QUALITY ASSURANCE: A PRIORITY FOR MEDICAL DISPATCH

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Memory is a fascinating and wonderful thing. It is a virtual necessity in nearly everything we do. Many people’s professions depend on a reliable memory. For actors, gamblers, and politicians, a good memory is a must.

Some things, however, seem just too important, or dangerous, to leave to memory alone. Would it do for NASA countdown engineers to have to “remember” all of the checks on the space shuttle that are necessary to ensure a safe and uneventful lift-off? Or, for a surgeon to “estimate” the number of sponges used and retrieved during a major operation? My guess is no. The “think system,” first introduced by Professor Harold Hill in Meredith Wilson’s The Music Man, may work for teaching kids in a brass band how to play without lessons, but experience shows it works poorly for dispatchers dealing with calls after call from people in crisis. How can we assure excellence in these important “high-stakes” occupations, where mediocrity can cost dearly?

Unfortunately, many program trainers, dispatch-center administrators, and, to a lesser degree, medical-control physicians still conceptualize medical priority dispatch as an event. It is not an event; it’s a process. While the “event” is initial training and protocol implementation, the “process” is found within a multifaceted, comprehensive quality-assurance program. The words quality assurance, unfortunately, are often considered to be two of the most boring words in EMS. It’s hard to count or tout the number of “lives saved” in the classroom or by a committee. Far from the wall of the siren or the urgent ring of the telephone, QA languishes in disuse in most systems. It is often approached with the enthusiasm of the guy who has to clean the floor in the theater after a Saturday matinee.

NECESSITY FOR QA IN DISPATCH

In 1988, the National Association of EMS Physicians issued the most important statement to date regarding medical dispatch in this half of the decade. It represents the first official “standard of care” document from exactly the people who should have a position—the medical directors of North America. For example, the NAEMSP Consensus Document on Emergency Medical Dispatch states in its section on pre-arrival instructions:

Pre-arrival instructions are a mandatory function of the EMD. In essence, the EMD is the “first” first responder and through immediate action can effectively eliminate the deadly “four minute” plus gap at the beginning of the response. Standard telephone instructions by trained EMDs are safe to give and in many instances a moral necessity.

This “standard” setter establishes the key components of EMD and strongly recommends their use. The importance of quality assurance is also uncategories stated as follows:

Quality assurance, risk management, and medical control are an absolute necessity for the ongoing well-being of any EMS system. NAEMSP believes that routine medical review of the activities of EMDs and medical dispatch centers is vital to the health of the EMS system in general. Dispatch review committees are a significant step toward providing this assurance.

As the current joke making the rounds in EMD goes, “What does a lax medical dispatch center director call the NAEMSP Consensus Document?” Answer: “Plaintiff’s exhibit #1.”

Maybe you’re convinced and respond, “Doc, you’re preaching to the choir.” But what exactly does one do to assure patient-care safety and low liability in our EMD centers? Unfortunately, QA suffers as a process because of a lack of a specific, clear definition that is understandable by the average EMS person, supervisor, or employer. Just as most sermons about getting to heaven often fail to include the road map, we have likewise not been provided with an adequate picture of the process.

While the final verdict isn’t in yet, as EMD is just entering its early adolescence, the following are a number of key specific elements that have been identified to date.

EMPLOYEE SELECTION AND EVALUATION

This area has recently been addressed very expertly by others in EMS management. With the permission of EMS quality-assurance expert Christine Zalar of Fitch & Associates, I have reproduced comments from her recent article, “Re-Examining Quality Assurance,” with occasional dispatch clarification (in parentheses) added:

The selection and evaluation of new employees is one aspect of QA that is frequently overlooked. Clear, objective standards should be adopted (in writing) for use in employee selection. (Previous) training and certification minimums should be established (National Academy of EMD, state, regional, and BLS certifications, etc.) and applicants should produce documentation. We also recommend that applicants be required to pass a brief written examination prepared by
a physician (or person trained and experienced in medical dispatching), which
won't necessarily identify the outstanding candidates, but would help eliminate people who cannot meet minimum standards. Another recommendation is an in-dept,
medically (dispatch) specific interview by a small group of people with strong medical
(dispatch) backgrounds; the panel shouldn't be exclusively management.

In the selection of employees, one of the most commonly overlooked steps is checking
the employee's references and past employers. Inquire about the candidate's strengths
and weaknesses, quality and quantity of work performed, and work-attendance history.

