

NEMSiS Update and Strategic Vision

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**October 11, 2010
NASEMSO Annual Meeting
Data Managers Council**

NEMESIS TAC Staff

- States are being contacted to update the information on the NEMESIS website

The State EMS Data Manager is the primary contact for NEMESIS staff.

State EMS Data Collection System:

Information regarding the State EMS Data Collection System and State EMS Forms was last updated on 9-6-2010.

Click on the following links to view the corresponding files:

- **EMS Data Collection Planning:** <http://www.cdphe.state.co.us/em/emtsdata/index.html>
- **EMS Data Reporting Website:** [EMTS System Data & Evaluation-Colorado Emergency Medical Services \(CEMSIS\)](#)
- **EMS Software Platform:** State Developed
- **EMS Data Dictionary:** [State-Required EMS Dataset Elements](#)
- **EMS Data Reporting Manual:** [Getting Started with Web-Based Reporting](#)
- **EMS Run Statistics:** <http://www.cdphe.state.co.us/em/EMSDataAnalysis/index.html> and data request form at <http://www.cdphe.state.co.us/em/emtsdata/DataRequestForm2008.doc>

NEMSiS Strategic Vision

- 2010:
 - Quality of Data
 - Version 3.0 Dataset finalization
- Future
 - Publish EMS Findings
 - Quantity and Quality of Data
 - Move to HL7 Standard....

NEMSiS Strategic Vision

- 2011:
 - Quality of Data - *ongoing*
 - Version 3.0 Efforts
 - Compliance testing for software
 - State XSD development
 - Site Visits
 - State Data Element Determination
 - » Mandatory vs Required vs Optional

NEMSiS Strategic Vision

Quality of Data

- Enhanced reports:
 - National and State Level
- Development of Dashboards
 - Evaluate growth, quality, service, people, finance
- Refined Reports
 - For web services, aggregate by month, based upon submission date
- Provide reports that show quality ... or lack thereof!

NEMESIS Strategic Vision

Version 3 Efforts

– Compliance Testing:

- One level only
- All v3 elements will be tested with “valid” data

– State XSD Development

- Identify State specific elements
- Site visit by NEMESIS TAC Staff
- Develop State specific XSD,
 - with the State EMS Data Manager and other State EMS Stakeholders

NEMSiS Strategic Vision

Publish ... to show:

- Value and Benefits of EMS
- Impact of EMS on:
 - STEMI
 - Stroke
 - OHCA
- Response Times

Data Submission Update

- 26 States are currently submitting to NEMSiS.
- The public warehouse is updated near the 1st of every month.
 - This is to allow for consistency with people doing research using the public data.
- Vision: update the warehouse weekly.

Composition of the NEMESIS Data Warehouse - 9-2010

Last Updated on: 9/13/2010 11:03:27 PM

States:	2008				2009				2010			Total
	1	2	3	4	1	2	3	4	1	2	3	
Alabama	59,122	64,508	85,735	81,974	105,186	121,086	124,848	113,698	116,064	118,538	81,070	1,071,829
Alaska								2,596	5,088			7,684
Arkansas					47,843	53,657	53,191	45,847	16,599	30,174		247,311
Colorado	54,312	51,074	56,880	60,024	80,625	86,371	96,960	87,708	78,104	67,743		719,801
Florida	89,854	132,976	174,041	199,927	260,503	255,725	264,028	279,302	291,554	164,917		2,112,827
Hawaii			3,233	19,702	25,610	25,160	24,670	25,186	25,971	25,042		174,574
Idaho					6,864	12,491	14,400	14,136	13,077			60,968
Iowa	34,724	35,730	34,793	36,004	17,950	34,910	40,204	42,946	40,478	39,729		357,468
Kansas						8,069	7,944	9,765				25,778
Maine	17,771	16,965	27,569	30,159	40,466	13,842	40,336	37,267				224,375
Michigan					7,495	32,598	35,422	124,402				199,917
Minnesota	51,238	52,780	82,322	80,336	86,936	94,033	97,031	99,338	94,571	100,940		839,525
Mississippi						50,935	63,740	62,765	51,814			229,254
Missouri	31,820	32,784	34,983	30,757	27,520	18,047	20,750	24,826				221,487
Nebraska	13,557	13,494	14,322	14,255	14,187	14,657	16,264	16,094	14,962			131,792
Nevada	7,914	7,833	31,080	23,302	18,643	19,012	20,035	14,260	9,418	13,744		165,241
New Hampshire	19,571	15,360	3,217	21,468	23,632	16,561	28,924	27,937				156,670
New Jersey					86,280	94,796	121,632	137,288	186,009	203,322		829,327
New Mexico			7,422	9,165	19,084	26,316	25,521	30,957				118,465
North Carolina	278,569	290,956	300,312	308,262	302,230	342,418	339,080	339,071	349,736	355,822		3,206,456
North Dakota	11,608	11,485	8,306	8,315	8,046	7,787	8,258	8,077	7,730	6,557		86,169
Oklahoma				1,926	35,951	61,253	51,668	79,773				230,571
South Carolina					33,373	45,266	67,733	123,810	242,965	254,216		767,363
South Dakota					1,794	2,580	2,949	2,754	4,912	6,356		21,345
Utah	15,390	15,151	28,689	34,821	39,169	40,749	38,963	35,064	40,906	7,682		296,584
West Virginia					6,134	13,846	22,607	65,489	94,072			202,148
Total	685,450	741,096	892,904	960,397	1,295,521	1,492,165	1,627,158	1,850,356	1,684,030	1,394,782	81,070	12,704,929

