

**AMR and Subcontractors  
Response Time Compliance**

The response time compliance mandated within the Agreement is compliance with the required standard 90% of the time. Both the Contractor and its Subcontractors have consistently exceeded the minimum standard.

Response times are calculated using the County's Public Safety Communications computer-aided dispatch system (CAD). Response time compliance is calculated monthly. Compliance is determined by zone for each of the five response time zones. Both the Contractor and its Subcontractors must meet the response time 90% compliance standard within each zone.

Year	Ambulance Percent Compliance	First Responder Percent Compliance
1999	94.7%	97.7%
2000	93.8%	98.0%
2001	94.1%	98.0%
2002 though June	94.8%	98.1%

Countywide Advanced Life Support  
First Response and Emergency Ambulance Service  
Contract Compliance Review  
Conducted May 2002

Executive Summary

The EMS Agency staff conducted a contract compliance site survey at AMR on May 7-8, 2002. We conducted interviews and obtained documentation to determine the Contractor's and its Subcontractors' compliance with the Agreement for Countywide Advanced Life Support First Response and Emergency Ambulance Service. EMS staff who participated in the survey were Dr. Karl Sporer, Barbara Pletz, Jan Ogar, and Matt Lucett.

We were very satisfied with the level of compliance that we found. It is evident that AMR - San Mateo has worked very hard and put together an extremely efficient and high quality operation. We had conducted a similar site survey of Baystar in 1994. The current site survey results are far superior to one we conducted in 1994.

The most substantive area of weakness was the lack of rapid access to some Subcontractors' clinical records. The lack of a centralized record keeping for the Subcontractors presents an opportunity for improvement.

We found the Contractor and its Subcontractors to be in compliance with the contract in most areas. We believe that both the Contractor and its Subcontractors are performing very well. It is obvious that all parties are working collaboratively to provide excellent service to our community.

Contractor's processes to ensure quality and maintenance of vehicles, equipment, and supplies were excellent. We did not evaluate this area for the Subcontractors.

AMR demonstrated clinical and operational compliance and its records were extremely complete and easy to access. For the Subcontractors this survey was more difficult to complete, so we are recommending that they develop a more standardized and centralized approach to clinical/training records.

We are making a number of recommendations for service and process improvement. These should be viewed as opportunities for improvement rather than criticisms.

Financial and Administrative

AMR is fully compliant with payments to the County for various services that County provides Contractor. These include dispatch services, CAD maintenance, radio system maintenance, medical oversight, and its share of the County's new trunked radio system.

AMR appears to be in compliance with all contract requirements related to patient billing and collections. AMR's procedures were reviewed in detail and a random sample of patient bills were reviewed for accuracy and appropriateness.

AMR has provided the EMS Agency with all quarterly reports that include, but are not limited, to average patient charges, consumable supply fees, the collection rate, and payor mixes. However, it took an inordinate length of time to obtain the billing documentation from the Modesto office; therefore, we recommend that specific billing information be available to the San Mateo AMR office and to the EMS Agency sooner when requested.

### Operations

This area shows excellent compliance in almost every element. AMR vehicles, equipment, and supplies are of excellent quality. All vehicles checked had a complete inventory of supplies and equipment. The new multi-casualty vehicle was particularly impressive.

The fleet maintenance and expendable supply programs both appear excellent. The procedure used by the support services staff to daily inspect each vehicle and its supplies and medications is excellent.

Overall, AMR operations appear well managed both at the senior management and supervisory levels.

### Clinical

Clinical performance and clinical record keeping are excellent for AMR. AMR has also been very timely in reporting clinical incidents to the EMS Agency.

Clinical and QA/QI record keeping does not appear to be organized in a standard way for all the Subcontractors. There should be a more structured tracking system and/or a periodic review by the Contractor of the documentation of training and QA/QI activities when these activities are done by the Subcontractors' personnel.

