attack on the myelin of the central nervous system.” *Id.* The symptoms “appear rapidly, beginning with encephalitis-like symptoms such as fever, fatigue, headache, nausea, and vomiting.” Furthermore, many patients experience neurological symptoms including confusion, visual blurring, weakness, and drowsiness. *See* Acute Disseminated Encephalomyelitis (ADEM), Cleveland Clinic, last reviewed on August 22, 2014, available at: http://my.clevelandclinic.org/services/neurological_institute/mellen-center-multiple-sclerosis/diseases-conditions/hic-acute-disseminated-encephalomyelitis.

⁵ A pneumothorax is “an accumulation of air or gas in the pleural space.” *Dorland’s: Dorland’s Illustrated Medical Dictionary*, 1476 (32nd ed. 2012).

Based on the record as a whole, the undersigned finds that the symptoms of Petitioner's ADEM began on or after her December 27, 2010 hospitalization for pneumonia and pneumothorax.

I. Procedural History

On November 1, 2012, Petitioner filed a Petition alleging that a flu vaccination administered in 2010 caused Petitioner to develop ADEM. Pet. at 1-4. This case was initially assigned to Special Master Denise Vowell; the case was transferred to the undersigned on March 4, 2013. See Notices of Assignment, filed November 1, 2012 and March 4, 2013.

Following the filing of Petitioner's medical records and affidavits, the undersigned determined that a fact hearing regarding whether Petitioner received the vaccine in question was necessary. See Order, ECF No. 22, at 1. A video conference fact hearing took place in Washington, DC on June 24, 2013. Tr. at 1-7. On July 26, 2013, the undersigned made a determination that "Petitioner ... has established by preponderant evidence that she received the influenza vaccination at Memorial Christian Church in Oklahoma City, Oklahoma on September 26, 2010." Order and Ruling on Facts Pertaining to Petitioner's Receipt of a Covered Vaccination [hereinafter "Order and Ruling"], ECF No. 35, at 10. The undersigned also noted that Petitioner had begun to suffer from symptoms, including fatigue and weakness, shortly after receiving the vaccination in September 2010; however, she had a positive H1N1 test after she was hospitalized for ADEM in January 2011. *Id.*

On September 10, 2013, Respondent filed a Rule 4(c) Report in which she denied that Petitioner had presented a reputable medical theory, evidence of "a logical sequence of cause and effect," or evidence of a "medically appropriate temporal relationship" between Petitioner's vaccine and her alleged injury. Rule 4 Report, ECF No. 37, at 9-10. Respondent identified a dearth of documented neurological symptoms in the medical records prior to Petitioner's hospitalization for pneumonia and pneumothorax on December 27, 2010, and she articulated a theory of alternative causation. *Id.* at 10-11. Respondent did not believe that this case was appropriate for compensation. *Id.* at 11.

During a status conference that took place on September 19, 2013, the undersigned discussed the status of the case with the parties, who agreed to explore settlement while simultaneously preparing for a trial. See Order, ECF No. 38. Petitioner filed an expert report from Dr. David Siegler on December 9, 2013. Pet. Ex. 18, ECF No. 39. Between the filing of Petitioner's expert report and Respondent's expert report, Petitioner identified missing medical records and filed them on July 28, 2014. Pet. Ex. 23, ECF No. 52. On September 5, 2014, Respondent filed an expert report from Dr. Michael Kohrman. Respondent's Exhibit ("Resp. Ex.") A, ECF No. 55. Following a status conference that took place on September 16, 2014, the parties agreed that the date of onset was still in contention and agreed that an onset hearing be held. See Order, ECF No. 56.

On October 9, 2014, Petitioner filed a Pre-Hearing Submission. Petitioner's Pre-Hearing Submission, ECF No. 61. Petitioner alleged that her symptoms began earlier than January 7, 2011, when she was diagnosed with ADEM. *Id.* at 1. She stated that circumstantial evidence,

including testimony and affidavits, show that Petitioner began to show symptoms of ADEM “within weeks of receiving the influenza vaccination on September 26, 2010.” *Id.* at 6. An Onset Hearing took place on October 30, 2014 in Oklahoma City, Oklahoma. *See* Order, ECF No. 63.

I. The Record

a. Medical Records

Petitioner filed several medical records from various treating physicians. Petitioner had a pre-existing diagnosis, as early as 2004, of asthma, for which she was prescribed a variety of medication including Pulmicort, Singulair, Symbicort, Advair, and Albuterol. *See* Pet. Ex. 4 at 51; *see generally* Pet. Ex. 4. However, Petitioner did not always take the prescribed medication. *See* Pet. Ex. 4 at 15, 16. Pulmonary testing conducted in 2004, 2006, and 2010 consistently indicated that Petitioner had a pulmonary obstruction and low vital capacity. Pet. Ex. 4 at 30, 47-48, 60. Otherwise, Petitioner appeared healthy and was followed frequently by her pediatrician, Dr. Colleen Dooley. *See generally* Pet. Ex. 4.