**ORIENTATION PROGRAMS**

Again, quoting from Zalar:

Orientation programs should be used to evaluate a new employee under intense and
demanding "real life" field (dispatch center) conditions. An orientation manual should
be comprehensive enough to serve as a resource text for the new employee. While the emph-
asis will be on operational matters, it should also reflect the medical (dispatch) philosophy
of the service. A manual of the clinical (dispatch priority and pre-arrival instruction)
protocols should be provided, offering a clear understanding of the standards for prehospital
(dispatch-specific) medical care in the community.

**DATA GENERATION**

Creation of a formal data base for monitoring dispatch decision-making is an
important part of QA. The effects of dispatch on field operations can be assessed,
as can dispatchers' adherence to protocol. Currently, a large urban system on the
West Coast has been able to monitor dispatch adherence to protocol by following
a significant percentage drop of BLS non-
lighted and sirens assignments (ALPHA
code tier). This has previously been iden-
tified as occurring in other systems im-
plementing a medical priority dispatch sys-
tem (MPDS) and was predicted to occur.
A myriad of other benefits come from a
good dispatch data base. In addition, the
information and trends seen in such data
aid in selecting the areas of major concern
in case-review activities.

The goal of the orientation program is to
acclimate the employee with the overall oper-
ation of the service. The program should
provide the new employee on-one preceptor-
torship by an experienced, trained member
of the service. Often, this preceptor is a train-
ing officer (and/or quality-assurance coordi-
nator) or clinical instructor. It is important
to note that orientation is a preplanned pro-
wess focusing on the develop-
ment of an employee who can function with-
in the organization's standards and philoso-
phies. The process takes time, and is a
gradual progression from one-on-one preceptor-
torship to checkups for evaluation of per-
formance. The orientation program should
be concurrent with the employee's probationary
period.

Orientation is more than showing them the
rules. It is a step-by-step program that estab-
ishes job and organizational expectations,
and monitors performance and results.

**INITIAL TRAINING**

Initial training must adhere to current
standards, such as those established by training programs currently recognized as
leaders in this area. Salt Lake City and
County, the states of Utah and California,
and the National Academy of EMD pro-
gams, as well as those accurately derived
from them, are examples. These courses
range from 24 to 40 hours, exclusive of
BLS training prerequisites. If at least a full
eight-hour day is not spent covering the
32 dispatch priority card concepts, you do
not have an acceptable initial training pro-
grame. Teaching only basic telecommuni-
cations and/or pre-arrival instructions, as
some have tried, does not constitute com-
plete EMD training. This is a fairly com-
mon error, which often occurs when pro-
grame are "modified" by those without
ALS-level medical background. On the
other hand, a "modified-to-fit-dispatch"
EMT course is also not appropriate per se
for previously published reasons. As the
old professor once said, "If you want an
apple, don't buy (or, in this case, train) an
orange just because it's round."

**CONTINUING DISPATCH
EDUCATION (CDE)**

Just as with QA, training is also a
process, not an event. A sound, ongoing
program of continuing dispatcher educa-
tion is essential to maintain the strength
of newly acquired wisdom. Without doing
your monthly educational "push-ups," the
body of EMD gets slowly weaker.
CDE, at a minimum, is one hour per
month, and includes review of dispatch
priorities, practical "mock" scenario drills,
BLS-level techniques, appropriate reading,
and even occasional field experience with

**MEDICAL DISPATCH
CASE REVIEW**

Each dispatch center with an MPDS
should have in place a medical dispatch
case review committee that evaluates cases
on a regular basis (monthly at minimum)
and consists of dispatch, EMS, and
medical-control personnel who understand
the process and the problems. This review
will provide both positive and nega-
tive feedback to dispatchers. Meetings last
one to 1/2 hours, and problematic, good,
and random cases are listened to and criti-
qued using a model dispatch template.
Each reviewer has a copy of the 32
dispatch protocol cards and eight treatment-
sequence cards. Calls are evaluated as the
reviewer follows the template format to
complete the formal steps of interrogation
and airing of pertinent information to the
responding unit(s). By being sure to in-
clude the "good" cases, you can formalize
the time-proven method of positive rein-
forcement by more frequently "catching
them doing it right."
The process also includes the use of a
dispatch feedback report that is submitted
by all dispatch-related parties, including
EMS field personnel (public and private),
law enforcement, hospitals, and dispatch-
ers themselves. This polite written re-
quest for clarification of "what happened"
at dispatch is researched by the dispatch-
ers, supervisors, and/or, in interesting or
judgment-call cases, the Dispatch Review
Committee formally. This helps organize
the process of case review.