The Quality Leadership Council (QLC) can improve its very good work through:

- A general review and revision of the CQI plan by the QLC.
- More consistent participation by the fire first response paramedic and EMT representatives.
- Formalizing the Key Performance Indicators results monthly for benchmarking purposes.
- Increasing the involvement of the receiving hospital physicians and nurses in the QA/QI process.

Contractor's clinical records are excellent. The information is accessible, complete, and well maintained. Clinical/training records were complete and easily accessible. For the Subcontractors it was more difficult to access these records and not all requested records were produced. A more standardized, centralized, and accessible system for clinical/training records for the Subcontractors is recommended.

Patient care records for AMR were reviewed and were determined to be very complete. It was not possible to quickly obtain a Subcontractor sample. When the electronic patient record system is 100% implemented it will be much easier to obtain and review patient care records.

### Data System and Reports

The EMS data system has been in development and is in the final testing phase at the present time. Initially a hand held Palm Pilot platform was attempted but was abandoned after field testing due to user problems, unreliability, and a number of other problems. AMR then developed PC-based software and selected "wireless and hardened" hardware for the ambulances. Fire service non-transport agencies enter their patient care records from a fire service PC over the Internet to the AMR server. This PC based system is in the final stages of beta testing. Many ambulance paramedics and a few first responder paramedics are participating in this beta testing.

The data system in its present form is somewhat different than the one that is described in the original Agreement. In the May 2000 contract amendment we recognized the need for flexibility by including this statement "Contractor may from time to time amend the requirements for the linked data system after receiving prior written approval of the Director of Health Services."

An area of non-compliance is that an E-mail system for EMS system participants, as specified in the Contract, has not yet been implemented.

The original contract specified that AMR would design and implement a web page for the public and local EMS personnel. EMS staff and AMR have negotiated language that the EMS Agency would take over this responsibility for an annual fee of \$30,000 to AMR. This amendment has not yet gone to the Board of Supervisors for approval.

### Personnel

This area shows very good compliance for Contractor but not for all Subcontractors. It is possible that Subcontractors (possible exception SFIA) are in compliance but could not produce evidence in many cases due to decentralized and inaccessible records.

AMR's supervisory training and safety programs appear excellent, although documentation of attendance at the Health and Safety Committee was not always available.

There appear to be some opportunities for more collaborative training between the Contractor and Subcontractors. Examples include weapons of mass destruction, hazmat, and driver training.

We reviewed unit hour utilization ratios for AMR's two 24-hour ambulances and for the "system" ambulance staffed by Menlo Park Fire District. We found all three in compliance with workload protection standard. Interestingly, all three were almost exactly the same (.26-.28), well within the workload protection average unit hour transport utilization standard of 0.40.

### Disaster

AMR is a valued participant in County disaster planning activities. It also consistently participates in disaster drills within the County as does the fire service. AMR's internal disaster plan exists but does need to be updated and annually tested.

AMR is becoming active on the County Critical Incident Stress Management (CISM) team. This activity was not originally a strong area for AMR as there was resistance from field personnel. There was also reluctance to participate on the County multidisciplinary CISM team as AMR has its own CISM team in other counties. AMR has actively worked on this project and now has four active County CISM team members. It is also providing some CISM training to its "Out-of-Class Supervisors." The field supervisors and management are now strongly supporting the program. A few Subcontractor agencies participate in the program.

AMR, and its Subcontractors, need to more actively encourage their personnel to join the Bay Area Disaster Medical Team (DMAT), a voluntary regional team that is based out of Menlo Park Fire and is partially funded by the Federal government.

### Incident Reports

There is compliance in this area. Some clarification of processes and procedures is encouraged for both the Contractor and subcontractors.

### Community Involvement

There is compliance with the contract. However, the list of current members of the Community Activities Advisory Committee needs to be reviewed and updated to reflect those who remain active members. The group should meet on a more

consistent basis to review the program's progress. We encourage AMR and its Subcontractors to improve communications on these activities through flyers, updates in newsletters and the use of the EMS Agency web-site. Finally, AMR will need to work with the JPA on obtaining Community Education contact information for those fire departments that were unable to do so in 2001.