Data submitted to NEMESIS through 10-10-2010

All records are not yet in the NEMESIS public warehouse.

States:	2008				2009				2010				Total
	1	2	3	4	1	2	3	4	1	2	3	4	
AK								2,596	5,088				7,684
AL	59,123	64,509	85,736	81,978	105,187	121,087	124,850	113,813	116,097	119,578	105,176	4,066	1,101,200
AR					47,843	53,657	53,191	45,847	16,599	30,174			247,311
CO	54,312	51,074	56,880	60,024	80,625	86,371	96,960	87,708	78,104	67,743			719,801
FL	89,854	132,976	174,041	199,927	260,503	255,725	264,028	279,302	291,554	164,917			2,112,827
HI			3,233	19,702	25,610	25,160	24,670	25,186	25,971	25,042			174,574
IA	34,724	35,730	34,793	36,004	17,950	34,910	40,204	42,946	40,478	39,729			357,468
ID					6,864	12,491	14,400	14,136	13,077				60,968
KS						8,070	7,944	9,765	10,296	11,440	4,272		51,787
ME	17,771	16,966	27,569	30,159	40,475	13,843	40,336	37,270	41,216	41,635			307,240
MI					7,497	32,600	35,423	124,410	177,534	177,212			554,676
MN	51,238	52,780	82,322	80,336	86,936	94,033	97,031	99,338	94,571	100,940			839,525
MO	31,820	32,784	34,983	30,757	27,520	18,047	20,750	24,826					221,487
MS						50,935	63,740	62,765	51,814				229,254
NC	278,569	290,956	300,312	308,262	302,230	342,418	339,080	339,071	349,736	357,561			3,208,195
ND	11,608	11,485	8,306	8,315	8,046	7,787	8,258	8,077	7,730	6,557			86,169
NE	13,557	13,494	14,322	14,255	14,187	14,657	16,264	16,094	14,970	22,962			154,762
NH	19,571	15,360	3,217	21,468	23,644	16,563	28,924	27,943	24,696	33,175	13,608		228,169
NJ					86,280	94,796	121,632	137,288	186,009	203,322			829,327
NM			7,422	9,165	19,092	26,318	25,521	30,968	69,103	67,863			255,452
NV	7,914	7,833	31,080	23,302	18,643	19,012	20,035	14,260	9,418	13,744			165,241
OK				1,926	35,951	61,253	51,668	79,773					230,571
SC					33,373	45,266	67,733	123,810	252,475	258,679			781,336
SD					1,794	2,580	2,949	2,754	4,912	6,356			21,345
UT	15,390	15,151	28,689	34,821	39,169	40,749	38,963	35,064	40,906	7,682			296,584
WV					6,134	13,846	22,607	65,489	95,438	110,158			313,672
Total	685,451	741,098	892,905	960,401	1,295,553	1,492,174	1,627,161	1,850,499	2,017,792	1,866,469	123,056	4,066	13,556,625

States & Territories expected to submit by the end of 2010

(33 Total)

- US Virgin Islands
- Mariana Islands
- Indiana
- Illinois
- Connecticut
- Washington
- Washington DC

(actively working to contribute in next 3 months)

States & Territories expected to submit in 2011

(43 Total)

- California
- Georgia
- Guam
- Kentucky
- Maryland
- Massachusetts
- Oregon
- Pennsylvania
- Vermont
- Wisconsin

NEMESIS TAC

Data Submission Schedule

NEMESIS 2.2.1 XML Submission Schedule

The State EMS Data should be submitted to NEMESIS on a quarterly basis if not sooner.
State requirements for submission may impact when data are submitted.

For States using web services for submission to NEMESIS data may be sent daily, hourly, or as determined by the State and its EMS software system. If web services are utilized by a State software system, any EMS agency data submitted by a batch upload (import) method to the State should be recognized by the State's EMS software system and the "batch upload" subsequently submitted to NEMESIS via web services. All EMS records are expected to be submitted to the National EMS database.