**MEDICAL CONTROL IN DISPATCH**

The medical director should have a
direct interest and influence in the ac-
tivities of medical dispatch. NAEEMSP's
"General Statement" and "Rationale" sec-
tions of its Consensus Document contain
the following phrases:

Medical control for the EMD and the
dispatch center is also part of the EMS physi-
cian's responsibilities. The involvement of
EMS physicians in the world of dispatch is
relatively new, but unquestionably essen-
tial.

Obviously, those medically responsible
for medical dispatch centers should learn
more about and participate in the activi-
ties of dispatch quality assurance. Taking a
credible EMD course is a good start.
Often, EMS physicians are asked to "ap-
prove" or even "modify" medical dispatch
protocols before they have become "dis-
patch literate."
The importance of the medical pres-
ence in some dispatch centers has led to
the creation of the "quality-assurance para-
Table I: Guidelines for risk management in a medical-dispatch quality-assurance program.

A comprehensive program for managing the quality of care includes not only quality assessment, but quality-assurance risk-management activities, designed to assist medical directors, dispatch supervisors, and emergency medical dispatchers in modifying practice behavior found to be deficient by quality assessment, to protect the public against incompetent practitioners, as well as to modify structural, resource, or protocol deficiencies that may exist in the medical dispatch system.

These 10 guidelines should be utilized in any medical dispatch system, whether public or privately operated, and whether conducted by medical directors, administrators, supervisors, peers, or governmental authorizing agencies:

1. The general policies and processes to be utilized in any quality-assurance activity should be codified and conformed with by the professional EMDs, whose performance will be scrutinized and should be objectively and impartially administered. Such initial involvement with and commitment to ongoing objectivity is critical to ensuring continued participation and cooperation with the program.

2. Any remedial quality-assurance activity related to an individual EMD should be triggered by concern for that individual's overall practice, rather than by deviation from specified criteria in single cases. Because of the inherent variability of patients and incidents, judgment as to the competence of specific dispatchers should be based on an assessment of their performance with a number of patients and not on the examination of single, isolated cases, except in extraordinary circumstances.

3. The institution of any remedial activity should be preceded by discussion with the EMD involved. There should be ample opportunity for the EMD to explain observed deviations from accepted practice patterns to supervisors, professional reviewers, and/or the medical director, before any remedial or corrective action is decided on.

4. Emphasis should be placed on education and modification of unacceptable practice patterns, rather than on sanctions. The initial thrust of any quality-assurance activity should be toward helping the EMD correct deficiencies in knowledge, skills, or technique, with practice restrictions or disciplinary action considered only for those not responsive to remedial activities.

5. The quality-assurance system should make available the appropriate educational resources needed to effect desired practice modifications. Consistent with the emphasis on assistance, rather than punitive activity, the medical-dispatch quality-assurance program should have the capability of offering or directing the EMD to the educational activities needed to correct deficiencies, whether they be peer consultation, continuing education, retraining or self-learning, and self-assessment programs.

6. Feedback mechanisms should be established to monitor and document needed changes in practice patterns. Whether conducted under the same auspices or separately, linkages between quality-assurance system and a quality-assessment activity should allow for assessment of the effectiveness of any remedial activities instituted by or for an EMD.

7. Restrictions or disciplinary actions should be imposed on those dispatchers not responsive to remedial activities, whenever the EMD's supervisor and/or appropriate medical control deem such action necessary to protect the public. Depending on the severity of the deficiency, such restrictions may include loss of certification.

8. The imposition of restrictions or discipline should be timely and consistent with due process. Before a restriction or disciplinary action is imposed, the EMD affected should have full understanding of the basis for the actions, ample opportunity to request reconsideration and to submit any documentation relevant to the request, and the right to meet with those considering its imposition. However, in cases where those considering the imposition of restrictions or discipline deem the dispatcher to pose an imminent hazard to the health of patients, personnel, or the public at large, such restrictions or disciplinary actions may be imposed immediately. In such instances, the due-process rights noted above should be provided and documented on an expedited basis.

9. Quality-assurance systems for medical dispatch should be structured and operated so as to ensure immunity for those conducting or applying such systems who are acting in good faith. To ensure the active, unaltered participation of all parties in the review process, all case reviews and the documents generated by them should be structured, if possible, for protection from subpoena and legal discovery. This incident-review protection is common in most hospital and medical review environments. Reviewing state and federal legislation, as well as pertinent court decisions, as the basis for developing comprehensive guidelines on immunity in review activities is essential.