Petitioner received flu vaccines in 2005, 2006, 2007, 2008, and 2009, and she did not report any adverse reactions to these flu vaccines. Pet. Ex. 4 at 37-38, 42. On September 26, 2010, Petitioner received the flu vaccine at issue. Order and Ruling at 10.

About two weeks after vaccination, on October 8, 2010, Petitioner went to her pediatrician, Dr. Dooley, because she was having trouble breathing at night and was unable to get Advair, her asthma medication. Pet. Ex. 4 at 8. She was “using inhaler ‘a lot.’” *Id.* Although her mother often accompanied her to medical appointments, Tr. at 20, the records reflect that Petitioner was “unaccompanied” at this visit.” *Id.* Dr. Dooley’s impression was that Petitioner was having an exacerbation of her asthma and she prescribed asthma medication, in addition to giving Petitioner some samples. *Id.* Petitioner went to Dr. Dooley again on October 23, 2010; her mother was at this visit. Pet. Ex. 4 at 7. During the visit, Petitioner again complained about her asthma and she stated that she could not afford her medication. *Id.* Dr. Dooley’s impression was that Petitioner was suffering from asthma and prescribed her prednisone and Singulair. *Id.* The medical records from Dr. Dooley do not document that Petitioner complained of symptoms of fatigue, heavy legs, difficulty concentrating, or dizziness. *See generally* Pet. Ex. 4. Another visit with Dr. Dooley was not noted until April 8, 2011.⁶ *See* Pet. Exs. 5, 6.

On November 10, 2010, Petitioner visited the on-campus health center at the University of Oklahoma, where she lived and attended school, with complaints of coughing and trouble breathing. *See generally* Pet. Ex. 15. On the Center’s symptom checklist, Petitioner reported that she had a fever, night sweats, a sore throat, a headache and ear ache/pain, a cough that was interfering with her sleep, and muscle aches, but that her symptoms were “somewhat improving”. *Id.* at 2. Exam notes documented wheezing, a red pharynx, and mucus and sinus issues; a Doctor of Osteopathic Medicine at the health center, Stephanie Parker, diagnosed

⁶ Petitioner’s affidavit states that she “ended up going to the doctor in Oklahoma City” after the November 10, 2010 clinic visit, but no records of such a visit were provided. Pet. Ex. 1 at 2.

Petitioner with bronchitis and asthma. *Id.* Petitioner was given a nebulizer treatment at the clinic, after which she felt “better” according to L. Cushman, R.N. *Id.* Petitioner was sent home with albuterol for additional nebulizer treatments, and antibiotics. *Id.* Again, the records do not document symptoms of extreme fatigue, “heaviness,” dizziness, difficulty concentrating, or sensitivity to light.

On December 27, 2010, Petitioner presented to the emergency room at Integris Baptist Medical Center with “wheezing, dyspnea⁷ . . . shortness of breath, [and] chest tightness starting yesterday.” Pet. Ex. 5 at 9. She denied weakness or fatigue; her neurologic examination was normal. *Id.* at 47-49. She reported that she had had a recent upper respiratory infection (“URI”), a runny nose, and congestion, and that the onset of symptoms had been one day prior. *Id.* The physician noted that she was experiencing a severe asthma exacerbation; however, she appeared alert and oriented, despite being in moderate distress and anxious. *Id.* at 10. Dr. John Huff noted that Petitioner had a computerized tomography (“CT”) scan in the emergency room that “show[ed] an extensive right upper lobe pneumonia as well as trace anterior right upper lobe pneumothorax.” *Id.* at 46-47. Petitioner was admitted to the intensive care unit (“ICU”) and was given antibiotics, corticosteroids, and bronchodilators. *Id.* at 50. Her diagnoses included community-acquired pneumonia, right small pneumothorax, asthma exacerbation, a left lower lobe pulmonary nodule, allergic rhinitis, and hypoxemia⁸. *Id.* at 49-50. Influenza, both type A and B, was ruled out through a laboratory test performed on December 27, 2010. *Id.* at 390.

The following day, on December 28, 2010, a right chest tube was placed for her pneumothorax. Pet. Ex. 5 at 374. As the pneumothorax began to resolve, Petitioner continued to have trouble breathing and she was intubated. *Id.* at 41, 362. A bronchoscopy was performed on December 29, 2010 and “showed severe bronchitis.” *Id.* at 41.

Petitioner’s condition continued to worsen. Pet. Ex. 5 at 41-42. Following the bronchoscopy, “[t]ube feeding was initiated. She had decreased responsiveness over the next few days. Her sedatives were decreased; however, she continued to have decreased mental status.” *Id.* The results of neurological exams were “extremely abnormal,” as was an MRI of her cervical spine. *Id.* It was noted that the findings of her MRI “were consistent with acute disseminated encephalomyopathy.” *Id.* A brain MRI conducted on January 6, 2011 showed, among other things, an “[a]cute infarction of the splenium of the corpus callosum with areas of diffusion restriction, T2 alteration, and abnormal contrast enhancement within pons . . . cervical spine cord may relate to hypoxic injury. Additional considerations include demyelinating process or vasculitis.” Pet. Ex. 5 at 368. A physician who saw Petitioner to manage her tracheostomy tube, Dr. Maplani, interpreted her results to show “an acute infarction of the corpus callosum with involvement of the pons in the right cerebellum. She had progression of the cervical spine ischemic injury and now has a high spinal cord injury as a result.” Pet. Ex. 7 at 8.

