

Northwest Community EMS System

901 Kirchoff Road
Arlington Heights, IL 60005

Phone: 847-618-4480 Fax: 847-618-4489



NORTHWEST
COMMUNITY
EMERGENCY
MEDICAL
SERVICES
SYSTEM

Year End Data 2016

At the end of each calendar year, the Provider Based Performance Improvement (PBPI) committee provides statistical measurements for the system. Within Image Trend reporting software, there is a report "Ambulance Run Data" that compiles the following statistics. During the year 2016 (January 1 to December 31) the 25 agencies completed a combined **70,141** Patient Care Reports (PCR) which is **an increase** over the 69,061 in 2015, the 68,733 in 2014 and the 67,787 that were produced in year 2013.

Our patient population was more female 36,694 (52%) than male 31,677 (45%) Unknown gender was listed (1,770) 3% of the time. The average age of our patients is 58 years old. The largest age group were the 80-89 year olds comprising 17% of our patient population.

33,221 (52%) ePCRs were documented as *ALS with transport*, 19,985 (28%) were documented as *BLS with transport*, and 13,184 (19%) were listed as *refused treatment or transport*. 799 (1%) patients were treated and then care was transferred to another agency for transport. 400 were between Jan 1st and Oct 3rd. 399 were between Oct 3rd and Dec 31st. This shows an increase in compliance of PCR completion when a non-transport vehicle arrived before the transport vehicle.

January 1st- December 31 st	2016	2015	2014	2013
25(24) Agencies	70,141	69,061	68,733	67,787
Female	36,694 (52%)	36,315 (53%)	53%	54%
Male	31,677 (45%)	31,089(45%)	47%	46%
Average age	58 years old	57 years old	58 years old	57 years old
Largest age group	80-89 y/o (17%)	81-90 y/o (17%)	81-90 y/o (18%)	81-90 y/o (18%)
ALS w transport	33,221 (52%)	31,947 (46%)	30,622 (44%)	30,253 (44%)
BLS w transport	19,985 (28%)	20,986 (30%)	23,712 (34%)	23,200 (34%)
Refusals	13,184 (19%)	12,855 (19%)	11,584 (17%)	11,548
Treated, Transferred care	799 (1%)	554 (1%)		

2016 Final DRAFT: NWC EMSS CARS Data

In addition to the demographic information that was reviewed, specific treatment of patients was analyzed. In 2016 there was a total of 613 attempts to establish intraosseous (IO) access for pts. The total number of IV attempts completed was 8,064.

The system attempted to place an advanced airway 558 times. Of those attempts, we used the King LTS-D 254 times. A cricothyrotomy was attempted 5 times. The remaining 299 attempts were standard orotracheal intubations with an endotracheal tube.

January 1st- December 31 st	2016	2015	2014	2013
IO access	613	592 adult 9 pediatric	571	586
Intravenous access attempt	8,064	8,201	8,359	10,598
KLTS-D airways	254	301	310	299
Orotracheal intubation	299	317	310	336
Cricothyrotomy	5	3	3	5

2016 DRAFT

PRIVILEGED AND CONFIDENTIAL - PEER REVIEW DOCUMENT - PATIENT SAFETY WORK PRODUCT. Protected under the Patient Safety and Quality Improvement Act. Do not disclose unless authorized by the NWC EMSS EMS MD or his designee.

"This report is not part of any patient's permanent medical record. All information provided, including any appended materials, is furnished as a report of quality management and is privileged and confidential, to be used solely in the course of internal quality control for the purpose of reducing morbidity and mortality and improving the quality of patient care in accordance with Illinois Law (735ILCS 5/8-2004 et seq)."

2016 Final DRAFT: NWC EMSS CARS Data

Oxygen (5,612) continues to be our most used medication. This is followed by Fentanyl (4,279), ASA (3,585) and then ondansetron (3,315). Reporting of this data is based on number of doses administered rather than per patient.

Number of medication doses administered:

Medication	2016	2015	2014
Adenosine	100	105	122
Albuterol	891	847	1222
Amiodarone	111	93	144
Aspirin	3,585	3,459	3,522
Atropine	89	76	130
Benzocaine	8	7	8
Dextrose 10%	729	739	752
Diphenhydramine	288	187	247
Dopamine	72	82	130
Epinephrine 1mg/10mL	453	101	146
Epinephrine 1 mg/mL	784	476	2441
Etomidate	45	40	26
Fentanyl	4,279	4,154	5,482
Glucagon	167	164	151
Ipratropium	709	696	816
Ketamine	4		
Lidocaine	38	55	56
Magnesium sulfate	8	9	18
Midazolam	503	430	639
Naloxone	428	194	427
Nitroglycerin	1789	1600	2454
Norepinephrine	15		
Ondansetron	3,315	3,118	3,421
Oxygen	5,612	5,828	6,309
Sodium Bicarbonate	43	30	33
Tetracaine	9	11	16
Verapamil	43	41	37

2016 DRAFT

PRIVILEGED AND CONFIDENTIAL - PEER REVIEW DOCUMENT - PATIENT SAFETY WORK PRODUCT. Protected under the Patient Safety and Quality Improvement Act. Do not disclose unless authorized by the NWC EMSS EMS MD or his designee.