Q1			Q2			Q3			Q4		
Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
- Submit Q4 20xx data: 1. after Jan 1 & before Mar 1 2. Web Services – anytime after the event date (E05_04 Unit Notified by Dispatch Date)			- Submit Q1 20xx data 1. after Apr 1 & before Jun 1 2. Web Services – anytime after the event date (E05_04 Unit Notified by Dispatch Date)			- Submit Q2 20xx data 1. after Jul 1 & before Sep 1 2. Web Services – anytime after the event date (E05_04 Unit Notified by Dispatch Date)			- Submit Q3 20xx data 1. after Oct 1 & before Dec 1 2. Web Services – anytime after the event date (E05_04 Unit Notified by Dispatch Date)		

NEMSiS TAC

Data Submission Report


- Current report
 - Submission Summary
 - Date range for submissions
 - Frequency tables
 - Violations of business logic / ETL Rules



Data Profile Report

NEMESIS Message Board

- This allows the States to see what data has been submitted with an event date in a given year and quarter.



NEMESIS Message Board

[Home](#)
[NEMESIS Home Page](#)
[Data Submission Policy](#)
[My Profile](#)
[Logout](#)

Welcome **User Name**

Please note, this report reflects ALL of the records submitted for your state.

Warehouse Summary for Your Sites												
	2008		2009				2010		2011			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
State Name	82,322	80,336	86,936	94,033	97,031	99,338	94,565	14			1	

Event Time Out Of Boundary			
	Event Year	Event Quarter	Event Count
State Name	2000	2	1
	2000	4	1

Sites listing					
ST Abbrev	State Name	Submit Data	Validator	Submission History	View Topics

NEMSiS Data Profile / Submission Report

Section A. Submission Summary [Back to Top](#)

Number of cases	31351
Minimum Date	2010-02-15
Maximum Date	2011-03-10
EMS Agencies Reporting Count	242
EMS Counties Reporting Count	88

Section B. NEMSiS Element Definition [Back to Top](#)

Note: Some elements have frequency distribution calculated in Section C. Click on the link to jump to Section C see the data.

Section C. EMS Data Element Frequency Distributions [Back to Top](#)

Section D. NEMSiS ETL Report [Back to Top](#)

Section E. NEMSiS ETL by Vendor Agency Report [Back to Top](#)

For a detail ETL report stratified by vendor and agency, click [here](#). You need to use your NDX credentials to log into the report system.

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Database Development

Data Quality Issues

NEMSiS ETL Rule Violations:

- In development:
 - State Report that shows ETL Rule ID violated by submission month
 - Data Quality –
 - » Areas for improvement identified
 - » Corrective measures taken
 - This will allow each State to see improvement in the ETL Rules violated by submission → after the improvements are made and implemented.

Database Developments

Data Quality Issues

A. Record Entry Issues

1. Age and Age Units – Rule 193
2. Time Entry – Rule ??? – Multiple!
3. Multi-Select Elements – again, multiple rules
 - i. Issue: The value associated with description "NONE" appears when a Null Value (-5, -10, -15, -20, -25) appears and no other non-Null Values have been submitted.

Database Developments

Data Quality Issues

B. Submission / XML Issues

1. Missing Records –
 - i. learned when training states
2. Procedures –
 - i. submission of Null Values when valid value submitted
3. Duplicate Records –
 - i. 1-1 element comparison
 - ii. 5 key constraint comparison

Database Developments

Data Quality Issues

C. NEMSiS V2.2.1 Business Logic

1. Created based on Data Dictionary
 - i. Definitions/Descriptions
 - ii. Record level verification
 - iii. XML file - % of violations

2. NEMSiS Website Link –
 1. Resource Manual with Rule Explanation
<http://nemsis.org/dataCenter/requestNEMSiSData.html>

Data submitted in August 2009

- 5 states uploaded data:
 - Total Records = 79,806
 - Records with errors = 38,113 = 47.76%
 - Some records have multiple errors
 - Top 5 Errors:
 - Rule ID 191 – E19_03 Procedure:
 - Null Value with valid value(s) submitted
 - Rule ID 481 & 480 – duplicate records
 - Rule ID 193 – E06_15 Age Units:
 - has no descriptor when age entered
 - Rule ID 194 – E19_07 Proc Complication:
 - multi-select issue

