World Health Organization

WHO Prehospital Toolkit

Prehospital Emergency Care Assessment Tool (PEAT)

USER GUIDE

A step-by-step guide for EMS managers and planners completing PEAT for the first time

For further support, contact: emergencycare@who.int

WHO Prehospital Toolkit: www.who.int/teams/integrated-health-services/clinical-services-and-systems/emergency-and-critical-care/prehospital-toolkit

1. About PEAT

Good prehospital emergency care saves lives. When ambulance services work well, patients get the right help quickly. But many services face challenges: insufficient staff, ageing equipment, or gaps in training. The first step to fixing problems is knowing what they are.

The Prehospital Emergency Care Assessment Tool (PEAT) helps you do exactly that. It asks a set of questions about your prehospital service and the system around it. Your answers show where your service is strong and where there are gaps, and you use that information to build an improvement plan.

PEAT is part of the WHO Prehospital Toolkit, a set of products designed to help countries strengthen prehospital emergency care. PEAT does not set minimum standards; it identifies gaps that can then be addressed using standards promoted elsewhere. It assumes there is a prehospital system, however nascent, in the location being assessed.

What does PEAT cover?

Section	Covers
1. Setting and respondent information	Basic details about you and your service
2. System context	The laws, funding, leadership and infrastructure around your service
3. Service-specific overview	Your staff, vehicles and bases
4. Call-taking and dispatch	How calls are received and crews are sent out
5. Patient transport and transfer	How patients are moved to and between facilities
6. Provider response and care	How your providers respond, treat and document

Who is this guide for?

EMS managers and planners completing PEAT - the head of an ambulance service, a regional manager, or a national EMS planner - especially anyone doing an assessment like this for the first time. You do not need research skills. You just need to know your service well, involve the right colleagues, and follow the steps in order.

The assessment at a glance

Phase	What happens	Time needed	You end up with
1. Plan	Get permissions, decide which service(s) to assess, pick your team and respondents, set dates	1–2 weeks before, a few hours of work	Scope agreed, named team, permissions in place
2. Complete the survey	Fill in the PEAT tool	2–4 hours (Section 2 takes longest)	A completed draft of the tool
3. Review meeting	The group reviews every answer, resolves disagreements, agrees the final ones	2–3 hours	Agreed final answers and a first list of priorities
4. Site visits	Visit the base station, vehicles and dispatch centre	60–90 minutes	Observations that check and enrich the answers
5. Report	Write up findings using the PEAT report template	A few hours	A short report your service and its authorities can act on
6. Improve and repeat	Build the action plan, monitor it, repeat PEAT to measure progress	Ongoing; repeat at least yearly	An improvement plan with named owners and dates

You do not need to do phases 2–4 in one day, but keeping them within one or two weeks keeps answers current and facilitates completion.

2. Phase 1 - Plan

Get permission first

Before any assessment, obtain permission from the appropriate national or local health authority (or EMS regulatory authority) and from the leadership of the service being assessed. If the assessment is part of a regional or national exercise, the coordinating team usually arranges this; confirm rather than assume.

Decide which service organisations to assess

Countries organise prehospital care differently, so decide the scope up front:

Situation	Approach
One national service	Assess that single service
Multiple independent regional services	Assess each regional service independently, with the same method, so results can be compared
Many private services	Either assess all (if resources allow), assess a representative sample, or leave private services out if public services carry most of the population's demand

Complete one PEAT per service organisation. If you assess several, plan from the start how results will be brought together.

Pick the team

Having people allocated to three named roles can support a smooth assessment:

Role	Who	What they do
Assessment lead	Usually the head of service or a senior planner	Owns the process end to end: permissions, scope, dates, completing the tool, the report
Facilitator	Can be the lead, or a respected senior colleague	Runs the review meeting, keeps discussion honest and moving
Rapporteur	Any organised team member	Records final agreed answers and key discussion points

Choose your respondents

One person cannot answer all of PEAT accurately. Section 2 asks about laws, financing and governance; Sections 4–6 ask about what actually happens on the ground. Aim for a combination such as:

- Director of the prehospital regulatory authority (Ministry of Health or equivalent) - for system context
- Head of the EMS organisation (or chief operating officer) - for the service overview
- Chief of dispatch or operations manager - for call-taking and dispatch
- Frontline prehospital providers (senior ambulance crew) - for provider response and care
- Training officer and medical director, if available

Different respondents can answer different sections. More than one respondent can also answer the same questions; comparing their answers (triangulation) often reveals the most important findings, and disagreements are resolved at the review meeting.