## Recommendations

- I. Financial and Administrative
  - A. A faster turnaround time from request to receipt of patient billing and account information from Modesto to Burlingame should occur.
- II. Operations
  - A. Equipment/Supplies
    - 1. Prepare an inventory list of what is stocked on multi-casualty vehicle
    - 2. Use the current Supervisors Committee for addressing issues related to equipment and supplies.
    - 3. Develop and maintain an equipment maintenance schedule for medical equipment (already done for Physio-control).
    - 4. Implement an automated inventory control and management system for expendable medical supplies.
  - B. Training
    - 1. Review HAZMAT curriculum with County HAZMAT Team to ensure Contractor's HAZMAT training meets "Awareness" level.
    - 2. Continue to update the Weapons of Mass Destruction curriculum as new information becomes available.
    - 3. Contractor should provide initial and continued training for ambulance and fire service personnel related to the ambulance system status plan.
- III. Clinical
  - A. Records
    - 1. There should be electronic record keeping to track all paramedics (AMR and Fire Service) required training and certifications (e.g., ACLS, PHTLS, PALS, HAZMAT, WMD, infrequent skills). These records should be immediately accessible during regular working hours.
    - 2. There should be electronic record keeping to track all ambulance EMTs (AMR and Fire Service) relative to required. These records should be immediately accessible during regular working hours.
    - 3. Contractor should review records (III.A.1 and III.A.2) with sufficient frequency to ensure compliance.
    - 4. A tracking tool should be developed that will determine compliance with the requirement that patient care records are provided to receiving hospitals within the required timeframe. This tool should contain sufficient data to permit effective quality improvement.
  - B. Continuous Quality Improvement (CQI)
    - 1. Contractor should provide written reports on results of Key Performance Indicator performance monthly. The reports should

be reviewed by the Quality Leadership Council (QLC) for internal and external benchmarking.

2. A threshold for action should be identified for indicators. A CQI plan should be developed for those indicators falling below the threshold. The development of the thresholds and CQI plan, including reporting of results, should be in collaboration with the QLC.
3. The CQI plan should be reviewed and revised in collaboration with the QLC.
4. The San Mateo County Prehospital Emergency Medical Group Joint Powers Authority (JPA) should ensure that it have consistent paramedic and EMT representatives attending the QLC.
5. There should be an electronic method of tracking skill utilization, call type, call volume, and patient acuity for each paramedic.
6. A program to assess each paramedic's and ambulance EMT's performance should be in place at all Contractor's and subcontractor's agencies.
7. A summary of minimum patient contact reports should be reviewed by the QLC.
8. Increase involvement of receiving hospital physician and nurses in the CQI process.

#### IV. Data System

- A. AMR and County need to agree to contract language relative to HIPPA compliance.
- B. AMR needs to develop and implement a detailed HIPPA Compliance Plan.
- C. All users of the EMS data system need to sign confidentiality agreements.
- D. AMR needs to implement an E-mail system for paramedics, ambulance EMTs, EMS Program Staff, and receiving hospitals.

#### V. Personnel

##### A. Supervisors

1. There should be a written policy regarding location of the AMR supervisor. The AMR supervisor should remain in a centralized bayside site when not on an active assignment.
2. There should be a written policy, signed by the JPA, that a JPA EMS Coordinator be immediately available 24/7/365.
3. Identify an EMS Coordinator for San Francisco International Airport.
4. AMR should develop a documentation tool for supervisors that will identify issues and occurrences during a shift as "pass down" information for the on-coming shift supervisor.

##### B. Records

1. There should be Supervisor Training records for all fire service EMS Coordinators. These records should be immediately accessible during regular working hours.



2. There should be records for all fire service Field Training Officers. These records should be immediately accessible during regular working hours.
3. Document AMR Health and Safety Committee meeting including minutes and any handouts.