⁷ Dyspnea is defined as “breathlessness or shortness of breath; difficult or labored respiration.” *Dorland’s: Dorland’s Illustrated Medical Dictionary*, 582 (32nd ed. 2012).

⁸ Hypoxemia is “deficient oxygenation of the blood.” *Dorland’s: Dorland’s Illustrated Medical Dictionary*, 908 (32nd ed. 2012).

Petitioner was examined by infectious disease specialist Aline Brown, M.D., on January 7, 2011. Pet. Ex. 5 at 173. Dr. Brown's diagnosis was ADEM "which is usually post-infectious." *Id.* She recommended a sputum test, laboratory results from which showed a positive H1N1⁹ result as of January 7, 2011. *Id.* at 42; Pet. Ex. 17 at 1-3. Petitioner was started on Tamiflu, in addition to the many medications she was already taking. *Id.* She started on a four day course of Intravenous Immunoglobulin ("IVIG") treatment on January 13, 2011. *Id.* at 42. When doctors attempted to wean her from the ventilator, she was unable to be weaned and a tracheostomy was performed. *Id.*; Pet. Ex. 22 at 1. The chest tube was discontinued on February 8, 2011, after doctors determined that her pneumothorax had resolved, and her ventilator was discontinued the next day. Pet. Ex. 5 at 42.

Several physicians attributed her condition to the H1N1 virus, for which she tested positive for on January 7, 2011. Pet. Ex. 17 at 2. Dr. William B. Schueler, a professor at the University of Oklahoma Health Sciences Center, opined that Petitioner had "some paralysis secondary to the swine flu in January 2011." Pet. Ex. 6 at 24. Another physician, Dr. Jenny Lee, opined that Petitioner had an asthma exacerbation that "turned into bronchitis and then pneumonia. This in turn was complicated by a 'collapsed lung' which required a chest tube and intubation and ventilator assistance (Dec. 28, 2010). During her recovery she contracted the 'swine flu' (Jan 2011) which turned into encephalitis." Pet. Ex. 6 at 27.

On February 17, 2011, Petitioner was transferred to Jim Thorpe Rehabilitation ("Jim Thorpe"), where she remained until March 25, 2011. *Id.* at 28, 42. Her discharge diagnoses, as reported on her discharge summary from Integris Baptist Medical Center, were: acute hypoxemic respiratory failure, community-acquired pneumonia, H1N1 influenza, asthma exacerbation, right pneumothorax, hypertension, acute disseminated encephalomyelitis, central hypothermia, critical illness myopathy¹⁰, anxiety, mild protein-calorie malnutrition, and mild oropharyngeal dysphagia¹¹. *Id.* at 40-43.

Petitioner continued to receive treatment from home health aides following her discharge from Jim Thorpe. *See generally* Pet. Ex. 6. She continues to require a wheelchair, as seen at the onset hearing, and she requires assistance for many activities of daily living. Tr. at 5; Pet. at 4.

⁹ H1N1 is a seasonal flu virus with several severe complications such as pulmonary and cardiac conditions. *See* John G. Barlett, MD, 2009 H1N1 Influenza – Just the Facts: Clinical Features and Epidemiology, Medscape, last reviewed on November 23, 2009, available at: http://www.medscape.com/viewarticle/709540_4; *see also* H1N1 (originally referred to as Swine Flu), Flu.gov, available at: http://www.flu.gov/about_the_flu/h1n1/.

¹⁰ Critical illness myopathy is defined as "severe muscle weakness, hypotonia, and depressed tendon reflexes of many different muscles . . . in some it may be a complication of therapy with corticosteroids or neuro-muscular blocking agents, but in others the cause is unknown." *Dorland's: Dorland's Illustrated Medical Dictionary*, 1224 (32nd ed. 2012).

¹¹ Dysphagia is defined as "difficulty in swallowing"; oropharyngeal dysphagia refers to "difficulty initiating the swallowing process." *Dorland's: Dorland's Illustrated Medical Dictionary*, 579 (32nd ed. 2012).

b. Affidavits

In addition to the medical records, Petitioner filed several affidavits. Petitioner's own Affidavit was filed on December 5, 2012. *See* Pet. Ex. 1, ECF No. 5-1. In this affidavit, Petitioner stated that a few weeks after vaccination¹², she would get "fatigued easily." Pet. Ex. 1 at 2. Additionally, she stated that she was lethargic, fatigued, and frequently had headaches. *Id.* She explained that she didn't tell her mother about her health because she suspected that her mother would make her return home from her on-campus housing and go to the doctor. *Id.* at 2. However, one day she felt dizzy, light-headed, weak, and nauseous and she told her mother, who urged her to come home. *Id.* After seeking treatment at the on-campus health center, she stated that her symptoms continued, but she didn't tell her mother. *Id.*