Choose how to administer the tool

PEAT can be completed in person or virtually, and either self-completed by respondents or administered by an interviewer who asks the questions and records answers. If using an interviewer, record responses verbatim. Whichever mode you choose, use the same one at every service you assess so results are comparable.

Materials checklist

☐ The PEAT tool (one copy per respondent or section-owner)

☐ This guide

☐ The PEAT report template (so you know what the output looks like before you start)

☐ Service records for the number questions: annual call volumes, fleet inventory and operational status, staffing numbers by provider level, training records, budget figures

☐ A room (or call) booked for the review meeting, with the draft answers visible to everyone

3. Phase 2 - Complete the survey

The three question types

1. Yes / No questions. Tick the box that best describes your service. Some have follow-up questions in the last column; answer these if you ticked Yes - and use them to reflect on what improvement would take.

2. Number questions. Write the number that applies (e.g. number of ambulances). Write N/A if the question does not apply. If you only have an estimate, give it and mark it as an estimate - finding the true figure can itself become an action item.

3. Rating questions (N / S / A). Many questions ask you to rate whether something exists in your service:

Rating	Meaning
N - No	Does not exist in your service at all
S - Somewhat	Exists but not fully: partially in place, or only works some of the time
A - Adequate	Fully in place and works as it should

NOTE: *When you rate something N or S, always write a note in the barriers column explaining why. This is what turns your answers into an improvement plan.*

Making results meaningful

Rate what actually happens, not what should happen. A protocol that exists on paper but is never used is not *Adequate*. A universal access number that only works in the capital city is *Somewhat* at best.

Be totally honest. There are no right or wrong answers, and no service is perfect. The results are for your service and its improvement plan – this is not a performance review of individuals, and not for public distribution. The goal is to find gaps so you can fix them.

4. Section-by-section guidance

The sections below explain what each part of PEAT is asking and give guidance on questions that can be confusing. Read the guidance for each section before you answer the questions. There are explanations for some of the questions – the others should be self-explanatory.

SECTION 1 Setting and Respondent Information

This section collects basic information about who you are and what service you run. It is straightforward: fill in each field as completely as you can.

Q1.3 - Type of service

Tick the box that best describes your service. If your service is a mix (e.g. part public, part volunteer), tick the one that best describes how most of your service operates, and add a note.

Q1.4 - Location served

Tick all areas that apply. If your service covers a specific region, write the name clearly. This helps when comparing results across different services.

Q1.8 - Additional respondents

If more than one person helped complete PEAT, list them all here. This is useful for follow-up and for knowing who to contact if questions arise.

SECTION 2 System Context

This is the longest section. It asks about the environment in which your service operates: the laws, money, leadership, and plans that shape what you can and cannot do. Some of these questions are about national or regional matters that are outside your direct control. Answer them based on what you know. If you are unsure, check with your Ministry of Health or regulatory authority before completing this section.

TIP *Section 2 asks about the system around your service, not just your own organisation. Answers may be at a local, regional, or national level, but they should all describe the context in which your service operates.*

2A - Governance and Policy

These questions ask whether there are laws and rules that govern your service. "Legislation" in this context is used to mean any official law, regulation, or formal policy that has legal force.

Q2.4 - Legislation establishing the prehospital system

This asks whether a law formally defines prehospital emergency care as part of the health system. If yes, name the law and describe what it says your service is responsible for.

Q2.5 - Universal access legislation

Does a law say that anyone, regardless of who they are or where they live, has the right to access prehospital care? This is about legal entitlement, not just practical availability.

Q2.6 - Financial protection legislation

Does a law protect patients from being refused care because they cannot pay? Answer Somewhat if patients are sometimes asked to pay before receiving care.

Q2.8–2.9 - Universal Access Number (UAN)

A UAN is a single, easy-to-remember phone number anyone can call to get emergency help (e.g. 911, 999, 112). Q2.8 asks if there is a law requiring one. Q2.9 asks if phone companies are required by law to make calls to that number free of charge.

Q2.10–2.12 - Protections

These ask whether the law protects patients from harm, protects bystanders who help, and protects prehospital providers who deliver care. These are important for building trust in the system.

Q2.13–2.14 - Private services

If there are no private ambulance services in your area, skip to Section 3 (Service-Specific Overview). If there are, these questions ask how they are regulated and whether they work together with public services.

2B - Financing

These questions ask how your service is paid for. Answer based on what you know about funding sources for prehospital care in your area.

Q2.21–2.22 - Public and non-public funding

Public funding comes from government. Non-public funding includes fees charged to patients, insurance payments, donor funding, or private sources. Many services use a mix; describe all sources.