10. To the fullest degree possible, quality-assurance systems should be structured to recognize care of high quality, as well as correcting instances of deficient practice. The vast majority of practicing, professionally trained EMDs provide care of high quality. Quality-assurance systems should explore methods to identify and recognize those treatment methodologies, procedures, and protocols that consistently contribute to improved patient outcomes, system efficiency, and safety. Information on such results should be communicated to the medical-control community and dispatch-agency administrations. EMDs providing high- and consistent-quality care should be rewarded. Commendations, awards, advancements, and other forms of positive reinforcement are important facets of quality assurance.

Certification and authorization by governmental entities are the next logical steps to ensuring that the EMD is a well-trained EMS professional. An ever-increasing number of states, regions, counties, and municipalities certify or require standard training for EMDs. NAEMS stands behind this effort as not only laudable but also as a future prerequisite to practice by medical dispatchers.

The following is excerpted from the recently instituted Pinellas County (Florida) EMD Rules (specific references have been made generic):

Dispatchers serving medical providers are required to be certified as emergency medical dispatchers (EMDs). The medical director shall develop, establish, and approve an emergency medical dispatch certification or recertification.
tification program for the (government agency).8

It is important to include special provisions for certification and recertification for the handicapped in any programs or administrative rules established. For example, the Utah rules state:

These rules shall not preclude any physically handicapped individual from certifying or recertifying who can demonstrate to the medical director, or his/her designate, proficiency in verbally describing the treatment methods outlined in the (government agency) approved EMD course to a caller.5,9

This governmental formalization process is just as important for medical dispatch today as it was 15–20 years ago, when that process crystallized for EMTs and paramedics.

RECERTIFICATION

Recertification allows the agency, supervisor, and medical director to formally assure continued adherence to minimum standards by the EMD through documentation of objective criteria in the form of hours and types of CDE, practical examinations, and written examinations. It also establishes processes for decertifying individuals who cannot meet such minimal criteria. The following is also excerpted from Pinellas County (FL) rules and standards8 (specific references have been made generic):

Recertification is required every two years to maintain (government agency) certification. This period and process may be modified by the medical director (or government agency).

RISK MANAGEMENT

The attitudinal philosophy of risk management within a quality-assurance program (found in Table 1) is derived from the Guidelines for Quality Assurance from the Council on Medical Service of the American Medical Association.1 It has been modified to fit the medical-dispatch situation and deals mainly with risk-management-type issues.

REFUSAL, SUSPENSION, OR REVOCA TION OF CERTIFICATION

While the goal of quality assurance is always to correct deficiencies and encourage excellence, not just adherence to minimum standards, there comes a time when, for EMDs failing to meet standards or those involved in activities not becoming a professional, terminal action is required. From the decertification standpoint, the following is quite specific and should be part of any formal QA process (again excerpted out of the Pinellas County8 and Utah standards,5,9 with specific references made generic):

The medical director (or governmental agency) may refuse to issue a certification or recertification, or suspend or revoke a certification for any of the following causes:

1. Habitual or excessive use or addiction to narcotics or dangerous drugs, or conviction of any offense relating to the use, sale, possession, or transportation of narcotics or dangerous drugs.
2. Habitual abuse of alcohol beverages or being under the influence of alcoholic beverages while on call or on duty as an emergency medical dispatcher, or conviction of driving under the influence of alcohol while driving a vehicle.
3. Fraud or deceit in applying for or obtaining a certification, or fraud, deceit, incompetence, patient abuse, theft, or dishonesty in the performance of duties and practice as an emergency medical dispatcher.
4. Involvement in the unauthorized use or removal of narcotics, drugs, supplies, or equipment from any emergency vehicle or health-care facility.
5. Performing procedures or skills beyond the level of certification or not allowed by these rules, or violation of laws pertaining to medical practice and drugs.
6. Conviction of a felony or a crime involving moral turpitude, or the entering of a plea

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of guilty or the finding of guilt by a jury or court of commission of a felony or a crime involving moral turpitude.

7. Mental incompetence as determined by a court of competent jurisdiction.

8. Demonstrated inabilities and failure to perform adequate patient care through approved pre-arrival instructions.

9. For good cause, including conduct that is unethical, immoral, or dishonorable.

CONCLUSION

Quality assurance needs to be one of the prime activities in the 1990s for developing and maintaining excellence in medical dispatch. As quality assurance expert Jim Demcooeur once stated, "Performance reviewed is performance improved." Certainly, medical dispatching has proved to be no exception to this wise corollary.

REFERENCES

5. Emergency Medical Dispatcher Rules of the Utah Emergency Medical Services System and Standards Act, Title 26, Chapter 5, Section R430-4.

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