Petitioner filed an affidavit authored by her college roommate, Caramia Testa, on December 5, 2012. *See* Pet. Ex. 3, ECF No. 5-3. Ms. Testa recounted that Petitioner was healthy and active prior to vaccination, but that "[a] few weeks after getting the flu shot, Sydney started showing symptoms of something being wrong." *Id.* at 1. The specific symptoms she discussed included fatigue and headaches. *Id.* at 1-2. Ms. Testa noted a particular occasion, Halloween 2010, where Petitioner appeared ill and fatigued. *Id.* at 2. The affidavit describes that she thought Petitioner's symptoms seemed to worsen until the semester ended and Sydney was hospitalized. *Id.* at 2-4.

Petitioner also filed an affidavit from witness Aurora Tapia.¹³ *See* Pet. Ex. 24, ECF No. 60. Ms. Tapia affirmed that she "specifically recall[ed] when Sydney got her flu shot," and that she "recall[ed] her symptoms starting shortly thereafter." Pet. Ex. 24 at 1. According to Ms. Tapia, Petitioner's symptoms included headaches, dizziness, fatigue, and acting different than usual; she specified that these symptoms started in late October of 2010 and into November of 2010. *Id.* at 1. She indicated that she was responsible for training Petitioner at Panera Bread, their mutual place of employment, and she noticed Petitioner was slow to complete tasks following receipt of the vaccine at issue here. *Id.*

Finally, Petitioner filed an affidavit authored by her mother, Heather Rich, on May 2, 2013. Pet. Ex. 16, ECF No. 23. According to Ms. Rich, Petitioner received the flu vaccination on September 26, 2010, and Petitioner's symptoms, including fatigue, headaches, and trouble sleeping, began "[a] couple of weeks later." *Id.* at 1. Other symptoms Ms. Rich noted included trouble speaking in complete sentences, weakness, lack of energy, and headaches. *Id.* at 1-2. Ms. Rich believed that these symptoms were attributable to Petitioner's asthma. *Id.* at 2.

c. Testimony

i. Sydney Rich

Petitioner testified as to the date of onset of her symptoms at the hearing

¹² In her affidavit, Petitioner never gives a date, or range or dates, for the onset of her symptoms. *See* Pet. Ex. 1, ECF No. 5-1.

¹³ Aurora Tapia testified under the name Aurora Tapia-Contreras at the hearing. Tr. at 73.

on October 30, 2014. She explained that, prior to vaccination, she was involved with a sorority at the University of Oklahoma and felt healthy. Tr. at 129-31. Although she used her rescue inhaler a few times during the move-in process, this was not abnormal, as she regularly used her rescue inhaler a couple of times a week. Tr. at 130.

Petitioner stated that her first symptom was “feeling tired” and it began a few weeks after vaccination, in mid-October. Tr. at 137-38, 162. Petitioner clarified that when she said she was “feeling tired,” her “body started feeling heavier than it did [before she experienced this symptom]” and her legs were heavy. Tr. at 137, 162-63. The next symptoms she began to experience were headaches and dizziness and she recalled that these began in early to mid-November. Tr. at 139, 162. Although she attempted to use her rescue inhaler and experienced some initial relief, it did not continue to alleviate her symptoms. Tr. at 138-39. Petitioner explained that after experiencing the first symptoms, she never improved and her symptoms worsened over time. Tr. at 165.

Counsel attempted to clarify the specific time of onset; Petitioner specifically recalled having symptoms during Halloween of 2010. Tr. at 139-40. The symptoms she remembered included being exhausted, feeling “heavy”, having difficulty breathing and headaches. *Id.* She stated that while experiencing these symptoms, she spoke to her mother but didn’t tell her mother about her ailments because she was afraid she would be forced to seek medical treatment. Tr. at 140-41. One of her last symptoms, being bothered by light, began “[I]ate November into December.” Tr. at 145. By the finals period, at the beginning of December 2010, Petitioner was “exhausted all the time. [Her] body felt so heavy. [She] was tired. [She] was having trouble breathing. [She] was having headaches, dizziness on a daily basis. And [she] couldn’t hardly focus at all.” Tr. at 158. A couple of weeks before she was hospitalized, on December 27, 2010, she felt unusually irritable and emotional. Tr. at 159-60. Until this time, however, she was still able to function. Tr. at 160. She could still drive; she could carry things. *Id.*