2C - Leadership

These questions ask about the management structure of your service. Job titles vary between countries. Use the closest equivalent in your system.

Q2.28 - Responsible persons

This list covers the key management roles in a well-functioning EMS. You may have one person covering more than one role. That is fine: mark Adequate if the function is being done, even if it is the same person doing multiple jobs.

2D - Infrastructure and Technology

These questions ask about the basic systems that allow your service to function, particularly the UAN and public awareness of it.

Q2.35 - Public awareness of UAN

If you do not know what percentage of the population knows the UAN, write "unknown" and note how this could be found out (e.g. through a community survey). This is itself a useful finding.

2E - Bystander Response

This asks about first aid training available to members of the public, not your staff. Community first aid response training extends the reach of your service by preparing people to help before your crew arrives.

2F - Quality Improvement

These questions ask about how data are collected, stored, and used to improve your service.

Q2.40 - Performance metrics

Key metrics for EMS include: number of calls received, response times, patient outcomes, and resource use. If you collect some of these but not others, rate as Somewhat and list what you do collect.

Q2.43 - Time targets

A time target is a goal for how quickly your service responds to priority calls (e.g. respond to life-threatening calls within 8 minutes). If you have targets but do not measure compliance, rate as Somewhat.

2G - Surge Response (Disaster Preparedness)

These questions ask whether your service is ready for large-scale emergencies. A Mass Casualty Incident (MCI) is any event where the number of patients exceeds your normal capacity, such as a road crash with multiple victims, a building collapse, or a disease outbreak.

Q2.45–2.47 - Disaster plan and drills

A plan that has never been practised may not work when it is needed. If you have a plan but staff do not know it, or you have not run drills, rate as Somewhat.

SECTION 3 Service-Specific Overview

This section focuses entirely on your own service. Answer based only on what your service has, not what exists in the wider system or in other services.

3A - Human Resources

Enter the number of prehospital providers at each level of training. If your service does not use a particular provider type, write N/A. If a provider type exists in your context but is not listed, use the "Other" row and specify.

Provider levels:

- First Aid / CFAR: Community members trained to give basic first aid as part of an organised system
- Basic Life Support (BLS) / BAP: Trained to give basic prehospital care including CPR, bleeding control, and immobilisation
- Intermediate Life Support: Providers trained beyond basic but below advanced level
- Advanced Life Support (ALS) / AAP: Trained to give advanced care including airway management and IV therapies
- Prehospital nursing staff: Nurses with specific prehospital training
- Physicians: Doctors working in the prehospital setting

3B - Operational Fleet

Enter the number of each type of vehicle in your service. Only count vehicles that are currently operational. Do not include vehicles that are broken, out of service, or awaiting repair.

NOTE *A basic ambulance can transport a patient and carry basic equipment. An advanced ambulance carries advanced equipment and is staffed by ALS providers. If you are unsure which category a vehicle falls into, classify it by the level of care the crew in that vehicle is trained to provide.*

3C - Facilities

List the facilities your service uses. This includes your headquarters, dispatch centres, and ambulance base stations. A satellite base station is a smaller location that supports a main base, for example a hospital parking spot used by a standby crew.

SECTION 4 Call-Taking and Dispatch

This section asks about how your service receives emergency calls and sends crews to respond. If your service does not have a dispatch centre at all (for example, you receive calls directly by phone without a dedicated call-taking system), mark Q4.2 as No and skip to Section 5.

Q4.1 - Reaching your service

Patients or bystanders may call either the national UAN or a number specific to your service. Both are valid. If callers use a service-specific number, write it in the follow-up column.

Q4.3 - Pre-arrival clinical advice

This asks whether your dispatchers can give callers basic instructions to help the patient while the crew is on the way, for example telling a caller how to do CPR or how to control bleeding. This is called pre-arrival guidance. If dispatchers give some advice informally but have no protocol for it, rate as Somewhat.

Q4.4 - Clinical oversight

This asks whether a medical professional (e.g. doctor or senior provider) is responsible for overseeing how your dispatch centre operates from a clinical point of view. This is different from operational management.

Q4.5 - Dispatch criteria

These are pre-set rules that tell dispatchers which type of crew and vehicle to send to different types of calls. For example, a cardiac arrest may require an ALS crew, while a minor fall may require a BLS crew. If decisions are made case by case without written criteria, rate as No or Somewhat.

Q4.9–4.10 - Caller location

Knowing where a caller is located quickly is critical. Automated phone tracking (Q4.9) does this automatically. Q4.10 asks about backup methods, such as asking the caller to describe their location, or using local landmarks. Both are important.

