



# The Importance of Assessing Vital Signs in Physical Therapy Outpatients

**Ray Galloway\* and Tanishka Dabade**

Department of Kinesiology, Dallas Baptist University, USA

**\*Corresponding author:** Ray Galloway, Department of Kinesiology, Dallas Baptist University, USA.

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## Introduction

Physical Therapists are autonomous practitioners. Measuring vital signs including temperature, blood pressure, heart rate, respiratory rate, and pulse oximetry allows physical therapists to screen for red flags. The therapists also monitor a patient's cardiovascular response to exercise, incorporate relevant information into the plan of care and use the information gained for making clinical predictions [1]. Common vital signs assessed in physical therapy settings include heart rate (HR), blood pressure (BP), respiration rate (RR), and blood oxygenation (SpO<sub>2</sub>). The American Physical Therapy Association (APTA) states that the measurement of vital signs is one of the minimum skills required of physical therapists and these should be measured during every visit by a new patient or existing clients. However, current literature indicates regular assessment is not common practice in the profession of physical therapy, with less than half of physical therapists assessing vital signs in the majority of patient visits. Research indicates that across all practice settings, outpatient physical therapists are the least likely to perform regular vital signs assessment [2].

A pattern noticed is that exercise constantly raises vital sign numbers helping the body acquire oxygen. The resting pulse rate average was 74.4 while the rate after exercise was 98.0. The data shows that people who have a high heartbeat tend to have a higher respiratory rate [3]. Vital signs can provide insight as to how a patient is performing and what the progression for the patient should look like. With direct access, patients can see a physical therapist without a referral for physical therapy. This autonomy warrants further evidence to guide the clinical decision-making

process by physical therapists with regard to assessment of vital signs. Clinical indicators that highlight the need for an assessment of vital signs include dyspnea, hypertension, fatigue, syncope, chest pain, irregular heart rate, cyanosis, intermittent claudication, nausea, diaphoresis, and pedal edema. Certain patient populations also warrant a vital sign assessment. These include elderly patients (older than 65 years), very young patients (younger than two years), debilitated patients, patients with a history of physical inactivity, and patients recovering from recent trauma. The measurement of vital signs can be used to establish goals and to assess a patient's response to activity [4]. One instance that may jeopardize patient safety is challenging the cardiovascular system without assessment of vital signs in an individual who is non-compliant with blood pressure medications. For instance, if the physical therapist is aware that the patient is on medication for high blood pressure and discovers normal vital signs on the initial evaluation, the physical therapist may assume that the patient's blood pressure is stable and defer regular assessment of vital signs during subsequent sessions. The underlying assumption in this situation, however, is that the patient will be compliant with the correct dosage of medication between sessions. If this is not the case and subsequent measurement is not taken, the stress to the patient's cardiovascular system may result in a cardiovascular incident. A large number of physical therapists believe vital signs assessment post treatment is time consuming. Hence, these assessments have been disregarded in the past. Another potential compromise to patient safety is to falsely assume that a patient who is young is necessarily healthy. For instance, a young athlete who is receiving pressure from outside sources to accelerate his rehabilitation and return to their

sport more rapidly may utilize performance-enhancing substances. Furthermore, even if the physical therapist screens for the use of these substances, it may be difficult to confirm their usage by the patient. These medications can have effects on the cardiovascular system and therefore may alter patient response to exercise and potentially increase the risk of an adverse event [1].

The physical therapy profession has seen an increase in autonomy through the development of direct access in the United States. As such, physical therapists must be prepared and able to serve as a first point of care and a valuable member of the primary care team. Doing so requires the ability to screen for and detect disease processes that require medical attention. The assessment of vital signs provides physical therapists with a fast, simple, and effective method of screening a patient's overall cardiovascular and pulmonary health. Furthermore, it allows physical therapists to establish the baseline cardiopulmonary function and can also be used to monitor response to treatment. Physical therapists are in a position to drastically affect a patient's health through skilled evaluation and treatment. When physical therapists regularly perform thorough objective measures, including vital signs assessment, it is highly likely that abnormalities will be identified for medical management. It is the responsibility of the physical therapist to take appropriate action to address these health concerns through physical therapy treatment, patient education, and communication and referral to other medical specialists if necessary. The key to providing this level of care is to analyze all available information, utilize sound clinical reasoning, and act. When practicing in this manner, the best standard of care can be provided during every encounter between physical therapists and their patients [2].

The Guide to Physical Therapist Practice 3.0 considers taking vital signs as essential to therapy practice. Physical therapy scope of practice clearly describes conducting a systems review in order to identify potential and existing problems, of which, aerobic capacity/endurance, circulation, ventilation and respiration/gas exchange are but a few of the listed areas to conduct tests and measures. The high prevalence of abnormal vital signs in outpatients warrants frequent VS assessment and PT action. As physical therapists are looked upon to become more autonomous therapy practitioners, taking baseline vital signs on every new patient and existing clients and appropriate monitoring of those vital signs is essential to avoid negligence and provide patients the safest care possible [5].

### Acknowledgement

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### Conflict of Interests

No conflict of interest.

### References

1. Virginia G Thistle, Allison L Basskin, Eric Shamus, Renee Jeffreys Heil (2016) 'Clinical decision making regarding the use of vital signs in physical therapy.' Physical Therapy and Rehabilitation.
2. Nathan Andrews, Raven Cochran (2019) Abnormal Vitals in Outpatient Physical Therapy.
3. Student Sample - Vital Signs Lab Report.
4. Monitoring Vital Signs. Introduction to Physical therapy and patient skills.
5. Brenda Kemling (2017) Vital Signs are Vital to Therapy Practice Rehabvisions.