Records submitted by Month and Business Rules Violated

Year	Month	Num of States	Num of Submissions	Num of Records With Errors	Num of Rules Violated	Rules Violated
2009	8	5	64588	38088	66	191,193,480,194,481
2009	9	8	281533	93520	86	193,191,184,169,173
2009	10	4	138605	43303	72	191,184,169,480,171
2009	11	11	1003203	167767	85	191,211,194,173,197
2009	12	9	284502	133535	86	193,191,220,194,184
2010	1	8	1113499	1000320	90	490,191,211,184,174
2010	2	3	101208	89819	86	490,196,197,176,191
2010	3	7	241989	182026	83	490,193,191,172,194
2010	4	12	1458271	981698	101	490,191,211,197,220
2010	5	12	981425	604380	102	490,191,211,173,184
2010	6	7	198295	162464	103	490,191,194,223,326
2010	7	7	866365	804787	99	310,490,319,191,211
2010	8	13	1384334	1022215	110	310,490,482,191,211
2010	9	8	1040786	881855	108	482,310,191,319,174
2010	10	5	836266	438956	97	482,191,319,211,223

Data submitted September 2010

- 8 states uploaded data:
 - Total Records = 1,040,786
 - Records with errors = 881,855 = 84.73%
 - Some records have multiple errors
 - Top 5 Errors:
 - Rule ID 482 – PCR Hash
 - Patient record has already been submitted under a different postID.
Action → only the most recent record will be used in the data warehouse.
 - Rule ID 310 – D02_07 EMS Agency County:
 - Value is null, blank or populated with a Null Value.
Action → Data to remain as submitted
 - Rule ID 191 – E19_03 Procedure:
 - Null Value with valid value(s) submitted
Action → Remove record/s reporting Null Values. [only the -25 procedure]
 - Rule ID 319 – E02_12 EMS Unit Call Sign
 - Value is null, blank or populated with a Null Value.
Action → Data to remain as submitted
 - Rule ID 174 – E02_08 Delay at Scene
 - The value associated with description "NONE" (225) and/or a Null Value (-5, -10, -15, -20, -25) has been submitted when at least one other non-Null Value has been submitted.
Action → Remove record/s reporting "None" and/or Null Values.
[only the -25 procedure]

State Reporting Tools Development

- Webinars with State Data Managers (ongoing)
 - Education on Submission Reports
 - Static Reports – Reporting Services
 - Agency Vendor Report
 - State Cube – Report Portal
- State Reports – mimic National Reports
 - Review reports

State: Agency & Vendor Report

Data Profile Report by Vendor and Agency

State Data:

Date Range: Quarter: 3 Year: 2009

Total rows: 913

State	Rule ID	Error Description	Element	Agency Num	Software Name	Ver.	Error Type	Errors
ST	481	After having removed duplicate records (based on all one-to-one elements), there are duplicate events according to the PCR complex key (D01_03, E01_01, E02_01, E02_12 and E05_04).	derived		Vendor	Version 4.2	Warning	9
ST	481	After having removed duplicate records (based on all one-to-one elements), there are duplicate	derived		Vendor	Version 4.2	Warning	2
ST	481	After having removed duplicate records (based on all one-to-one elements), there are duplicate	derived		Vendor	Version 4.2	Warning	2

State: Agency & Vendor Report

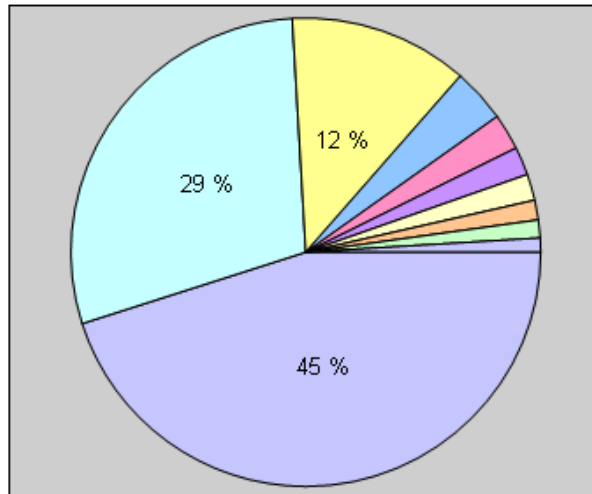
State	Rule ID	Error Description	Element	Agency Num	Software Name	Ver.	Error Type	Errors
ST	192	Value in E06_11 (gender) reflects 650 (male) when value in E03_01 (complaint reported by	E06_11		Vendor	Version 4.2	Warning	1
ST	193	Value for E06_15 (age unit) is not populated with a non-Null Value when value in E06_14 (age) is populated with a numeric value between 1 and 120.	E06_15		Vendor	Version 4.2	Caution	2329
ST	193	Value for E06_15 (age unit) is not populated with a non-Null Value when value in E06_14	E06_15		Vendor	Version 4.2	Caution	1
ST	193	Value for E06_15 (age unit) is not populated with a non-Null Value when value in E06_14	E06_15		Vendor	Version 4.2	Caution	1
ST	193	Value for E06_15 (age unit) is not populated with a non-Null Value when value in E06_14	E06_15		Vendor	Version 4.2	Caution	1
ST	211	Value reported in E08_06 (Mass Casualty Incident) is 1 (yes) when value reported in E08_05 (Number Of Patients At Scene) is not 1125 (single) or 1120 (none) OR value report in E08_06 (Mass Casualty Incident) is 0 (no) when value reported in E08_05 (Number Of Patients At Scene) is 1130 (Multiple).	E08_06		Vendor	Version 4.2	Caution	79
ST	211	Value reported in E08_06 (Mass Casualty Incident) is 1 (yes) when value reported in	E08_06		Vendor	Version 4.2	Caution	73
ST	211	Value reported in E08_06 (Mass Casualty Incident) is 1 (yes) when value reported in	E08_06		Vendor	Version 4.2	Caution	60