"This report is not part of any patient's permanent medical record. All information provided, including any appended materials, is furnished as a report of quality management and is privileged and confidential, to be used solely in the course of internal quality control for the purpose of reducing morbidity and mortality and improving the quality of patient care in accordance with Illinois Law (735ILCS 5/8-2004 et seq)."

2016 Final DRAFT: NWC EMSS CARS Data

When transport was necessary, the system transported 39,577 patients to System hospitals. **It is known that we transport to non-system hospitals and our hospitals receive patients from non-system agencies.** It is also known that NWCH is the hospital that is the most central of our system. Our total number of patients transported a facility was 53,206=N

Hospital transports	2016	2015	2014	2013
NCH	18,259 (34%)	17,415 (33%)	17,079	17,483
ABMC	8,775 (16%)	8,439 (16%)	8,466	8,204
SAMC	6,510 (12%)	6,353 (12%)	6,090	5,932
AGSH	3,628 (7%)	3,515 (6.6%)	3,348	3,145
GOMC	2,132 (4%)	1,952 (3.6%)	1,916	1,827
Presence-Resurrection	273 (0.5%)	382 (0.7%)	356	382
Non-System Hospitals that received the most patients from a system agency				
Lutheran General	4474 (8%)	4,328 (8%)	4,301	
Condell	1357 (2.5%)	1,150 (2%)	1,025	
All other receiving facilities	7,798 (15%)	9,399 (18%)	11,753	

2016 DRAFT

PRIVILEGED AND CONFIDENTIAL - PEER REVIEW DOCUMENT - PATIENT SAFETY WORK PRODUCT. Protected under the Patient Safety and Quality Improvement Act. Do not disclose unless authorized by the NWC EMSS EMS MD or his designee.

"This report is not part of any patient's permanent medical record. All information provided, including any appended materials, is furnished as a report of quality management and is privileged and confidential, to be used solely in the course of internal quality control for the purpose of reducing morbidity and mortality and improving the quality of patient care in accordance with Illinois Law (735ILCS 5/8-2004 et seq)."

2016 Final DRAFT: NWC EMSS CARS Data

On October 3, 2016 the system switched to ImageTrend Elite to comply with NIMSES 3 data reporting requirements. One area where the data set was expanded was Provider Primary Impression.

Primary Impression	2016 (Jan to Oct)	2016 (Oct to Dec)	2015	2014
Traumatic injury	8,466		10,364 (15%)	9,388
Impression starting with "injury" (22 choices)		2,242		
Other illness/injury	5,094		6,616 (9%)	7,294
Behavioral/psychiatric disorder	4,075		5,495 (8%)	5,726
No apparent illness/injury	4,009		5,356 (7.7%)	5,451
Pain	3,610	1,371	4,975 (7%)	4,977
No abnormal finding upon exam		2,039		
Weakness		1,153		
Exam without abnormal findings		993		
Other Chest Pain		636		

2016 DRAFT

PRIVILEGED AND CONFIDENTIAL - PEER REVIEW DOCUMENT - PATIENT SAFETY WORK PRODUCT. Protected under the Patient Safety and Quality Improvement Act. Do not disclose unless authorized by the NWC EMSS EMS MD or his designee.

"This report is not part of any patient's permanent medical record. All information provided, including any appended materials, is furnished as a report of quality management and is privileged and confidential, to be used solely in the course of internal quality control for the purpose of reducing morbidity and mortality and improving the quality of patient care in accordance with Illinois Law (735ILCS 5/8-2004 et seq)."

2016 Final DRAFT: NWC EMSS CARS Data

Response times and scene times change based on **many factors** from agency to agency. The data reported here is **only** for comparison to last year. This system is comprised of Fire-based 911 services as well as private providers conducting inter-facility transfers. Also, the change from ImageTrend Field Bridge to ImageTrend Elite has affected our "At hospital Time" (unit arrival at destination till back in-service. Total call time ("unit dispatched" till "unit back in service") for Jan to Oct is an average of 1hr and 13 minutes and for Oct to Dec is an average of 1hr and 21min. In 2015 our average length of call was 1 hour and 10 minutes. This year, Tuesdays had the highest total number of calls with 10,465 (15%). There are known key stroke errors prolonging enroute times that agencies are being asked to correct.

