


# The Critical Need for Human Capital Measurement Standards and Transparency in Healthcare

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## ABSTRACT

Despite long histories, the disciplines of healthcare performance analytics and human capital analytics followed parallel but separate tracks during the 19th and 20th centuries. Little has been done to integrate these two analytic disciplines to improve the delivery of medical care and the sustainability of healthcare organizations. Today, there is an increased demand for healthcare to meet the aging world population, spiraling healthcare costs, and a shortage of human resources to meet patient needs. It is imperative that healthcare professionals apply innovations to explore and optimize value from a combined discipline of healthcare human capital measurement and reporting.

## KEYWORDS

Analytics, Capital, Healthcare, Human, ISO 30414, Measurement, Metrics, Resources, Standards, Transparency

## INTRODUCTION

Two critical streams of research, conducted one hundred years apart, are converging today. The groundbreaking mathematical and data-driven studies by Florence Nightingale during the Crimean War in 1820 revolutionized how healthcare professionals determined the root causes of illness and injury among patients (Bradshaw, 2020). A century later, Fredrick Winslow Taylor established a theory of management and workflow analysis known as “Scientific Management.” This research would later be known as “Taylorism” and recognized as a precursor to modern human capital analytics (Birnbaum & Somers, 2022). Despite long histories, the disciplines of healthcare performance analytics and human capital analytics followed parallel but separate tracks during the

DOI: 10.4018/JHMS.328520

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19<sup>th</sup> and 20<sup>th</sup> centuries. Little has been done to integrate these two analytic disciplines to improve the delivery of medical care and the sustainability of healthcare organizations. Today, there is an increased demand for healthcare to meet the aging world population, spiraling healthcare costs, and a shortage of human resources to meet patient needs. It is imperative that healthcare professionals apply innovations to explore and optimize value from a combined discipline of healthcare human capital measurement and reporting.

## **The Case for Human Capital Measurement and Reporting**

We define human capital as the knowledge, information, ideas, skills, and wellbeing of individuals and groups of individuals. Just as physical capital is created from the production of materials, human capital is created from the application of skills and capabilities of individuals within a workforce (Coleman, 1994). Human capital has been referred to as “the most important form of capital in modern economies... While all forms of capital are important, including machinery, factories, and financial capital, human capital is the most significant” (Becker, 2002).

Nowhere is the value of human capital more apparent than the healthcare field, an industry that relies upon skilled professionals with specialized education, training, and unique competencies to reduce suffering and restore health. The healthcare industry is one of continuous and rapid change. Advances in technology, practice, and medical breakthroughs (all human capital value-driven outcomes in themselves) require a continually evolving workforce—one that requires careful management focused on the development and engagement of trained professionals to optimize the value of human capital.

It is not uncommon to hear organizational leaders claim that people are the most valuable asset in their organizations. These same organizations regularly provide the public with detailed information about their financial and operating assets that represent tangible investments. These actions demonstrate their ability and willingness to measure and disclose information about certain aspects of operational and financial performance of their organization. However, most are either unable or unwilling to provide meaningful information about the contribution of human capital to the tangible and intangible value of their workforce (Lev, 2001).

In this paper, we take the position that 1) Human capital is one of the most, if not the most, critical assets of healthcare industries today, 2) Human capital can and should be quantifiably measured, and 3) Standardized measurement and transparent reporting of human capital metrics should be undertaken in the healthcare industry to better inform management (and the public) about the efficiency and effectiveness of investment in human capital.

## **The Opposition**

The opposition to human capital reporting and measurement comes in a particularly negligent form: one in which few would argue against the value of human capital, nor against the value of measurement and reporting. However, the overwhelming presence of external reporting by organizations which focuses almost entirely on financial data while inadequately considering intangible assets such as human capital (Gamerschlag & Moeller, 2011) indicates that the opposition exists not in principle, but in action.