Q4.13 - Medical direction

This is different from clinical oversight of the dispatch centre (Q4.4). Medical direction means a clinician can give real-time advice to the crew on the ground about how to treat a specific patient.

Q4.16–4.18 - Base stations

A base station is a fixed location from which crews are deployed. Good geographic spread of bases reduces response times. Q4.16 asks if they exist. Q4.17 asks if their locations provide good coverage. Q4.18 asks about smaller satellite bases.

SECTION 5 Patient Transport and Transfer

This section asks how patients are moved from the scene to a healthcare facility, and how transfers between facilities work.

Q5.1 - Transportation system

Not all prehospital systems use ambulances for all calls. In some settings, transport may involve taxis, motorcycle responders, or community vehicles. Describe the method used and rate based on how organised and reliable it is.

Q5.4 - Notifying the receiving facility

Giving the hospital advance notice that a patient is coming allows staff to prepare. If this sometimes happens but not always, rate as Somewhat.

Q5.5–5.7 - Interfacility transfers

These questions ask about moving patients from one healthcare facility to another, for example from a district hospital to a specialist centre. Q5.7 asks whether your service treats these transfers as a distinct type of response, separate from responding to an emergency scene.

Q5.8 - Driver and care provider

In a well-functioning system, the person driving the ambulance and the person caring for the patient are different individuals. This allows full attention to the patient during transport. If one person does both, rate as No or Somewhat depending on how consistently this affects care.

SECTION 6 Provider Response and Care

This is the most detailed clinical section. It asks about your providers' training, what care they can deliver, how they document it, and what equipment and medications they have.

6A - Human Resources

Q6.4–6.6 - Training curriculum

These questions ask whether there is a formal, approved training programme that providers must complete. A curriculum adapted to local context (Q6.6) means the training reflects local disease patterns, resources, and cultural factors, rather than international standards that may not apply in your setting.

Q6.8–6.9 - Ongoing training

Skills can decline if not practised. Q6.8 asks whether providers are required to keep their training up to date (Continuous Professional Development). Q6.9 asks whether they are re-tested at set intervals to confirm they still have the skills they were trained in.

6B - Care Provision

This section asks whether clinical protocols exist for a range of emergency conditions, and whether your providers can perform specific clinical skills. Answer based on what your service actually does, not what it could do in ideal circumstances.

Q6.10 - Clinical protocols

A protocol is a written set of instructions that tells a provider how to assess and treat a specific condition. If a protocol exists but providers do not follow it, rate as Somewhat. If no written protocol exists, rate as No even if providers have informal habits for managing that condition.

Q6.12 - Medical control protocol

Medical control means that a provider on scene can contact a doctor or senior clinician by radio or phone for advice about a specific patient. Rate this based on whether a clear process exists and whether it is used in practice.

Q6.13 - Clinical skills

This is a long list of skills. For each one, ask: can your providers perform this skill reliably, at any time of day, with the equipment and training available? If they can do it sometimes but not always (for example, only when a specific crew member is on shift), rate as Somewhat.

TIP *Work through Q6.13 with your frontline providers, not just managers. Managers may not always know which skills are genuinely available at 3am.*

6C - Documentation

These questions ask how patient care information is recorded and shared. Good documentation is essential for patient safety and for quality improvement.

Q6.14 - Recording patient care

This asks whether providers reliably fill in a patient care record for every patient they attend. If documentation is inconsistent (done by some crews or for some call types but not others), rate as Somewhat.

Q6.15–6.16 - Handover documentation

When handing over a patient to the hospital, documentation should travel with the patient so hospital staff know what happened before they arrived. If verbal handover happens but no written record is given, rate as Somewhat.

6D - Infrastructure and Technology

These questions ask about the systems that keep your equipment and medications ready for use.

Q6.18 - Medications and equipment management

This asks whether there is a system to check what has been used, restock it, and safely dispose of expired items. An informal system where individual crews manage their own supplies should be rated as Somewhat at best.

Q6.19 - Organisation of supplies

Equipment and medications should be stored in a consistent, organised way (such as in colour-coded jump bags), so any crew can find what they need quickly, even in a vehicle they do not normally use.

5. Phase 3 - The review meeting

However the tool was completed, hold a review meeting: the group agrees the most accurate answers and starts shaping priorities. Where two respondents gave different answers to the same question, that disagreement is often the most revealing finding – for example, a director may believe dispatch criteria exist while dispatchers have never seen them.