System totals Min:Sec	2016 All System		2016 Fire Based		2016 Private Ambulance services		2015 Fire Based	2015 Private Ambulance services	2015 all system
	Jan to Oct	Oct to Dec	Jan to Oct	Oct to Dec	Jan to Oct	Oct to Dec			
En-route time	1:09	2:35	1:22	2:23	1:54	3:57	0:57	1:46	1:04
To the scene	7:22	6:43	4:10	4:01	33:01	22:53	3:42	15:30	5:26
On scene time	18:24	18:27	16:17	16:23	26:04	28:39	16:14	24:15	17:34
Transport time	10:24	11:10	9:47	9:41	18:01	17:28	9:24	17:34	10:56
Time to Transfer Care		5:04		4:17		8:26			
Back in service	35:43	42:29	38:51	46:32	21:29	25:26	39:27	18:47	35:32
Total call time	1 hr 13min	1hr 21min	1hr 10min	1hr 18min	1hr 40min	1hr 38min	1hr 9 min	1hr 17 min	1hr 10min

2016 DRAFT

PRIVILEGED AND CONFIDENTIAL - PEER REVIEW DOCUMENT - PATIENT SAFETY WORK PRODUCT. Protected under the Patient Safety and Quality Improvement Act. Do not disclose unless authorized by the NWC EMSS EMS MD or his designee.

"This report is not part of any patient's permanent medical record. All information provided, including any appended materials, is furnished as a report of quality management and is privileged and confidential, to be used solely in the course of internal quality control for the purpose of reducing morbidity and mortality and improving the quality of patient care in accordance with Illinois Law (735ILCS 5/8-2004 et seq)."

2016 Final DRAFT: NWC EMSS CARS Data

The following shows the number of PCRs completed by each agency. This may **not** fully indicate the number of patients treated, as some agencies complete a PCRs on “no patient found” and “canceled” incidents. N=70,141

Top Private Providers

Top Three Fire Based Agencies

Total PCRs per agency	2016	2015	2014	2013
Advantage	3491	3,988	5,218	4,872
Arlington Heights	7230	6,548	6,167	6,166
Barrington	1180	1,127	1,046	1,985
Barrington-Countryside	1363	1,305	1,119	
Bloomington	3314	3,149	3,143	3,131
Buffalo Grove	3041	2,970	2,868	2,632
Des Plaines	6527	6,331	6,048	5,838
Elk Grove Township	669	680	668	684
Elk Grove Village	4078	3,833	3,635	3,579
Fermilab	52	54	28	43
Hoffman Estates	4631	4,367	4,095	4,106
Itasca	1041	989	970	928
Lake Zurich	2490	2,370	2,291	2,016
Lincolnshire RWFPD	1928	1,875	1,700	1,789
Long Grove	946	888	922	967
Mount Prospect	4032	4106	4,048	4,022
Palatine	5407	5131	4,994	4,937
Palatine Rural	495	471	426	591
Prospect Heights	1254	1174	1,202	1,128
Rescue 8	1153	1330	1,818	3,610
Rolling Meadows	2437	2293	1,920	2,048
Schaumburg	6795	6717	6,045	5,801
Schiller Park (until July)	741	1239	1164	1274
Superior	4526	4773	5,980	4,625
Wood Dale	1322	1353	1,203	1,127

2016 DRAFT

PRIVILEGED AND CONFIDENTIAL - PEER REVIEW DOCUMENT - PATIENT SAFETY WORK PRODUCT. Protected under the Patient Safety and Quality Improvement Act. Do not disclose unless authorized by the NWC EMSS EMS MD or his designee.

"This report is not part of any patient's permanent medical record. All information provided, including any appended materials, is furnished as a report of quality management and is privileged and confidential, to be used solely in the course of internal quality control for the purpose of reducing morbidity and mortality and improving the quality of patient care in accordance with Illinois Law (735ILCS 5/8-2004 et seq)."

2016 Final DRAFT: NWC EMSS CARS Data

Tremendous thanks to all who pulled the data, created, and reviewed this report prior to distribution.

Respectfully submitted,

Jason Brizzell, Paramedic Schaumburg Fire Department Chair, PBPI committee	Adam Rothenberg, Paramedic Palatine Fire Department Vice Chair, PBPI committee
Joe Albert, Paramedic Elk Grove Village Fire Department Data coordinator, PBPI committee	Nichole Junge, RN Paramedic Rolling Meadows Fire Department Secretary, PBPI committee
Dan Pasquarella, Paramedic Buffalo Grove Fire Department Screen Coordinator, PBPI committee	Susan Wood, RN Paramedic 2016 System Liaison for PBPI

And the entire PBPI team!

Happy New Year.

2016 DRAFT

PRIVILEGED AND CONFIDENTIAL - PEER REVIEW DOCUMENT - PATIENT SAFETY WORK PRODUCT. Protected under the Patient Safety and Quality Improvement Act. Do not disclose unless authorized by the NWC EMSS EMS MD or his designee.

"This report is not part of any patient's permanent medical record. All information provided, including any appended materials, is furnished as a report of quality management and is privileged and confidential, to be used solely in the course of internal quality control for the purpose of reducing morbidity and mortality and improving the quality of patient care in accordance with Illinois Law (735ILCS 5/8-2004 et seq)."