Community Paramedicine (CP) Evaluation Tool - Summary

Community Paramedicine is an emerging field in health care where EMTs and Paramedics operate in expanded roles in an effort to connect underutilized resources to underserved populations.

The Rural and Frontier EMS Agenda for the Future defined community paramedicine as "an organized system of services, based on local need, which are provided by EMTs and Paramedics integrated into the local or regional health care system and overseen by emergency and primary care physicians. This not only addresses gaps in primary care services, but enables the presence of EMS personnel for emergency response in low call-volume areas by providing routine use of their clinical skills and additional financial support from these non-EMS activities."

Each of the successful programs now in place across the country was uniquely and specifically designed to meet one or more health care needs essential to that community. Additionally, successful programs capitalize on linkages, collaboration and integration with other health care resources in the community.

A multi-disciplinary advisory committee should be assembled consisting of key representatives from:

- Public health
- Hospitals
- Primary care
- Regulatory agencies
- EMS
- Social services
- Other areas impacted by the community paramedicine program

CP programs should focused on

- Efficiently allocating scarce health care resources and improving access to care in these underserved areas.
- Keeping "frequent fliers" out of the emergency care system by ensuring their health care needs are met in other ways.
- Taking health care into the patient's home.
- Specific medical needs (DM, HTN, CHF, COPD, etc.)
- Social issues (substance abuse & mental health)

A successful CP program must:

- Define its system-specific health status benchmarks and performance indicators
- Use a variety of community health and public health interventions to improve the community's health status.
- Reduce the burden of illness, chronic disease, and injury as a community-wide public health problem, not strictly as a patient care issue.

Adapted from Community Paramedicine Evaluation Tool, U.S. Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy; March 2012 http://www.hrsa.gov/ruralhealth/pdf/paramedicevaltool.pdf

- Provide a common framework by which data can be collected from multiple community paramedicine programs and aggregated to develop a snapshot of common successes and challenges.

Key elements of a successful CP program

Assessment: Regular systematic collection, assembly, analysis, and dissemination of information on the health of the community.

1. There is a thorough description of the epidemiology of the medical conditions targeted by the community paramedicine program in the service area using both population-based data and clinical databases.
    a. There is a description of illnesses and injuries within the community paramedicine service area including the distribution by geographic area, high-risk populations (pediatric, elder, distinct cultural/ethnic, rural, and others), incidence, prevalence, contributing factors, determinants, morbidity, and patient distribution using any or all of the following: vital statistics, emergency department (ED) data, EMS data, hospital discharge data, State police data (those from law enforcement agencies), medical examiner data, and other data sources. The description is updated at regular intervals.
        i. Multiple population-based and clinical data sources (e.g., ED data, hospital discharge data, and others) are electronically linked and used to describe illness and injury within the jurisdiction.
    b. Collaboration exists between the community paramedicine program, public health officials, and health system leaders to complete risk assessments.
        i. The public health epidemiologist, along with health care and community paramedicine participants, is involved in the development of illness/injury reports. There is clear evidence of data sharing, data linkage, and well-defined reporting roles and responsibilities.
    c. There is an established electronic information system (EIS) for ongoing targeted surveillance and system performance assessment. The community paramedicine EIS may be freestanding or an extension/adaptation of other databases (e.g. EMS or hospital).
        i. The community paramedicine EIS is linked to both administrative and clinical databases to provide a comprehensive overview of the community paramedicine program and its effect on current and future community healthcare needs.
    d. The EIS database captures all patient/client contacts.
        i. The community paramedicine electronic medical record is fully integrated with the patient/client's formal health care record in the patient/client's medical home.
    e. Reports can be generated from the community paramedicine EIS to help guide performance improvement activities and to document the effectiveness and/or efficiency of the program.
        i. Reports are generated on a regular basis and are used to inform oversight bodies, funding agencies, and the general public about the impact of the community paramedicine program.