How can I use all that Data?



Using NEMSiS Benchmarking & Reporting Tools

Top 10 Cause of Injury Categories



Cause of Injury	Percent	Total
Falls (E88X.0)	45 %	179,086
Motor Vehicle traffic accident (E81X.0)	29 %	115,303
Struck by Blunt/Thrown Object (E968.2)	12 %	49,086
Motor Vehicle non-traffic accident (E82X.0)	4 %	14,780
Motorcycle Accident (E81X.1)	2 %	9,918
Stabbing/Cutting Assault (E966.0)	2 %	7,802
Stabbing/Cutting Accidental (E986.0)	2 %	7,201
Pedestrian traffic accident (E814.0)	1 %	5,434
Bicycle Accident (E826.0)	1 %	4,914
Firearm assault (E965.0)	1 %	3,856
Cases selected: 397,380 †		

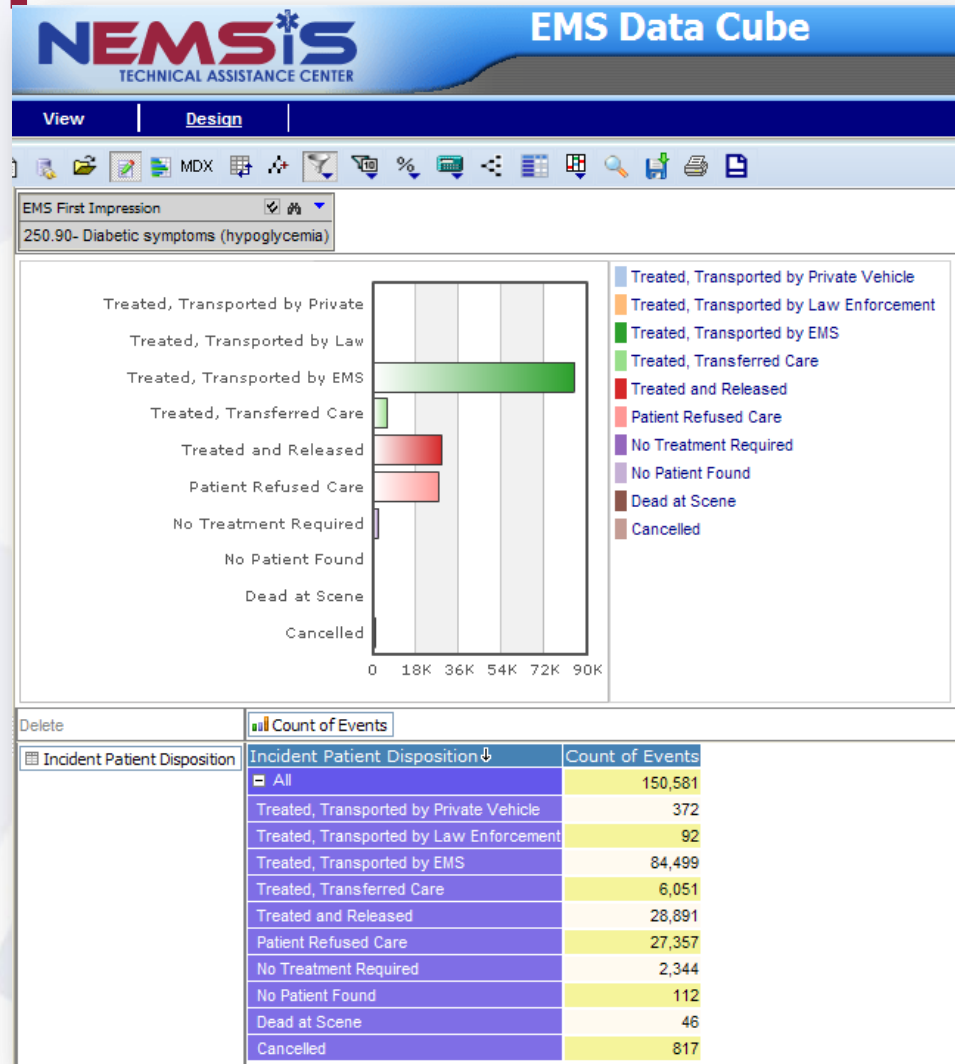
EMS Data...