Before reviewing answers: a rapid data check

Check the completed tool for obvious problems first, so the meeting works from a clean draft:

☐ Any unanswered questions? Assign someone to get each answer.

☐ Any N or S rating with nothing in the barriers column? Add the explanation.

☐ Do the numbers make sense together? (Operational vehicles cannot exceed total vehicles; provider numbers by level should add up to the workforce total.)

☐ Where respondents disagreed, list the disagreements for discussion rather than silently picking one.

☐ Any “unknown” answers? Keep them visible - they become action items, not blanks.

Running the meeting

Open with a senior person, then have the facilitator remind everyone: be open and honest - it is the only way to a plan that improves care; this is a closed internal process, not a public report; and every perspective is valid, from the director to the newest crew member.

Work through each section. For each question the facilitator asks: does everyone agree? The rapporteur records the agreed final answer. End by agreeing a first list of action priorities - the gaps the group most wants to fix.

6. Phase 4 – Site visits

A physical visit catches what desk answers miss. Visit, as applicable:

- **The base station:** condition, security, crew facilities, medication and equipment storage (organised so any crew can find items quickly - e.g. colour-coded jump bags)
- **A sample vehicle:** check its actual contents against the service's equipment list; note broken or missing items and expiry dates
- **The dispatch centre:** how calls arrive, how crews are activated, what technology is actually in use; observe a live call if permitted
- **Documentation:** ask to see a completed patient care record and a handover document

Where the visit contradicts a survey answer, the visit usually wins: correct the answer and note why. If permitted, photograph equipment and facilities (never patients).

7. Phase 5 - Report

Write up the assessment using the PEAT report template (separate file – available on WHO's prehospital toolkit website). The template mirrors this process: methods, a results summary you can complete directly from the finished tool, findings by section, and the action plan. A short, honest report finished within two weeks beats a long one finished never. Keep the completed tool as an annex - it is the baseline you will compare against next time.

8. Phase 6 - Build the improvement plan, monitor, repeat

Step 1 - List your gaps. Every N or S rating is a gap, and its barriers note tells you what kind of fix it needs. Add the gaps revealed by follow-up questions and the walkthrough.

Step 2 - Prioritise. Three questions: Does this gap put patients at risk (life-saving response first)? Is it feasible with resources you have now? Is it a quick win that builds momentum?

Step 3 - Write the plan. For each priority gap:

What is the gap?	One clear sentence
What will change?	The action you will take
Who is responsible?	One named, accountable person
What is needed?	Staff, training, equipment, funding
By when?	A realistic deadline
How will you know it worked?	The measure of success

Step 4 - Share and monitor. Share the plan with your team, your leadership, and the health authority; review progress every 3–6 months. Repeat PEAT at least yearly, with the same respondents where possible so results are comparable, and compare against your baseline.

REMEMBER: *PEAT is a tool for improvement, not an audit or inspection. Be honest, involve your team, and treat the results as the starting point for change.*

9. Quick reference

Common questions

Question	Answer
What counts as Adequate?	Fully in place and working as it should, for the whole area you serve. Partial, sometimes, or capital-city-only is S.
Rate the ideal or the reality?	Always the reality. Paper systems that are not used are not Adequate.
What if I don't know the exact number?	Give your best estimate and mark it as one. Finding the true figure can itself be an action priority.
What if a question doesn't apply to us?	Write N/A and add a note explaining why.
Can one person do the whole tool?	Section 2 needs someone senior on policy; Sections 4–6 need people close to operations. One person can draft, but hold the review meeting either way.
Do I need permission first?	Yes - from the appropriate health or regulatory authority and your own leadership.
What if we have several service organisations?	Complete one PEAT per organisation (see Phase 1) and plan how results will be combined.
What do I do with the results?	Build the improvement plan (Phase 6), report to your leadership and authority, and keep the completed tool as your baseline.

Glossary

- **Universal access number (UAN):** the single local telephone number the public calls to activate the prehospital service.
- **Dispatch:** receiving emergency calls and sending the right crew and vehicle to the scene.
- **Medical oversight / direction:** supervision of clinical care by qualified medical professionals, through protocols (indirect) or real-time advice (direct).
- **Provider levels:** community first aid responder (CFAR), basic and advanced prehospital providers - the tiers of training recognised in your system.
- **Interfacility transfer:** moving a patient between health facilities for ongoing or definitive care.
- **Triangulation:** asking more than one respondent the same question and comparing answers to get closer to the truth.
- **Surge response:** the service's ability to scale up for outbreaks, disasters and mass casualty incidents.
- **Baseline:** your first completed PEAT, against which repeat assessments are compared.