Most knowledge-intensive organizations recognize that their source of competitive advantage comes from human capital, however, few provide reliable metrics to demonstrate this value (Bukowitz, Williams, & Mactas, 2004). The specific reasons for this are nuanced and varied, and may result from a belief that human capital is immeasurable, the technology or analysis are exorbitantly expensive, or there is no reason to disclose human capital performance as stakeholders have not called for human capital reporting in the past. It also may result from a disbelief in the alignment between human capital value and organizational performance, or an erroneous assumption that to measure and disclose human capital metrics may release ‘trade secrets’ or increase privacy concerns and undue risk exposure. To these statements and inaction, we provide the following rebuttal and potential solutions.

## The Measurement, Standardization, and Disclosure of Human Capital

In 2020, the Securities and Exchange Commission (SEC) declared that human capital is not to be considered exclusively an expense, but an investment in an intangible asset and, therefore, not immeasurable (Posner, 2022). There are many approaches to the measurement of human capital, including employee cost/contribution analyses such as the Mellon Human Capital Value Metric (Bukowitz, Williams, & Mactas, 2004), the measurement of Human Resources (HR) functions and people processes (Baron, 2011), and estimations with reference to future earnings, past investments, or individual characteristics (Stroombergen et al., 2002). Many human capital measures may be context specific, vary over time, or be specific to the needs of an organization's strategy. However, there are constant ways to measure and contextually explain people management data (Baron, 2011). This can be accomplished through the use of standards, or generally accepted HR principles, for the measurement and reporting of human capital data. Around the world, regulators and governance monitoring bodies are actively establishing standards and regulations related to human capital issues. These issues include but are not limited to human rights, labor/management relations, and workplace conditions.

Similar to laws passed in the United Kingdom and, most recently, Japan, the U.S. Government passed a law in the House of Representatives (still being considered in the Senate as of November 2022) called the Workforce Investment Disclosure Act (WIDA). This would amend the SEC's disclosure requirements to include more structured information on human capital performance beyond simply the number of employees in an organization. The spirit of the legislation is to encourage "private and public [organizations] to hire workers at different education levels and invest in them for the long-term." It specifies approximately 26 quantitative metrics that are to be disclosed to the public. In addition, the bill calls for reframing the way "publicly traded companies are being provided with incentives to prioritize investments in physical assets over investments in their workforces" (S.1815—117th Congress (2021-2022), 2021). This bill and other disclosure efforts are redefining how we quantify the intangible asset that is the workforce.

One set of generally accepted standards for quantifying human capital is the global standard introduced by the International Organization for Standardization (ISO) related to the measurement and reporting of human capital: ISO 30414:2018 - Human resource management - Guidelines for internal and external human capital reporting (International Organization for Standardization, 2018). Its objective is to "consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce" and to provide information to enhance internal decision-making related to the effective management of human capital. The standard is designed for application in different organizations, industries, and countries, regardless of "type, size, nature or complexity of the business, whether in the public, private or voluntary sector, or a not-for-profit organization" (International Organization for Standardization, 2018). The standard provides guidance on how to quantify the critical intangible asset of human capital. We posit that following the ISO 30414:2018 standards will allow healthcare organizations to determine and create a compelling narrative about the effectiveness and efficiency of human capital contributions over time and will aid in achieving sustainable performance goals and outcomes. This is especially germane for healthcare organizations that depend on their employees to fulfill their mission and vision.

ISO 30414:2018 provides a model for calculating metrics with differing guidance for small or large organizations and for internal or external use and disclosure. The framework contains three components: 1) Inputs: The fundamental building blocks for achieving value through people and includes all investment in human capital - e.g., workforce costs; 2) Activities: The key tasks in HR Management (value chain or life cycle), to ensure that people are able to work productively and healthily - e.g., information about organizational culture; 3) Outputs/Outcomes: The results of the investments and activities - e.g., human capital Return on Investment (ROI). These three components are applicable across the eleven focus areas of ISO 30414:2018 listed below, and include the calculation

and risk assessment associated with each area. While all areas should be considered, organizations may select certain measures based on their individual circumstances and needs. Organizations may benefit from monitoring and measuring performance in the following areas identified for measurement by ISO 30414:2018:

1. **Compliance and ethics** (potential measures include: number and type of grievances filed, training hours on compliance and ethics, external dispute resolutions)
2. **Workforce Costs** (potential measures include: total workforce costs, cost per hire, turnover costs)
3. **Diversity** (potential measures include: workforce diversity with respect to age, gender, nationality, disability, job family, job level/hierarchy, qualification, diversity of leadership team)
4. **Leadership** (potential measures include: leadership trust, span of control, leadership development effort)
5. **Organizational Culture** (potential measures include: engagement, satisfaction, commitment, productivity, human capital ROI)
6. **Organizational Health, Safety and Well-Being** (potential measures include: lost-time for injury, number of occupational accidents, rates of fatality, death or mortality)
7. **Productivity** (potential measures include: financial indicators of per employee profitability, revenue per employee, pay equity performance)
8. **Recruitment, Mobility and Turnover** (potential measures include: number of qualified candidates per position, average length to fill vacant positions, voluntary/involuntary turnover rates, leaving reasons)
9. **Skills and Capabilities** (potential measures include: learning and development measurement, internal mobility rate)
10. **Succession Planning** (potential measures include: succession effectiveness rate, succession readiness rate by years)
11. **Workforce Availability** (potential measures include: absenteeism, number of employees, contingent workforce)

The guiding principle for human capital reporting is to provide a common, consistent framework to evaluate human capital performance information and allow internal and external stakeholders to understand if the human capital policies and practices are aligned to the organization's strategic and operating mission and values. With a universal standardization process, organizations of all types, sizes, industries, and geographic locations can apply approaches that are comparable while also being adapted to varying circumstances. Standards provide a framework from which the competencies and skills required to quantify human capital impact can be developed for use within organizations. Standards are critical for supporting human capital professionals in generating human capital metrics, and provide a context in which to create narratives about human capital management impact. Standards are also well suited to integration with many recent developments in technology; the advancements of which may simplify measurement and consistent application. The adoption and proliferation of common measurement standards may also improve the ease and availability of the skills, tools, systems, and resources for measuring and reporting on human capital more cost-effectively. Introducing a common set of standard measures can create consistency in the way human capital is measured, quantified, benchmarked, and communicated.

### The Value of Standardized Measurement and Disclosure of Human Capital

Organizations that disclose their efforts to develop human capital tend to perform better than organizations that do not disclose this information (Embankment Project for Inclusive Capitalism (EPIC), 2021). Research shows that organizations using analytics to understand the impact of human capital programs have close to three times higher human capital ROI than organizations that don't employ an analytics approach in evaluating the effectiveness of human capital programs (Charas et

al., 2021). Additionally, tracking and reporting human capital analytics has been shown to improve profitability performance by an average of 25% (Washington et al., 2020).

### **Expert Position from the Healthcare Field**

The true value creation of healthcare systems is generated by intangible assets: the employees. Employees are the service product of healthcare systems and the triad of healthcare—quality, access to care, and cost-of-service delivery—is dependent on services rendered by people. The knowledge, skills, and abilities of the healthcare workforce are the true source of value in the system. However, those are not reflected in the financial statements despite the significant financial impact on the solvency of healthcare systems. Voluntary employee exits during the pandemic, which led to potential staffing crises, are proof of the value of employees to hospitals. Chronic unhealthy work environments and poor employee mental health in healthcare exposed the long-standing weakness in workforce management and the lack of understanding of one of the greatest assets in healthcare: the employees. The lack of a strategic human capital focus made it a challenge to deal with the turnover of a highly skilled workforce and that had significant consequences on the triad of healthcare, in addition to the poor financial performance of healthcare systems. If the current employee crisis is not remedied, it could threaten the sustainability of the healthcare system. As healthcare systems combat additional staffing shortages and the potential closure of many hospitals throughout the country, there is a heightened focus on enhancing the work-life balance of healthcare providers. The goal is to address systemic causes of turnover and curb the rising voluntary exits of employees, create a more sustainable and healthier workforce, foster a more supportive work environment, and follow the principles of the World Health Organization (WHO).