- But... do you know how to use it!?
- Clinical Compliance:
 - Protocols
 - Chest Pain / STEMI
 - Diabetic
 - Cardiac Arrest
- AMA
 - within NEMSiS this is Patient Refused Care
- Gender by Age –
 - Based on “Patient Contact”

Diabetic Patients by Disposition

Provider's Primary Impression
= **Diabetic**

Summary of 10.3 million records by Disposition



AMA – Patient Refused Care

Incident/Patient
Disposition
= Patient
Refused Care

Summary of
Provider
Impressions
Qtr 1 2010

Event Date:	1st Quarter 2010
Incident Patient Disposition:	Patient Refused Care
EMS First Impression	Count of Events
All Provider Primary Impressions	60,710
Not Available	13,622
959.90- Traumatic injury	12,582
Not Recorded	8,356
Not Applicable	6,583
Not Known	3,708
250.90- Diabetic symptoms (hypoglycemia)	2,298
780.20- Syncope / fainting	2,289
789.00- Abdominal pain / problems	1,955
312.90- Behavioral / psychiatric disorder	1,919
786.09- Respiratory distress	1,380
786.50- Chest pain / discomfort	1,306
780.30- Seizure	1,281
780.09- Altered level of consciousness	757
977.90- Poisoning / drug ingestion	628

AMA Patients ... concerns

- What is the State / EMS Agency policy on AMA?
- Huge potential for liability!!
- Query the data for:
 - MOI
 - Complaint of Pain
 - Visible Injury
- Follow up with patients:
 - Who initiated the conversation?

AMA Patients ... concerns

- Trends among personnel
 - On a national level according to EMS industry leaders, staff are more likely to “No Load” patients towards the end of shift
 - Does this happen in your State –
 - Complaints / Investigations
 - » Query the data by staff?
- EMS Agencies can query the data by staff –
...performance improvement opportunity

Gender by Age Group

Patient Gender

Patient
for
Co

Patient Gender	Patient Demographics.Patient Age ↓	Count of Events
Male	>=100	2,422
	01-09	89,428
	10-19	153,003
	20-29	244,773
	30-39	221,042
	40-49	317,912
	50-59	377,991
	60-69	350,125
	70-79	335,055
	80-89	296,626
	90-99	69,465
	Not Rec	64,425
	Not Recorded	4,512

Incident Patient Disposit

Multi Select

- All
- Cancelled
- Dead at Scene
- No Patient Information
- No Treatment
- Patient Refused
- Treated and Released
- Treated, Transported
- Treated, Transported by Law Enforcement
- Treated, Transported by Private Vehicle

EMS Data Usage

- Clinical Needs:
 - Look at clinical history: Protocol Compliance, Provider Impression Findings & Incidence, Cardiac Arrest Outcomes, etc
 - Identify areas with low incidence of Bystander CPR and AED use: then train the community
 - % impacted
 - Low educated
 - Chest compression training

EMS Data

- **Times!!!**
 - Day of Week
 - Time of Day
 - do your EMS Agencies have adequate staffing??
- **What are your Response Times:**
 - Out of Chute (dispatched to en route)
 - Dispatched to Arrive on Scene
 - On Scene:
 - Based on Provider Impression / Protocols:
 - » GCS Trauma
 - » Chest Pain / STEMI

Use of Data by EMS Agencies Nationally


- Data used for years to determine ALS vs BLS manned vehicles:
 - Don't need to have paramedic on every call
 - Man with BLS crews – and have increased response times and patient outcomes
 - Based on dispatch criteria (EMD) send Medic backup as necessary
 - Philadelphia – went to ½ medic and ½ BLS
 - Utilization of critical skills is minimal
- King Airway – is not a BLS skill – many EMS systems use this and other “advanced” skills effectively

Using NEMSiS Data





- Data Use
 - State perspective
 - Performance measures
 - Benchmarking example
 - EMS Agency perspective as well
 - This is what's in it for them!!

