

INTRODUCTION

Though many patients in the pre-hospital setting have specific complaints such as “my belly hurts” or “I’m having chest pain”, there are numerous situations in which the patient complains of symptoms that are difficult for the clinician to interpret. Examples of some challenging presentations include vague symptoms such as “I just don’t feel well”, specific complaints such as “I can’t move my arm” (where the clinician cannot determine the specific etiology), or patients with numerous multisystem complaints that don’t easily fit in to one particular care path. For the purposes of this document, patients with these sometimes vague or challenging presentations will be referred to as “undifferentiated” patients.

Some patient populations are more likely to present with undifferentiated complaints, such as pediatric and geriatric patients, as well as patients with certain medical conditions such as diabetes or renal failure. Patients with mental illness or cognitive deficits may also present quite undifferentiated on first medical contact.

Clinicians may find assessing these patients difficult as there is often no ‘starting point’ to base the assessment on. It is important that the clinician does not trivialize the patient’s symptoms; rather they should consider a broad range of etiologies that may result in vague complaints and maintain suspicion of serious causes for non-specific or unclear presentations. As an example, general malaise can be an indication of numerous underlying causes such as infection (acute or chronic), anemia, cardiac-related etiologies, metabolic or hormonal imbalance, cancer, chemical exposure, medication effects, or neurological dysfunction.

Undifferentiated complaints are challenging for all clinicians and these patients often require more in-depth diagnostic tests either in the ED or subsequently during admission or follow up. The important point is that seemingly insignificant or unclear complaints may represent serious underlying etiologies that cannot be adequately ruled out in the pre-hospital setting.

SAFETY

As the underlying cause of symptoms is often unknown, it is important for the clinician to maintain a high degree of suspicion for infectious or toxicological agents.

Always ensure routine practices (infection control practices) are followed.

ASSESSMENT

Assessing the undifferentiated patient may lead the clinician towards a likely cause and therefore a specific guideline or the patient may remain undifferentiated throughout pre-hospital management. The clinician must optimize their interaction with the patient, family, caregiver, or bystanders to conduct an appropriately thorough assessment. At the same time the clinician should avoid becoming entangled in details that are insignificant and may simply delay treatment/transport.

During assessment, be wary of prematurely reaching a diagnosis and committing to a specific guideline (this is referred to as premature diagnostic closure). If you believe you’ve reach a diagnosis, be sure to also pay attention to data that does not support your working diagnosis. This will help you keep an open mind and minimize cognitive errors that can lead to overlooking alternative etiologies. Failure to recognize abnormal findings on assessment or to address them may lead to poor patient outcome in the form of inappropriate treatment pathways, destination choices, or decision to not transport the patient.

The clinician should gather a history including:

- Presenting complaint
- History of presenting complaint – details of when it started, similar episodes, and any exacerbating or palliating factors
- For chronic complaints, why they called for help at **this** particular time
- Direct questions about symptoms by body system
- Past medical, surgical, and psychiatric history
- Current (and recent past) medications – any recent changes in medications (e.g. new medications, stopping a medication or alterations in dosing)
- Family history

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- Sleeping patterns (e.g. any insomnia or changes in sleep cycle)
- Possibility of pregnancy
- Social history (e.g. stressors, smoking, drug or alcohol use, incarceration, abuse)
- Risk of infection (e.g. recent travel, contact with sick individuals, long-term care facility resident)

When obtaining the history for a patient with undifferentiated complaints:

- Collect information to confirm or exclude life-threatening conditions first (e.g. airway or hemodynamic instability), then focus on the most likely differential diagnosis
- Assess for high priority symptoms which would require immediate treatment or could be affecting the patient's ability to provide accurate answers (e.g. hypoglycemia or stroke)
- Determine whether there is cognitive impairment due to drugs/alcohol, dementia, delirium, etc.
- If required, use other tools to facilitate history taking (e.g. visual aids or diagrams)
- Ask questions in language the patient can understand; family may assist with this.
- Obtain collateral information from others on scene as needed

Once a thorough history has been taken, the clinician should conduct a physical assessment, beginning with a complete set of vital signs. To improve accuracy of the physical assessment, the clinician should:

- Ensure a comprehensive physical assessment
- Clarify any points of the history while conducting the physical assessment
- Check the patient's environment and physical surroundings
- Keep the differential diagnosis in mind while examining the patient; utilize the exam to assess for findings that both support or refute your suspicions
- Use other assessments (such as 12-lead ECG or blood glucose check) when those tests will affect the disposition and treatment of the patient by confirming or excluding various hypotheses

MANAGEMENT

The patient who remains undifferentiated requires the same level of care and attention as those who have a clear pre-hospital diagnosis.