C. Training

1. WMD and HAZMAT training should occur cooperative between Contractor and JPA.
2. Incorporate AMR Safety Program into fire service training.
3. Implement Ambulance Driver Training for fire service ambulance personnel.
- 4.

D. Identification

1. Implement a policy and procedure a method to visibly identify paramedic personnel at the incident scene.
2. Standardize paramedic identification with the CAD.

VI. Disaster

- A. Conduct an exercise that will test AMR's internal disaster plan on an annual basis.
- B. Update Disaster Plan – Personnel Duties with more recent information (e.g., Holman Group, CHORAL).
- C. Remind personnel on a regular basis about the Bay Area Disaster Medical Assistance Team and encourage membership.
- D. AMR should incorporate information on the County Critical Incident Stress Management Team into the local "New Hire" orientation program.

VI. Community Involvement

- A. The membership list of the Community Activities Advisory Committee should be updated to reflect current active members.
- B. The Community Activities Advisory Committee should meet on a consistent basis to review the program's progress
- C. A more formal communication method should be used to inform all personnel of upcoming community activities opportunities.
- D. The JPA should obtain Community Education contact information for all agencies that have not provided information for 2001

AMR Requested Maximum Patient Fee Increase  
911 Contract

AMR is requesting a increases in its maximum patient fees. This request is based upon its analysis of the impact of the Medicare rule changes in ambulance reimbursement as well as unforeseen increased County charges to AMR.

Medicare Rule Change

In 1998, when the agreement between the County and AMR was being negotiated both parties were aware that the Health Care Finance Administration (HCFA) was in the process of developing new rules for ambulance reimbursement. However, it was unknown what the effect of these changes would be for AMR-San Mateo.

While negotiations were in process between HCFA and “interested parties” it became evident that California’s ambulance services would be taking a disproportionately large cut compared to the rest of the country.

The new Medicare reimbursement rates will be phased in over 5 years beginning April 1, 2002. The new rules mandate substantial changes in allowable charges. For instance, the past practice of billing at the standard allowable ALS rate for all emergency ambulance transports is not permitted unless the patient requires at least three medications or certain procedures (e.g., defibrillation, endotracheal intubations). Very few patients will meet this criteria.

There is also a factor built in for “geographic practice cost indices” (GPCI). Fortunately for San Mateo County, our GPCI is higher than many other parts of California.

Ambulance providers across the state are increasing their rates to mitigate the effect of the Medicare rate changes. It is likely that most will have higher percent increases than those being proposed by AMR-San Mateo.

Annual Increases to date

AMR-San Mateo has increased its rates annually in accordance with the contract. A listing of these increases is attached as well as the contract language addressing them.

AMR Current Payments to County

AMR pays the County for a variety of services the County provides. These fees were included in the original contract that commenced January 1, 1999. The fees increase annually according to the Bay Area Consumer Price Index. The current fees are:

<b>Purpose</b>	<b>Amount</b>	<b>Frequency</b>
EMS Program oversight of Contractor	\$160,355.64	On-going annual fee
Public Safety Communications dispatch services	\$626,324.00	On-going annual fee
Public Safety Communications for CAD maintenance	\$ 47,556.00	On-going annual fee
Information Services Department for radio system maintenance	\$ 98,386.56	On-going annual fee
Environmental Services Department for CDF's paramedic first response services	\$ 30,000.00	On-going annual fee

Unanticipated Additional County Fees to AMR

The County had not finalized its plan to implement a new trunked radio system when the AMR 911 contract began in 1999. Subsequently this plan was finalized and AMR agreed to pay County \$267,705 as its share of the new system. This amount was paid in two installments in FY 2000/01 and FY 2001/02. This issue was addressed in the contract amendment dated February 6, 2001.

The County has requested additional AMR fees to cover its costs. These include \$87,426 as AMR's share of the cost to implement a backup fire/EMS dispatch center for PSC. This will be a one-time charge in FY 2002/03. Additionally, AMR has agreed to increase its payments to the County in the amount of \$100,000 for services the EMS Program provides. This additional fee is on-going on an annual basis beginning in FY 2002/03.