Petitioner was questioned about her doctors’ visits. She stated that she visited her primary care physician, Dr. Colleen Dooley, on October 8, 2010, without her mother. Tr. at 142. She explained that she didn’t discuss the symptoms she was experiencing and that she was given asthma medication, but didn’t take it. Tr. at 142-43. She went back to Dr. Dooley with her mother on October 23, 2010, and was given more medication, which she finally did take. Tr. at 143. She went to the on-campus infirmary on November 10, 2010. Tr. at 146. In between these appointments, Petitioner testified that her symptoms were worsening, that “it was so hard to function,” and that she “was so scared.” *Id.* Even then, however, she did not discuss these symptoms with the medical personnel at either Dr. Dooley’s office or at the on-campus health center. Tr. at 146-52. When given a checklist at the on-campus health center, however, Petitioner checked the boxes for muscle aches and headaches, which she explained she was experiencing at the time. Tr. at 151-52. Petitioner testified that her reasoning for not discussing her other symptoms was that she believed her symptoms were asthma related, and that she “just thought [she] was going to get better.” Tr. at 169-70, 172. She was also worried that the doctor would prescribe steroids for her, which would cause her to gain weight. Tr. at 178.

The mental symptoms Petitioner was experiencing were discussed at the hearing as well. Petitioner stated that she experienced trouble focusing at work and that it took her longer to

finish tasks than it did before vaccination, but she didn't think "it was bad enough that [her] job would be in trouble." Tr. at 154, 186. She was still able to carry her belongings, drive a car, and get in and out of bed, although it became increasingly more difficult. Tr. at 157, 160.

Petitioner testified that many individuals, including her mother, co-workers, and friends, were concerned about her health; she also testified that she was concerned about her own health. Tr. at 180. Despite their concerns and her own, Petitioner did not discuss her symptoms with medical professionals because "[she] was just naive. [She] was stupid. . . [she] was just a stupid teenager." Tr. at 180. During the onset hearing, Petitioner stated, multiple times, that she did not report her specific symptoms because she attributed them to her asthma. *See, e.g.*, Tr. at 188.

ii. Heather Rich

Heather Rich, Petitioner's mother, was the first to testify at the onset hearing; she also testified at the previous fact hearing.¹⁴ Ms. Rich testified that her daughter was healthy in the fall of 2010, aside from the asthma she controlled using medication; however, Ms. Rich testified that Petitioner was not always compliant with taking her prescribed medication. Tr. at 12; 14. Ms. Rich explained that Petitioner had asthma problems "probably every couple of months" and used a breathing machine to treat these flare-ups. Tr. at 32. Ms. Rich stated that the symptoms Petitioner usually experiences when in distress due to asthma include trouble breathing, coughing, and wheezing. Tr. at 32-33. Typically, she described, "when [Petitioner] was at her worst she would do two breathing treatments, and she would be fine. It opened her right up." Tr. at 62.

Ms. Rich stated that she had a good relationship with her daughter, and that although Petitioner lived on-campus at the University of Oklahoma, they spoke daily on the phone. Tr. at 17. Petitioner called her mother a "helicopter mom" and testified that Ms. Rich was heavily involved in her daughter's life. Tr. at 62. Ms. Rich explained that she saw Petitioner weekly because Petitioner came home on the weekends to work at Panera Bread, a local restaurant. Tr. at 17. The Rich home had "a couple of levels" and Ms. Rich did not notice Petitioner having trouble with the steps when she was home, although she clarified that they were not often in the house at the same time. Tr. at 38-39.

The symptoms of Petitioner's ADEM began, according to Ms. Rich, around the "first part of October." Tr. at 18. Ms. Rich explained that after vaccination, Petitioner called her mother with complaints of headaches and lack of energy. *Id.* They spoke about seeing a doctor, but Petitioner "made the comment that she would be fine, that she should probably take her [asthma] medication." *Id.* Ms. Rich testified that Petitioner told her that she "was having trouble walking to class . . . her legs were tired . . . and . . . felt heavy," which prompted a visit to her primary care physician, Dr. Dooley, on October 23, 2010. Tr. at 19-20. During this visit, Ms. Rich attended the appointment and gave a history to the physician's office as "[she] tended to talk for Sydney a lot." Tr. at 20. The symptoms, such as trouble walking and headaches, were not discussed at this appointment, because Ms. Rich stated that she "thought it was just asthma." Tr. at 21-22,

¹⁴ A fact hearing was held on June 24, 2013, to determine whether Petitioner received a flu vaccination. The transcript for the June 24, 2013 will be cited as "Tr. June." The transcript from the current hearing will be cited as "Tr."

41. Ms. Rich did not notice any changes in Petitioner's balance, but she did notice that Petitioner "wasn't like herself." Tr. at 41.

Ms. Rich informed the Court that when Petitioner's symptoms continued, Ms. Rich urged her to see a doctor. Tr. at 24. Petitioner agreed to go to an on-campus health center at the end of November. Tr. at 24. The symptoms Ms. Rich recalled that Petitioner had complained of trouble with her legs, headaches, trouble sleeping, and weakness. Tr. at 24-25. When they spoke on the phone, Ms. Rich said that Petitioner "was kind of slurring her words a little bit." Tr. at 25. Ms. Rich explained that the first symptoms she noticed that weren't typical for an asthma exacerbation, including slurred speech and the inability to walk to class. Tr. at 40.