To accomplish these goals requires understanding the underlying pain points of the entire employee life cycle in healthcare and organizational well-being. The current statistics of organizational well-being in healthcare are worrisome, with 54% of physicians reporting feelings of burnout (Tawfik et al., 2018) and experiencing the highest suicide rate of any profession (Anderson, 2018). Doctors and nurses are twice as likely to commit suicide compared to the general population, and medical errors are on the rise due to the declining mental health of health workers. In addition, since the pandemic, there is an increased incidence of healthcare worker assaults by patients. These statistics of employee safety deficiencies and poor mental health are alarming. To understand and address the current healthcare staffing crisis, the work environments, and organizational well-being requires the collection of robust people data measurements that are standardized to allow comparison across healthcare systems, collaboratively share best practices, and allow external stakeholders to determine systems that are high performing based on the cost, quality, access, and organizational well-being linked to their people data.

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### **The Need for Transparent Reporting of Human Capital Metrics**

Increasingly, as organizations collect more data about their workforce, employees and shareholders want to benefit from the insights about sustainable performance that are reflected in the data. For employees, human capital reporting metrics such as the diversity of employees and leaders, the amount invested in employee development, the percentage of employees and leaders who leverage training, the retention and turnover rates, and measures of culture like a leadership trust index or employee engagement score may play a critical role in decisions about joining or staying with an organization. For shareholders and investors, rigorous methods of quantifying human capital performance and material impact are critical. They provide information about the allocation of budget and ROI in human capital and serve as an indicator of sustainable business performance. ISO posits that organizations will benefit from adopting standards because they will be better prepared to report on human capital performance, addressing the “S” in ESG (Environmental, Social, and Governance) performance by positioning themselves in the context of sustainable corporate

governance. They will be better able to address sustainable economic value creation through data-driven and evidence-based decision-making regarding the development and positioning of human capital program effectiveness.

Stakeholders are demanding higher levels of transparency related to human capital performance to inform their investment in and patronage of an organization. Research has shown that 60% of consumers place a very high priority on information related to workplace conditions and pay equity practices as a basis of their purchase intent/patronage; priority is also placed on the organization's policies and practices in diversity, equity, inclusion, and culture (Dahlhoff, 2022). Other stakeholders, such as investors and governance monitoring agencies, have continued to pressure organizations to disclose performance information related to human capital sustainability and impact on corporate financial performance. In addition to the SEC, other global agencies are taking action, including the World Economic Forum, the European Financial Reporting Advisory Group (EFRAG), and the International Financial Reporting Standards (IFRS).

Today, many critical metrics and practices are not transparent to the very stakeholders, such as employees, consumers, investors, and policy-makers who need the information in order to start and sustain economic recovery. Moving forward, enhanced transparency around workforce management and human capital measures is needed and demand will continue to grow. Without this data, organizations will have a difficult time adapting to changing markets and workforce needs, building critical partnerships, and attracting customers, or in this case, patients. Such data is critical to building workforce trust and attracting, engaging and retaining the talent that delivers value.

## **CONCLUSION**

### **The Critical Need for Human Capital Measurement Standards and Transparency in Healthcare**

If people are an organization's most valuable asset (and often one of the largest expenses), the organization must strive to understand and manage that asset appropriately, as they do with other assets and investments in the organization. Stakeholders, patients, employees, policy-makers, local communities, other interested parties, and society at large will benefit from greater transparency and disclosure of human capital measurements.

However, standardized human capital measurement and disclosure will only bring about a positive impact if action is taken. The current absence of credible measurement and reporting of human capital in the healthcare industry reveals that our sense of human capital value may be more romantic than pragmatic.

Given that healthcare is ultimately delivered through people, this should be of critical concern to healthcare management. In this paper we have provided evidence of the value of measuring human capital, guidance on how healthcare organizations can use existing standards to quantify and report on this important asset, and made a case for transparent reporting. We maintain that the need for human capital measurement and transparent reporting is more than good management practice; it is a societal issue. No matter how healthy you are, at some point in your life you will need some form of healthcare support. You deserve a clear and transparent view into the alignment of human capital investments and performance-measured against robust standards-of the organization where you receive care.

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