2. A resource assessment for the community paramedicine program has been completed and is regularly updated.
    a. The community paramedicine program has completed a comprehensive inventory that identifies the availability and distribution of current capabilities and resources from a variety of partners and organizations throughout the community.
        i. The community-wide resource assessment has identified strategies to meet the needs of the targeted clinical condition groups/individuals and methods for supporting those activities financially.
    b. The community paramedicine program has completed a gap analysis based on the inventories of internal and external system resources as well as system resource standards.
        i. A gap analysis of community paramedicine resources has been completed and is updated at regular intervals based on the adopted resource standards.
    c. There has been an initial assessment (and periodic reassessment) of overall program effectiveness.
        i. There is ongoing assessment of multiple program objective outcomes over time as the outcomes relate to changes within the program for specific program interventions.
    d. The community paramedicine program has undergone an external independent analysis of all aspects of the program.
        i. Independent external reassessment occurs regularly, at least every 5 years.
3. The community paramedicine program assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.
    a. The benefits of the community paramedicine program, in terms of cost savings, decreased EMS transports, decreased hospital visits, improved health/wellness, and so on, are described.
        i. A series of reports and fact sheets are available and regularly updated to descriptively and graphically illustrate the costs and benefits of the community paramedicine program.
    b. Cases that document the societal benefit are reported on so the community sees and hears the benefit of the community paramedicine program while simultaneously protecting patient privacy.
        i. Cases are used as part of information fact sheets that are distributed to the press and other segments of the community. These information fact sheets document the cost-benefit of the community paramedicine program to the community.
    c. An assessment of the interests of public officials concerning community paramedicine program information has been conducted and communications mechanism developed based on the results of the assessment.

i. In addition to routine public official contact, public officials are involved in various oversight activities such as the community paramedicine advisory council.

d. An assessment of the needs of health insurers/payers concerning community paramedicine program information has been conducted and communications mechanism developed based on the results of the assessment.

i. In addition to routine contact, health insurers/payers are involved in various oversight activities such as the community paramedicine advisory councils.

e. An assessment of the needs of the general medical community, including physicians, nurses, prehospital care providers, and others, concerning community paramedicine program information has been conducted and communications mechanism developed based on the results of the assessment.

i. In addition to routine contact, the broad medical community is involved in various oversight activities such as the community paramedicine advisory council.

Policy Development: Promoting the use of scientific knowledge in decision making that includes building constituencies, identifying needs and setting priorities, legislative authority and funding to develop plans and policies to address needs, and ensuring the public's health and safety.

1. Comprehensive statutory authority and administrative rules support community paramedicine program infrastructure, planning, provision, oversight, and future development.

a. Community paramedicine activities are allowable/supportable within EMS regulations, licensure, certification, and scope of practice.

i. Specific statutes, rules, and regulations govern community paramedicine programs statewide.

b. The community paramedicine program is not in conflict with other licensing agencies or authorities, including: nursing, physician assistants, home health care, primary care, or others.

i. Specific statutes, rules, and regulations govern community paramedicine programs statewide.

2. Community paramedicine program leaders (sponsoring agency, community paramedicine personnel, and/or other stakeholders) use a process to establish, maintain, and constantly evaluate and improve a community paramedicine program in cooperation with medical, payer, professional, governmental, regulatory, and citizen organizations.

a. The program leaders have developed and implemented a multidisciplinary, multi-agency advisory committee to provide overall guidance to the community paramedicine planning and implementation strategies. The committee meets regularly and is in compliance with local or state open-meeting or transparency regulations and protects patient privacy.

i. There is a community-wide multidisciplinary, multi-agency advisory committee with well-defined goals and responsibilities

relative to the development and oversight of the community paramedicine program that meets regularly. The committee routinely provides guidance and assistance to the community paramedicine program on system and program issues. There is strong evidence of consensus building among system participants. The committee is in compliance with all open meeting or transparency regulations and protects patient privacy.

b. A clearly defined and easily understood structure is in place for the community paramedicine program decision-making process at the local administrative level to continually improve the program.
    i. There is a clearly defined process for making decisions affecting the community paramedicine program. The process is articulated in the community paramedicine program plan and is further identified within system policies. Stakeholders know and understand the process and use it to resolve issues and to improve the program.

c. Community paramedicine program leaders have adopted and use goals and objectives that are specific, measurable, attainable, realistic and timely for the community paramedicine program.
    i. Community paramedicine program leaders, in consultation with their community-wide multidisciplinary, multi-agency advisory committee, have established measurable program goals and outcome-based, time-specific, quantifiable, and measurable objectives that guide system effectiveness and program performance.

d. The community paramedicine program has comprehensive protocols that guide personnel to ensure consistency of care delivered, to decrease unwarranted variation in care, and to ensure patient care activities remain within scope of practice boundaries.
    i. Specific protocols for community paramedicine activities have been formally adopted and guide the assessment and treatment of patients/clients and serve as a basis for ongoing performance improvement.

e. The community paramedicine program assures confidential (HIPAA compliant) two-way communication of patient care records related to the program's care between the program providers and the affiliated hospital/physician/medical home providers.
    i. There is a formal written policy, HIPAA compliant, that governs the two way transmission of health care information between community paramedicine and other health care providers. Community paramedicine personnel have received specific training in HIPAA compliance.

f. The exchange of data and any peer review or performance improvement processes are protected from discoverability.

i. Specific peer review and performance improvement protection exist in state statute, rule, or regulation for multi-disciplinary, multi-agency peer review including community paramedicine personnel.