Following finals, which Petitioner struggled to complete, she returned home for Christmas break. Tr. at 26-27. During the break, Ms. Rich noticed that Petitioner seemed "different." Tr. at 27-28. Ms. Rich received a phone call from Petitioner on December 27, 2010, stating that something was wrong and that she needed to be transported to the emergency room. Tr. at 28-29. Again, Ms. Rich gave medical personnel a history and again she noted that she "tend[s] to speak up for Sydney." Tr. at 30.

iii. Aurora Tapia-Contreras

Aurora Tapia-Contreras, Petitioner's supervisor at Panera Bread, testified second at the onset hearing. She stated that she met Petitioner in January of 2009 at their mutual place of employment and "became friends right off the bat." Tr. at 73-74. Ms. Tapia-Contreras noted that Petitioner began to take shorter, weekend-only shifts after school started, but she did not notice any physical or mental shortcomings related to her job performance. Tr. at 75-76.

In October 2010, Ms. Tapia-Contreras noted that Petitioner complained that she was not feeling well, and particularly that she complained of headaches, dizziness, and fatigue. Tr. at 77. She first noticed Petitioner's breathing troubles in mid-November. Tr. at 89. Furthermore, Ms. Tapia-Contreras noted that Petitioner's "mental process was kind of slow" and she had trouble understanding job-related tasks. Tr. at 79. When discussing her physical performance, Ms. Tapia-Contreras explained that the job was physical and required Petitioner to stand; however, she did not notice any physical deficits. Tr. at 84-85.

As Petitioner continued to experience worsening symptoms, Ms. Tapia-Contreras felt that she needed to cover for Sydney's inadequate performance; Ms. Tapia-Contreras explained that she told Petitioner to seek medical treatment "all the time." Tr. 80-83.

iv. Caramia Enrich¹⁵

Caramia Enrich, Petitioner's high school friend and freshman year roommate, testified. Mrs. Enrich stated that, prior to vaccination, Petitioner did not appear to have any trouble walking, any dizziness, or any headaches. Tr. at 98-99. She remembers Petitioner getting the vaccination

¹⁵ Caramia filed an affidavit on December 5, 2012 using her maiden name, Caramia Testa. At the hearing, on October 30, 2014, Caramia was married and testified under her married name, Caramia Enrich.

and recounted that she noted Petitioner's health changing in October 2010. Tr. at 100. The first symptom she noticed was fatigue, at the beginning of October. Tr. at 108, 115. In particular, she remembered that Petitioner was excited about a trick-or-treat event on Halloween, but that at the end of the event, Petitioner "was completely drained," which was uncharacteristic of Petitioner's behavior. Tr. at 100-01. She explained that, contrary to testimony in her own affidavit, Petitioner had complained of dizziness and leg pain immediately preceding Halloween. Tr. at 101, 122. The leg pain, as clarified by Mrs. Enrich, was "not like a shooting pain. What she had said was, like, heavy." Tr. at 122.

Mrs. Enrich stated that Petitioner's symptoms worsened in November of 2010 and that "[t]owards November, she was really tired all the time, really fatigued and complaining more about heavy arms and legs and so forth. And I saw more of the dizziness and headaches." Tr. at 103. Although Petitioner complained of dizziness, Mrs. Enrich does not remember Petitioner losing her balance or stumbling. Tr. at 103. Mrs. Enrich recounted that Petitioner spoke to her mother frequently and that "[s]he would talk about how she felt tired . . . [b]ut she was usually pretty quiet about symptoms and so forth." Tr. at 121.

Ms. Enrich mentioned that sound and light seemed to bother Petitioner. Tr. at 105. Petitioner would take the stairs to their sixth floor dormitory room; Ms. Enrich stated that Petitioner was still using the stairs to reach the sixth floor at the end of October. Tr. at 115-16. Mrs. Enrich explained that Petitioner's speech wasn't slurred, but she seemed incoherent at times and would "easily los[e] her train of thought." Tr. at 117-18.

Petitioner's trip to the on-campus health facility was discussed, and Ms. Enrich recalled that Petitioner wanted to discuss the symptoms she had been experiencing including "how she felt tired at the time, and [that] she really thought her asthma was kicking up." Tr. at 118-19. Petitioner purportedly told Mrs. Enrich that the doctors thought she might have bronchitis or the flu. Tr. at 104. The last time Mrs. Enrich saw Petitioner before her hospitalization was the day before Christmas break. Tr. at 110.

II. The Applicable Legal Standards

A petitioner must prove, by a preponderance of the evidence, the factual circumstances surrounding her claim. 42 U.S.C. §300aa-13(a)(1)(A). To meet the preponderance of the evidence standard, the special master must "believe the existence of a fact is more probable than its nonexistence before [she] may find in favor of the party who has the burden to persuade the [special master] of the fact's existence." *In re Winship*, 397 U.S. 358, 371-72 (1970) (Harlan, J., concurring, quoting F. James, *Civil Procedure*, at 250-51 (1965)).

