

NPIC/QAS Perinatal H1N1 Spring 2010 Survey I and II Results

In October, 2009 NPIC/QAS sent a survey to member and contract hospitals to determine the impact of H1N1 on their practice with 17 hospitals returning the survey (for the time period 1/1/09 – 9/30/09). In May 2010 the same survey was distributed to NPIC/QAS hospitals (for the time period 10/1/09 – 5/1/10) with again 17 hospitals responding to the second survey (not all of the hospitals were the same from Survey I to Survey II).

Hospital/Perinatal Center Descriptive Data

	Survey I 1/1/09-9/30/09	Survey II 10/1/09-5/1/10
<i>Average number of deliveries</i>	4,474	4,391
<i>Range</i>	1,000 – 14,000	900 – 13,000
<i>Hospital Levels</i>	4 Level II 5 Level III 8 Regional Perinatal Center	3 Level II 6 Level III 8 Regional Perinatal Center

American Hospital Association Region

	Survey I	Survey II
Region 1 (CT, ME, MA, NH, RI, VT)	1 (6%)	2 (12%)
Region 2 (NJ, NY, PA)	4 (24%)	4 (24%)
Region 3 (DE, KY, MD, NC, VA, WV)	5 (29%)	1 (6%)
Region 4 (AL, FL, GA, MS, SC, TN)	2 (12%)	2 (12%)
Region 5 (IL, MI, IN, OH, WI)	4 (24%)	5 (29%)
Region 6 (IA, KA, ME, MI, NE, ND, SD)	0 (0%)	1 (6%)
Region 7 (AR, LA, OK, TX)	1 (6%)	1 (6%)
Region 8 (CA, NE, OR, WA)	0 (0%)	1 (6%)

Data Concerning Suspected/Confirmed H1N1 Admissions	Survey I 1/1/09-9/30/09	Survey II* 10/1/09-5/1/10
<i>For hospitals reporting admissions:</i>	Average (Range)	Average (Range)
Hospital pregnancy admissions suspected H1N1	11.64 (1-50)	19.5 (1-92)
Hospital pregnancy admissions confirmed H1N1	4.80 (1-15)	10.4 (1-28)
Number of hospitalized days for mothers suspected H1N1	8.9 (3-30)	8.8 (2-20)
Number of hospitalized days for mothers confirmed H1N1	18.1 (3-52)	15.8 (7-38)

*Survey II: some hospitals reported they no longer confirmed H1N1, but treated patients as positive. During Survey I one hospital reported 2 H1N1 related maternal deaths. At Survey II no maternal deaths were reported.

Neonatal Hospitalizations

	Survey I 1/1/09-9/30/09	Survey II 10/1/09-5/1/10
<i>Neonatal Admissions for Maternal H1N1</i>	3 (17%) hospitals Range: 1-8 neonates Average: 3.3	5 (29%) hospitals Range: 1-10 neonates Average: 5.0
<i>Neonatal Admissions for Suspected H1N1</i>	1 (6%) hospital Range: 1 neonate Average: 1	3 (17%) hospitals Range: 1-2 neonates Average: 1.7
<i>Neonatal Admissions for Confirmed H1N1</i>	2 (12%) hospitals Range: 1 neonate each Average: 1	2 (12%) hospitals Range: 1-2 neonates Average: 1.5
<i>Neonatal Death Related to Neonatal H1N1</i>	1 hospital reported a neonatal death related to H1N1	1 hospital reported a neonatal death related to H1N1

Loss of Staff Time Due to H1N1:

At Survey 1 ten hospitals provided staffing absence data ranging from one surgical technician to six key medical staff (4 RNs/2MDs) each out for seven days. At follow-up, six hospitals provided data ranging from seven key medical staff (5RNs/2CNAs) each off for approximately 3 days to 300 employees in various positions averaging 3-4 days per person. Data indicates that on average key medical personal were absent seven days from onset of symptoms.

Changes Related to H1N1

<i>Do you believe there have been any changes related to H1N1 around</i>	Survey I 1/1/09-9/30/09	Survey II 10/1/09-5/1/10
Visitation policies (limiting visitation of family, friends; etc.)	94%	94%
Negative impact on patient satisfaction (overall patient satisfaction decreasing or on specific areas of complaints)	38%	53%
Increase in staffing patterns (needing additional staff due to H1N1 or due to staff being out)	44%	12%
Decrease in overall services sought by patients (patients are choosing not to come to clinics, classes, etc.)	25%	13%
Decrease in overall services provided (due to any H1N1 related issue such as limited staffing, capacity, etc)	6%	6%
Closing of outpatient or other services (such as clinics, childbirth classes)	13%	6%

Responses to Greatest Challenge(s)

In survey I the responses to the greatest H1N1 challenge were clustered around appropriate care of the patients via the CDC recommendations, staff assignments, and the restriction of visitation. In survey II there was a continued concern about adhering to CDC recommendations, but specifically around the limitation of contact between mother and newborns. Also, there were concerns about sufficient personal protective equipment, enforcement of visitation restrictions and keeping all staff “up-to-date”.

Responses to Lessons Learned

In survey I hospitals were concerned regarding the close monitoring of these patients due to rapid deterioration. There was an expressed need for more staff to monitor patients and to have multidisciplinary plan of care in place. In survey II there was continued concern about this patient population rapidly deteriorating especially from a pulmonary standpoint and the need for close monitoring. Visitation issues should be clearly communicated to the public and the need to follow updated CDC recommendations along with keeping staff updated—communication! One hospital indicated it was beneficial to not wait until test confirmation to start Tamiflu.

Currently, 63% of hospitals have a regional plan. The majority are following CDC and local Department of Health recommendations. In survey I there were questions about H1N1 practice recommendations, isolation, and the proper use of personal protective equipment. In survey II no questions were asked.

Influenza Diagnosis Code Totals from NPIC/QAS Trend Data Base (n=125 hospitals)

<i>Total MDC 14</i> <i>(includes antepartum, postpartum & delivered inpatient discharges)</i>	Reported 2008	Reported 2009
	240,970	232,365
<i>ICD-9-CM Code/description</i>		
488.1 Influenza due to identified novel H1N1 virus*	*Code added October 2009	92 (0.040%)
487.1 Influenza with other respiratory manifestations	125 (0.052%)	342 (0.147%)
487.0 Influenza with Pneumonia	8 (0.003%)	62 (0.027%)

Summary

Although Perinatal H1N1 recommendations were new and were updated during the 2009-2010 flu season, hospitals became informed and did not have H1N1 questions by May 2010. Hospitals experienced an increase of pregnancy and neonatal admissions related to H1N1. The H1N1 hospital policy changes continued along with challenges around communication and visitation. Practice concerns were expressed related to the rapid deterioration of patient condition that can occur with perinatal patients with H1N1, the need for communication and staff education. Patient satisfaction related to H1N1 continues to be affected. Overall, H1N1 is being reported in the perinatal population and is affecting patients, staff, and hospital policies. Based upon this limited survey there is a need for continued understanding and development of a specific plan for the care of this unique population.

For questions or comments about these data, contact Julie Shocksnyder, Associate Vice President, National Perinatal Information Center/ Quality Analytic Services, (401) 274-0650 or jshocksnyder@npic.org.