3. The community paramedicine program has a comprehensive written plan based on community needs. The plan integrates the community paramedicine program with all aspects of community health including, but not limited to: EMS, public health, primary care, hospitals, psychiatric medicine, social service and other key providers. The written community paramedicine program plan is developed in collaboration with community partners and stakeholders.
    a. Community paramedicine program, in concert with a multidisciplinary, multi-agency advisory committee, has adopted a community paramedicine program plan.
        i. A comprehensive community paramedicine program plan has been developed, adopted in conjunction with community stakeholders, and includes the integration of other systems (e.g., EMS, public health, community health, and primary care).
    b. The community paramedicine program plan clearly describes the system design (including the components necessary to have an integrated program) and is used to guide system implementation and management. For example, the plan includes references to regulatory standards and documents and includes methods of data collection and analysis.
        i. The community paramedicine program plan is used to guide system implementation and management. Stakeholders and policy leaders are familiar with the plan and its components and use the plan to monitor system progress and to measure results.
4. Sufficient resources, including those both financial and infrastructure related, support program planning, implementation, and maintenance.
    a. The community paramedicine program plan clearly identifies the human resources and equipment necessary to develop, implement, and manage the community paramedicine program both clinically and administratively.
        i. A resource assessment survey has been completed and is incorporated into the community paramedicine program plan. Goals and measurable objectives to reduce or eliminate resource deficiencies have been implemented. Evaluation of progress on meeting resource needs is evident and, when necessary, the plan has been adapted.
    b. Financial resources exist that support the planning, implementation, and ongoing management of the administrative and clinical care components of the community paramedicine program.
        i. A stable (consistent) source of reliable funding for the development, operations, and management of the community paramedicine program (clinical care and lead agency administration) has been identified and is being used to support planning, implementation, maintenance, and ongoing program enhancements.

c. Operational budgets (program administration and operations and in-field operations) are aligned with the community paramedicine program plan and priorities.

    i. An operational budget exists for each component in the plan and matches system needs and priorities with program and operational expenditures.

5. Collected data are used to evaluate system performance and to develop public policy.

    a. The community paramedicine program electronic information systems (EIS) is used to assess system performance, to measure system compliance with applicable standards, and to allocate program resources to areas of need or to acquire new resources.

        i. Community paramedicine EIS reports are used extensively to improve and report on program performance. The sponsoring agency issues regular and routine reports to providers. Program leaders assess reports to determine deficiencies and to allocate resources to areas of greatest need. Program performance and standard compliance are assessed and reported.

    b. Continuing education for community paramedicine providers is developed based on review and evaluation of EIS data.

        i. Routine analysis of community paramedicine information and educational opportunities is being conducted. Integrated program objectives tying program performance and education are implemented and routinely evaluated. Regular updates to community paramedicine information and education are available. Community paramedicine EIS data are used to measure outcomes and effectiveness.

    c. Community paramedicine leaders, including the multidisciplinary, multi-agency advisory committee, regularly review system performance reports and system compliance information to monitor community paramedicine program performance and to determine the need for program modifications.

        i. The community paramedicine program community-wide multidisciplinary, multi-agency advisory committee and related stakeholder groups meet regularly and review data reports to assess program performance over time looking for ways to improve effectiveness and patient outcomes.

6. The community paramedicine, EMS, public health, community health, and primary care systems are closely linked and working toward a common goal.

    a. The community paramedicine program, EMS, public health and community health system, and primary care leaders have established linkages including programs with an emphasis on population-based public health surveillance and evaluation for acute and chronic disease prevention and health promotion.

        i. The public health/community health epidemiologist along with EMS, primary care providers, and community paramedicine

participants is involved in the development of risk assessment reports. There is clear evidence of data sharing, data linkage, and well-defined reporting roles and responsibilities.

Assurance: Assurance to constituents that services necessary to achieve agreed-on goals are provided by encouraging actions of others (public or private), requiring action through regulation, or providing services directly.