Use of Searchable Query System

- All report domains
- Areas of emphasis — the user can set more restrictions based on each element

 New Subscription

Quarter:	<input type="text" value="Q1, Q2, Q3, Q4"/>	Year:	<input type="text" value="2008"/>
Level of Service:	<input type="text" value="EMT-Basic, EMT-Intermediate, E"/>	Response Mode to Scene:	<input type="text" value="Lights and Sirens, No Lights or"/>
Type of Service Requested:	<input type="text" value="911 Response (Scene), Interce"/>	Complaint Reported by Dispatch:	<input type="text" value="Abdominal Pain, Allergies, Anin"/>
Sex:	<input type="text" value="Female, Male"/>	Include Nulls:	<input type="text" value="No"/>
Age (yrs):	<input type="text" value="0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 1"/>	Race:	<input type="text" value="American Indian or Alaska Nati"/>

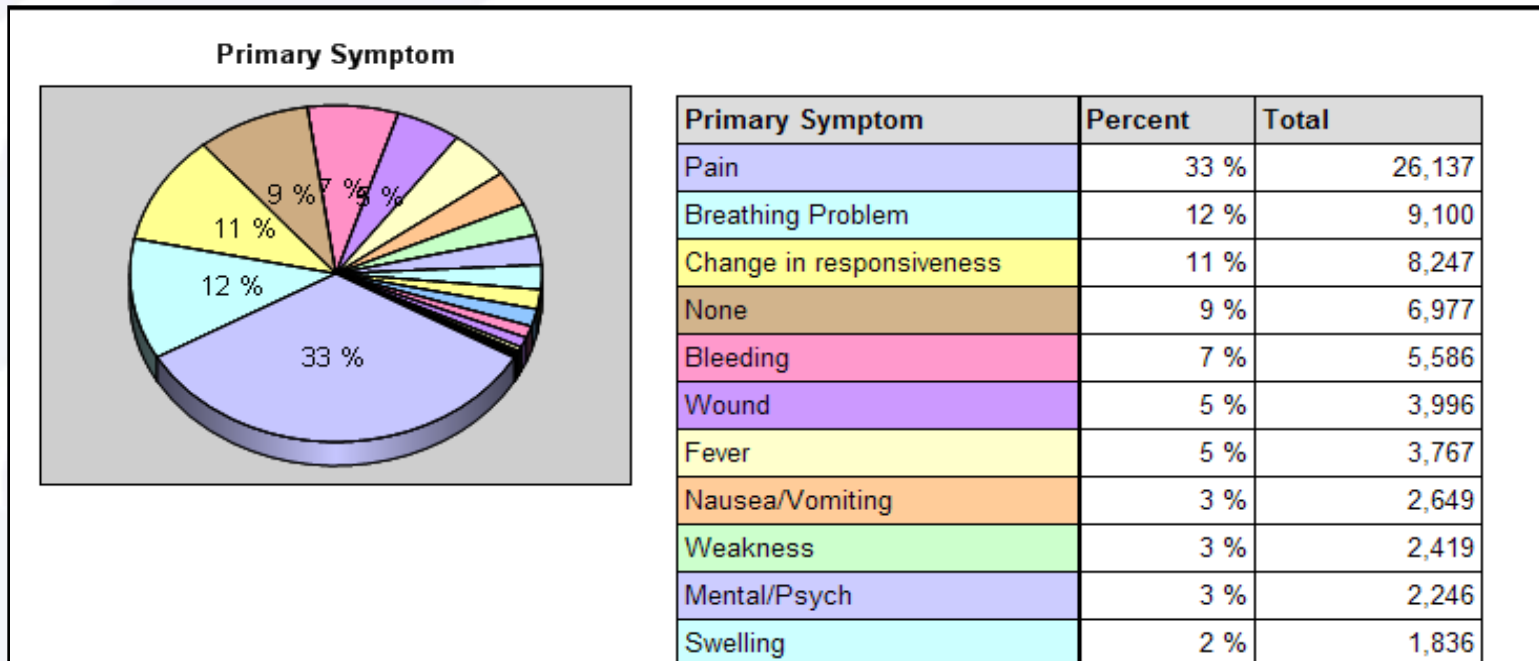
 1 of 6  100% Find | Next  Export 



Searchable Query Reports

Use of Searchable Query System National User-Generated Reports

- Pediatric User-Generated Report
...results:



National Data Cube

- Public dataset
- Generate and save tables
- Build charts
- Modify the format
- Export Reports



National Data Cube

NEMSiS OLAP Cube:

Report of all Incidents, where Gender is Male or Female and Disposition is “Treated and Not Transported