Management of the undifferentiated patient may follow principles from multiple guidelines however care is often directed toward treating symptoms when an underlying cause cannot be determined. This may include oxygen, IV fluid, analgesia, an antiemetic or an antipyretic. It may also include non-pharmacological measures such as adjusting lighting or temperature, or placing them in a position of comfort.

The undifferentiated patient who is refusing transport should be taken seriously, as we are often unable to rule out significant underlying causes for their symptoms in the pre-hospital setting. It is important for the clinician to determine the patient's capacity to refuse transport/treatment and complete a thorough assessment so the patient can make an informed decision based on the risks as explained to them. Refer to the Non-Transport/Refusal of Care guideline for further information.

TRANSFER OF CARE

When a patient is brought into the emergency department with no priority symptoms and no clearly defined chief complaint, it may lead to the patient being triaged inappropriately. It is important to clearly state the history and physical assessment findings and provide any insight which may help to direct subsequent care. The clinician should act as an advocate for the patient and relay any prehospital concerns to the receiving facility. The pre-hospital care provider is often the only source of valuable information regarding the scene conditions the patient was found in.

CHARTING

It is important to document all information as obtained from the history and physical. For these patients, details regarding when the event started, specifically why the patient sought medical assistance at this particular time, and a comprehensive medication profile are all critical components of the chart. These items are extremely

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useful for subsequent care providers. The narrative section of the PCR is of key importance.

Key Points – The Undifferentiated Patient

Always screen for high priority symptoms; never disregard or minimize the potential seriousness of an undifferentiated presentation

A comprehensive history and physical as well as complete documentation including medication list and scene conditions are essential

Avoid premature diagnostic closure

Although diagnosis in the pre-hospital setting may not be possible, symptom control is expected

Travers AH, Stewart R. The Sick Person and the Challenge of the Undifferentiated Patient. In Cone DC, OConnor RE, Fowler RL eds. Emergency Medical Services: Clinical Practice and Systems Oversight, 5th ed. USA: Kendall Hunt Professional, (In Press, 2014).

KNOWLEDGE GAPS

Despite the relatively high prevalence of patients who are seen who remain undifferentiated, there is a relative paucity of research and knowledge in this area.

EDUCATION

Much of the education around an undifferentiated patient needs to be done on a case by case basis. Ongoing communication with the emergency department system of care is a tool which can help you when dealing with these patients. Partake in local mortality and morbidity rounds in your hospital where feasible and when/where feasible ask your emergency department team what the outcome of the patient was.

QUALITY IMPROVEMENT

Important elements include [1] non-transport rates and subsequent relapse rates, [2] presence of stable vital signs, and [3] comprehensive documentation.

REFERENCES

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Nijrolder I, et al. Diagnoses during follow-up of patients presenting with fatigue in primary care. CMAJ. 2009 ; 181(10): 683-7.

Paturas JL. The EMS call. In Pons PP, Cason D, eds. Paramedic field care: a complaint based approach. Mosby Year Book, 1997, pp 29-33.

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PEP 3x3 TABLES for THE UNDIFFERENTIATED PATIENT

Throughout the EHS Guidelines, you will see notations after clinical interventions (e.g.: **PEP 2 neutral**). PEP stands for: the Canadian Prehospital Evidence-based Practice Project.

The number indicates the Strength of cumulative evidence for the intervention:

1 = strong evidence exists, usually from randomized controlled trials;

2 = fair evidence exists, usually from non-randomized studies with a comparison group; and

3 = weak evidence exists, usually from studies without a comparison group, or from simulation or animal studies.

The coloured word indicates the direction of the evidence for the intervention:

Green = the evidence is supportive for the use of the intervention;

Yellow = the evidence is neutral;

Red = the evidence opposes use of the intervention;

White = there is no evidence available for the intervention, or located evidence is currently under review.

PEP Recommendations for The Undifferentiated Patient Interventions, as of 2014/07/02. PEP is continuously updated. See: <https://emspep.cdha.nshealth.ca/TOC.aspx> for latest recommendations, and for individual appraised articles.

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