In determining whether a petitioner is entitled to compensation under the Vaccine Act, a special master must consider the record as a whole. 42 U.S.C. §300aa-13(a)(1). The special master may not make a finding based on the claims of a petitioner that are not substantiated by medical records or medical opinion. *Id.* The process of finding facts pursuant to the Vaccine Act begins with analyzing the medical records. 42 U.S.C. §300aa-11(c)(2). As set forth in 42 U.S.C. §300aa-13(b)(1)(A), a special master shall consider "all . . . relevant medical or scientific evidence contained in the record," including "any diagnosis, conclusion, medical judgment . . .

regarding the nature, causation, and aggravation of petitioner's illness, disability, injury, condition, or death."

To resolve factual issues, the special master must weigh the evidence presented, which may include contemporaneous medical records and testimony. *See Burns v. Sec'y of Health & Human Servs.*, 3 F.3d 415, 417 (Fed. Cir. 1993) (explaining that a special master must decide what weight to give evidence including oral testimony and contemporaneous medical records). "Medical records, in general, warrant consideration as trustworthy evidence." *Cucuras v. Sec'y of Health & Human Servs.*, 993 F.2d 1525, 1528 (Fed. Cir. 1993). Records created contemporaneously with the events they describe are presumed to be accurate, as individuals seeking treatment will likely report the circumstances relating to their symptoms and history accurately to ensure their doctors have all the information necessary to treat their malady. *Cucuras*, 993 F.2d at 1527-28. Similarly, doctors recording their patients' histories are paying particular attention to record such histories accurately so that they will be aware of all of the patient's ailments in order to effectively treat them. *Id.* Therefore, particular attention should be paid to contemporaneous medical records and opinions of treating physicians. *Capizzano v. Sec'y of Health & Human Servs.*, 440 F.3d 1317, 1326 (Fed. Cir. 2006); *Cortez v. Sec'y of Health & Human Servs.*, No. 09-176V, 2012 WL 4829301, at *6 (Fed. Cl. Spec. Mstr. Aug. 31, 2012).

When considering the weight to be given to oral testimony versus contemporaneous records, "[i]t has generally been held that oral testimony which is in conflict with contemporaneous documents is entitled to little evidentiary weight." *Murphy v. Sec'y of Health & Human Servs.*, 23 Cl.Ct. 726, 733 (1991), *aff'd*, 968 F.2d 1226 (Fed. Cir.), *cert. denied sub nom. Murphy v. Sullivan*, 506 U.S. 974 (1992) (citing *United States v. United States Gypsum Co.*, 333 U.S. 364, 396 (1947) ("Where such testimony is in conflict with contemporaneous documents we can give it little weight, particularly when the crucial issues involve mixed questions of law and fact."))

Records that are clear, consistent, and complete should be accorded substantial weight. *Lowrie v. Sec'y of Health & Human Servs.*, No. 03-1585, 2005 WL 6117475, at *20 (Fed. Cl. Spec. Mstr. Dec. 12, 2005). To overcome the presumptive accuracy of the written medical records through testimony, the testimony must be "consistent, clear, cogent, and compelling." *Sanchez v. Sec'y of Health & Human Servs.*, No. 11-685, 2013 WL 1880825, at *3 (Fed. Cl. Spec. Mstr. Apr. 10, 2013) (citing *Blutstein v. Sec'y of Health & Human Servs.*, No. 90-2808, 1998 WL 408611, at *5 (Fed. Cl. Spec. Mstr. June 30, 1998)).

III. Discussion

"Petitioner alleges that shortly after having received the influenza vaccine on September 26, 2010, she began to experience the onset of neurological symptomology that was subsequently diagnosed as ADEM." Petitioner's Pre-Hearing Submission, ECF No. 61, at 1. That "neurological symptomology" allegedly included "unprecedented symptoms [of] extreme fatigue, headaches, lack of concentration, dizziness, and feeling nauseous." *Id.* at 2; *see also* Pet. Ex. 1; Pet. Ex. 24.

At hearing, Petitioner testified that she was experiencing this multitude of symptoms before her visits with Dr. Dooley and with the on-campus health center, but that she did not report these symptoms to the medical professionals. Tr. at 142-43, 147-48, 150-51. Petitioner gave several reasons for not telling her physician about these symptoms--that she thought the symptoms were related to her asthma, tr. at 169; that the doctors would put her on steroids, which had caused her to gain weight in the past, Tr. at 178; and that her mother “would make [her] move back home.” Tr. at 165, 171; Pet. Ex. 1 at 2. She also stated that she thought she “was going to get better.” Tr. at 146-47.

However, the medical histories provided during Petitioner’s medical visits, both to Dr. Dooley and to the on-campus health center, consistently reflect that her symptoms in the fall of 2010 were related to her asthma and her developing bronchitis/ pneumonia, and not to ADEM. On October 8, 2010, about two weeks after receiving the vaccine, Petitioner made her first visit to a medical professional post-vaccination. She was unaccompanied by her mother, who otherwise tended to speak for her. Pet. Ex. 4 at 8. Petitioner’s chief complaint was that she was “having trouble breathing at night and hasn’t been able to get Advair [asthma medication].” Pet. Ex. 4 at 8. Petitioner did not complain of fatigue, “heaviness,” dizziness, sensitivity to light, difficulty remembering things, or completing tasks. Petitioner was given samples of several asthma medications, *id.*, which she did not take. Tr. at 142-143.