1. The electronic information system (EIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the community paramedicine.
    a. The community paramedicine program collects and uses patient data as well as provider data to assess system performance and to improve quality of care.
        i. Patient care data are used to identify and meet additional health care/social welfare needs as they are identified.
    b. Community paramedicine care providers collect patient care and administrative data for each episode of care and provide these data to the community paramedicine program which is evaluated including monitoring trends and identifying outliers.
        i. The community paramedicine patient data system is fully integrated with all affiliated health care entities and with the public health surveillance system to help monitor community health needs.
2. The financial aspects of the community paramedicine program are integrated into the overall performance improvement system to ensure ongoing “fine-tuning” and cost-effectiveness.
    a. Cost data are collected and provided to the community paramedicine program EIS for each major component of the program.
        i. The cost of an aggregate system can be determined and is provided to the system registry for inclusion in the annual community paramedicine program report.
    b. Cost, charge, collection, and reimbursement data are aggregated with other data sources including insurers and data system costs and are included in annual community paramedicine program reports.
        i. Outside financial data are combined with internal community paramedicine program data and are used to estimate total system costs. These financial data are described in detail in the annual community paramedicine program report.
    c. Financial data are combined with other cost, outcome, or surrogate measures, for example, avoidance of EMS transports, avoidance of hospital visits, improved wellness measures, and others, to estimate and track true system costs and cost benefits.
        i. Estimated savings using various burdens of disease costs or outcome measure models are calculated for all community paramedicine programs and activities, are combined with actual system cost data to determine costs and savings of the total system, and are described in detail in the annual community paramedicine program report.

3. The community paramedicine program ensures competent medical oversight.
    a. There is authority for a community paramedicine medical director and a clear job description, including requisite education, training, and certification, for this position.
        i. If separate individuals, the EMS agency medical director and CP program medical director regularly meet together with program leadership to coordinate and integrate the EMS and CP aspects of the agency's services.
4. The community paramedicine program is supported by an EMS system that includes communications, medical oversight, and transportation; the community paramedicine program, EMS system, and public health and community health agencies are well integrated.
    a. There is clear-cut legal authority and responsibility for the community paramedicine program medical director including the authority to adopt protocols, implement a performance improvement system, ensure appropriate practice of community paramedicine providers, and generally ensure medical appropriateness of the community paramedicine program based on regulatory agency scope of practice and accepted standards of medical care.
        i. There is written evidence that the community paramedicine program medical director has, consistent with the formal authority, adopted protocols, implemented a performance improvement program, is restricting the practice of community paramedicine program providers (if indicated), is making significant efforts to improve the medical appropriateness of the community paramedicine program, and is working to fully integrate the program into the community health/primary care systems. Sufficient resources have been allocated for the medical director's participation and oversight to ensure that an appropriate amount of his/her time is dedicated to program responsibilities.
5. The community paramedicine program ensures a competent and safe workforce.
    a. In cooperation with the prehospital certification and licensure authority, established guidelines exist for community paramedicine personnel for initial and ongoing training including community paramedicine specific courses.
        i. The community paramedicine program CE requirements are based upon identified knowledge or competency gaps in providers, are specific to address these gaps, and are altered over time to address newly identified gaps.
    b. The community paramedicine program has established, with oversight by the medical director, a credentialing process that assures each community paramedicine provider has proven competence in performing the skills within the scope of practice.
        i. In addition to local credentialing, state and/or national recognition in the form of certification or licensure has been attained for all community paramedicine personnel.

c. Conduct at least one multidisciplinary community paramedicine/community health conference annually that encourages system and team approaches to community health.
    i. Multidisciplinary (EMS, physicians, nurses, physiatrists, policy makers, consumers, and others) community paramedicine conferences are conducted regularly, new findings from quality assurance and performance improvement processes are shared, and the conferences are open to all practitioners within the system. Regular attendance is required.

d. There are mechanisms within the system performance improvement processes to identify and correct systemic personnel deficiencies within the community paramedicine program.
    i. Community paramedicine leadership and other stakeholders, including hospitals and the lead agency, monitor and correct personnel deficiencies as identified through quality assurance and performance improvement processes. A method of corrective action has been instituted, and appropriate follow-up is occurring. Monitoring of program deficiencies and corrective actions is ongoing.

e. There are mechanisms in place within agency and institutional performance improvement processes to identify and correct deficiencies in practice patterns of individual practitioners within the community paramedicine programs.
    i. Practice patterns of individual practitioners performing outside the standards of care are routinely assessed by the medical director and sponsoring agency. Corrective actions (training, additional education, and disciplinary), as appropriate, are instituted, and trends are monitored and reported to the sponsoring agency and/or other licensing agency.

6. The program acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the community paramedicine program.

    a. The program works in conjunction with the prehospital and other regulatory agencies to ensure that community paramedical care provided by licensed individuals is in compliance with any rules, regulations, or protocols specific to community paramedicine delivery.
        i. The prehospital regulatory agency, working cooperatively with the community paramedicine sponsoring agency, is involved in ongoing community paramedicine program performance improvement processes and prehospital provider compliance with any rules, regulations, or protocols specific to prehospital practice.

    b. The program refers issues of personnel noncompliance with laws, rules, and regulations to appropriate boards or licensure authorities.
        i. Appropriate boards or licensure authorities are involved in the system performance improvement processes addressing individual personnel performance issues.