EMS Data Cube				
Patient Gender <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Incident Patient Disposition <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Multi-Select		Multi-Select		
Delete				
<input type="checkbox"/> Incident Patient Disposition	Incident Patient Disposition	Patient Gender	EMS First Impression	Count of Events
<input type="checkbox"/> Patient Gender	Patient Refused Care	Female	<input checked="" type="checkbox"/> All	336,763
<input type="checkbox"/> EMS First Impression		Male	<input checked="" type="checkbox"/> All	301,195
	Treated and Released	Female	<input checked="" type="checkbox"/> All	109,113
		Male	<input checked="" type="checkbox"/> All	102,066
	Treated, Transferred Care	Female	<input checked="" type="checkbox"/> All	152,797
		Male	<input checked="" type="checkbox"/> All	130,437
	Treated, Transported by Private Vehicle	Female	<input checked="" type="checkbox"/> All	13,244
		Male	<input checked="" type="checkbox"/> All	11,370

Tutorials for Cube Services

- Tutorials are available as:
 - Written PDF documents
 - Adobe Flash presentations



Cube Tutorials

State Data Cube

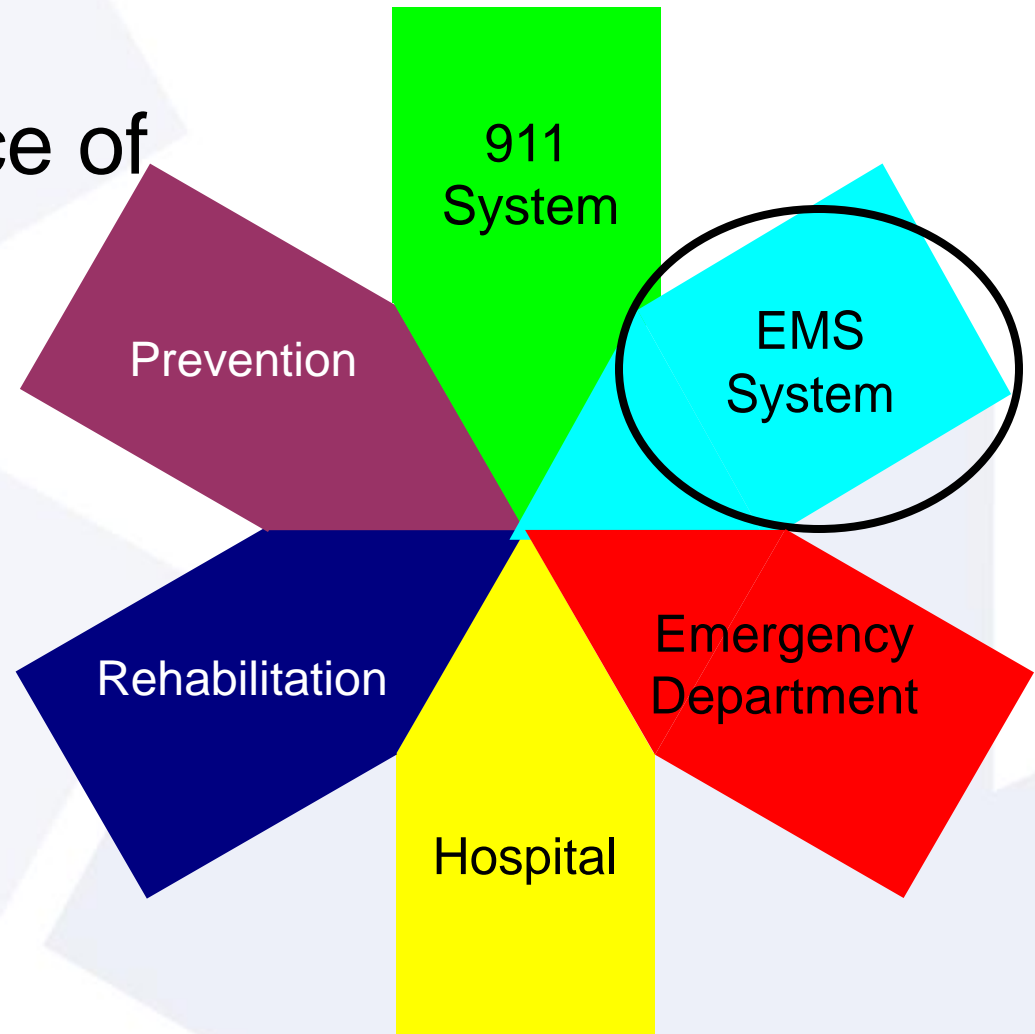
- Each state allowed to see its data
- State access for:
 - State EMS Official
 - State EMS Data Manager
 - State EMS Physician
- After login....same as the National Data Cube, except....
 - EMS Agency
 - EMS Unit Call Sign
 - Patient, Incident, and Destination Zip Codes

Public Release Research Dataset

- Released August 2010
 - Available on a single DVD
 - Includes 2009 data only
 - Dynamic tables
 - Flat files
 - SAS files
 - SAS programming
 - DVD encryption at the data level

Where We Need to Be

EMS is one piece of a health care puzzle.





Questions



Questions??

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