Petitioner saw Dr. Dooley again on October 23, 2010; again her chief complaint was “asthma--worse when [she] comes home.” Pet. Ex. 4 at 7. Again, nothing about heaviness, lack of concentration, dizziness, headaches, or nausea. The impression of the treating professional was asthma, and Petitioner was again treated with asthma medication. *Id.* This time, she was also given the steroid Prednisone. *Id.*

On November 10, 2010, Petitioner saw a medical professional, Stephanie A. Parker, D.O., at the University of Oklahoma Health Services Center. Pet. Ex. 15 at 1. Upon checking in, Petitioner filled out intake forms, including a checklist of symptoms on which she was to mark the symptoms she was experiencing. *Id.* at 2. Petitioner stated that her worst symptoms were coughing and trouble breathing, but she also indicated that she was experiencing fever, night sweats, sore throat, headache, ear ache/pain, cough, wheezing, and muscle aches. *Id.* She stated that her symptoms started five days prior and that they were “somewhat improving.” *Id.*

Petitioner stated in her affidavit that in early November 2010, she felt dizzy, lightheaded, weak, and nauseous, which prompted her to call her mother and make an appointment with the on-campus health center. Pet. Ex. 1 at 2. At the hearing, Petitioner testified that she was confused, dizzy, having trouble walking coupled with heavy legs, and had blurry vision prior to her November 10 appointment. Tr. at 147-51. The records from the health center reflect none of those concerns. Petitioner had three separate opportunities to tell someone at the clinic about these symptoms: when she filled out the intake sheet, when she spoke with the doctor, and when she spoke with the nurse after the first nebulizer treatment, but she did not avail herself of those opportunities. The focus of that visit, as had been the focus of her earlier medical visits, was exclusively her difficulty breathing and related issues.

Petitioner did not see another medical professional until she went to the emergency room at Integris Baptist Hospital on December 27, 2010. Petitioner presented to the emergency room with shortness of breath, chest tightness, wheezing, and dyspnea which started one day prior. Pet. Ex. 5 at 9. Even then, Petitioner “denie[d] weakness, fatigue,” “denie[d] nausea,” “denie[d] muscle pain or weakness,” *Id* at 48-49, and her responsiveness did not begin to decline until several days after her admission for pneumonia, pneumothorax, and hypoxemia. *Id.* at 41.

Petitioner was familiar with doctors, as she had had asthma, a chronic illness, since childhood and would go to the doctor occasionally for a flare-up of asthma or to refill an asthma related medication prescription. Tr. at 126-27. Therefore, she was familiar with the practice of visiting a physician and reporting symptoms, particularly when prompted. She continued this practice when she went to college: she went to the doctor three times that first semester, and she reported the symptoms from which she was suffering so that they could be treated. The undersigned is not persuaded that Petitioner would not be forthcoming with her doctors, particularly if the symptoms were as unprecedented, persistent and severe as has been described. The undersigned finds that Petitioner reported the symptoms she was experiencing, related to the severe pulmonary illness for which she was eventually hospitalized.

Petitioner’s medical records clearly document her worsening medical condition throughout the fall of 2010, but the worsening condition that they document is pulmonary. Petitioner has not put forward evidence sufficient to refute the contemporaneous medical records, which firmly support the onset of the symptoms of ADEM concurrently with or shortly after Petitioner’s hospitalization for pneumonia, pneumothorax and hypoxemia, on or after December 27, 2010.

The undersigned has carefully reviewed the record. Consistent with the foregoing discussion, the undersigned finds that the symptoms of ADEM began concurrently with or shortly after Petitioner’s hospitalization for pneumonia, pneumothorax and hypoxemia, on or after December 27, 2010.

IV. Conclusion

The undersigned has carefully reviewed the record. Consistent with the foregoing discussion, the undersigned finds that the symptoms of ADEM began concurrently with or shortly after Petitioner's hospitalization for pneumonia, pneumothorax and hypoxemia, on or after December 27, 2010.

Petitioner may now proceed with her claim. The parties are ordered to provide this ruling to any expert whom they retain for the purpose of litigating that claim. The undersigned is unlikely to find persuasive expert opinion that is inconsistent with these findings of fact. *See Burns*, 3 F.3d at 417 (special master did not abuse his discretion in refraining from conducting a hearing when the petitioner's expert "based his opinion on facts not substantiated by the record"). The parties shall also contact my chambers no later than September 25, 2015 to schedule a telephonic status conference in this case to discuss next steps.

IT IS SO ORDERED.

s/Lisa D. Hamilton-Fieldman
Lisa D. Hamilton-Fieldman
Special Master