AMR Payments to the JPA

AMR pays the JPA \$4,172,871.10 annually for paramedic first response services and for staffing of four ambulances by the Half Moon Bay, Menlo Park, Pacifica, Woodside fire service agencies.

Proposed Rate Increase

AMR is requesting an additional rate increase be begin this fall. Listed below are the current and proposed maximum fee structures:

<b>Item</b>	<b>Current</b>	<b>Proposed</b>
Base Fee	\$925.91	\$958.42
Mileage	17.59	18.21
Oxygen	84.44	87.40
Night Charge	84.44	87.40
Average Patient Charge	\$1,112.38	\$1,151.43
Increase		\$ 39.04

The Agreement currently stipulates that the Contractor may annually increase fees based on the Bay CPI. The various annual County charges to the Contractor as well as the fees Contractor pays the JPA also increase by this same CPI percent. AMR's current collection rate in San Mateo County is 63.7%, therefore, it does not fully recoup the increased charges it pays to the County and to the JPA. AMR is requesting that its CPI increase be modified so that AMR can recoup the actual CPI percentage amount. The County fees to AMR and the fees AMR pays to the JPA increase annually by the CPI percentage rate.

Rate Comparison

In order to fairly compare emergency ambulance rates, it is essential to identify the collection rate, subsidies paid to the provider, and any County costs charged to the provider.

The following tables provide the information that is available to us for several Bay Area counties. It is probable that the other Counties fees will also be increasing based upon the Medicare ambulance reimbursement rule change.

In reviewing the payments to counties and fire service agencies it is also important to consider the number of patient transports, e.g. San Mateo AMR's annual transports are 22,000, Santa Clara AMR's are 62,000.

**Maximum Patient Fees**

Item	San Mateo Current	San Mateo Proposed	Alameda	Contra Costa	San Francisco (AMR)	San Francisco (Fire Dept)	Santa Clara	Santa Cruz
Base Fee	\$925.91	\$958.42	\$750.00	\$728.36	775.00	\$605.00	\$754.00	\$677.73
Mileage	17.59	18.21	14.75	13.07	15.33	12.00	16.00	13.56
Oxygen	84.44	87.40	59.51	58.04	76.75	57.00	67.00	54.71
Night Charge	84.44	87.40	N/A	N/A	N/A	68.00	N/A	N/A
Average Patient Charge	\$1,112.00	\$1,151.04	\$883.41	\$904.85	\$1,002.39		\$986.00	\$836.65
Fee Increase to be Requested per AMR	\$ 39.04		To be determined	\$ 50.65 already approved and included above			\$ 39.13	RFP Process underway

**Other Financial Considerations  
 Additional Fees to 911 Ambulance Provider**

<b>Item</b>	<b>San Mateo</b>	<b>Alameda</b>	<b>Contra Costa</b>	<b>San Francisco</b>	<b>Santa Clara</b>	<b>Santa Cruz</b>
County EMS Agency	\$160,356	\$2,778,300				
County Dispatch Services	\$626,324				\$1,192,352	\$293,182
County Radio Maintenance	\$ 98,387					
CAD Maintenance	\$ 47,556					
Payments to Fire Service	\$4,172,871		\$232,841		\$3,143,608	
<b>Total</b>	<b>\$5,105,494</b>	<b>\$2,778,300</b>	<b>\$232,841</b>		<b>\$4,335,960</b>	<b>\$290,000</b>

**County Paid Subsidy to 911 Ambulance Provider**

<b>Item</b>	<b>San Mateo</b>	<b>Alameda</b>	<b>Contra Costa</b>	<b>San Francisco</b>	<b>Santa Clara</b>	<b>Santa Cruz</b>
Subsidy Derived from Benefit Assessment Tax			\$1,428,000			
Taxes That Support Fire Service EMS				\$21,980,039		