

A large control room with a curved wall of multiple monitors. The monitors display various data including maps, video feeds of buildings and streets, and colorful grid-based dashboards. Several people are seated at desks in the foreground, working at their computers. The room is brightly lit with overhead lights.

The Value of an Operational Platform for Hospitals & Health Systems

White Paper

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Executive Summary

Why Hospitals & Health Systems Need Operational Software Technology to Drive Sustainable Healthcare Delivery

Everyone talks about the emerging decentralized, digital healthcare delivery model accelerated by the COVID-19 pandemic. While health systems should view it as a major priority, the hospital will still and always be the foundation of care delivery for acute care and treatments.

Additionally, for all the hype about the emergence of a decentralized digital healthcare delivery system, that system's two key driving goals are an optimized state of operational efficiency and providing the best clinical care

possible to patients – the hospital must be the starting point towards digital patient care.

Therefore, in practical terms, every hospital needs to reset its mission to become as operationally efficient as possible to best serve its patients, support its care teams and meet revenue goals. Operational Platforms are the engine for achieving these efficiencies and the catalyst for the coming decentralized, digitalized healthcare delivery system.



The State of Hospital Operations: Risks & Threats

Due to many years of inadequately addressing operational inefficiencies, the risks to hospitals cuts across many levels and are at a critical impact point that threatens their very future financial sustainability as an institutional setting for treating large populations of acutely ill patients.

Operational waste across the U.S. healthcare system, according to the latest data, is averaging \$700-\$750 billion annually, with \$125 billion of that figure coming from operational

Devastating Consequences

This operational efficiency crisis can have devastating consequences for smaller hospitals and health systems as they face the same pressures, challenges and risks as larger institutions, but with far fewer resources.

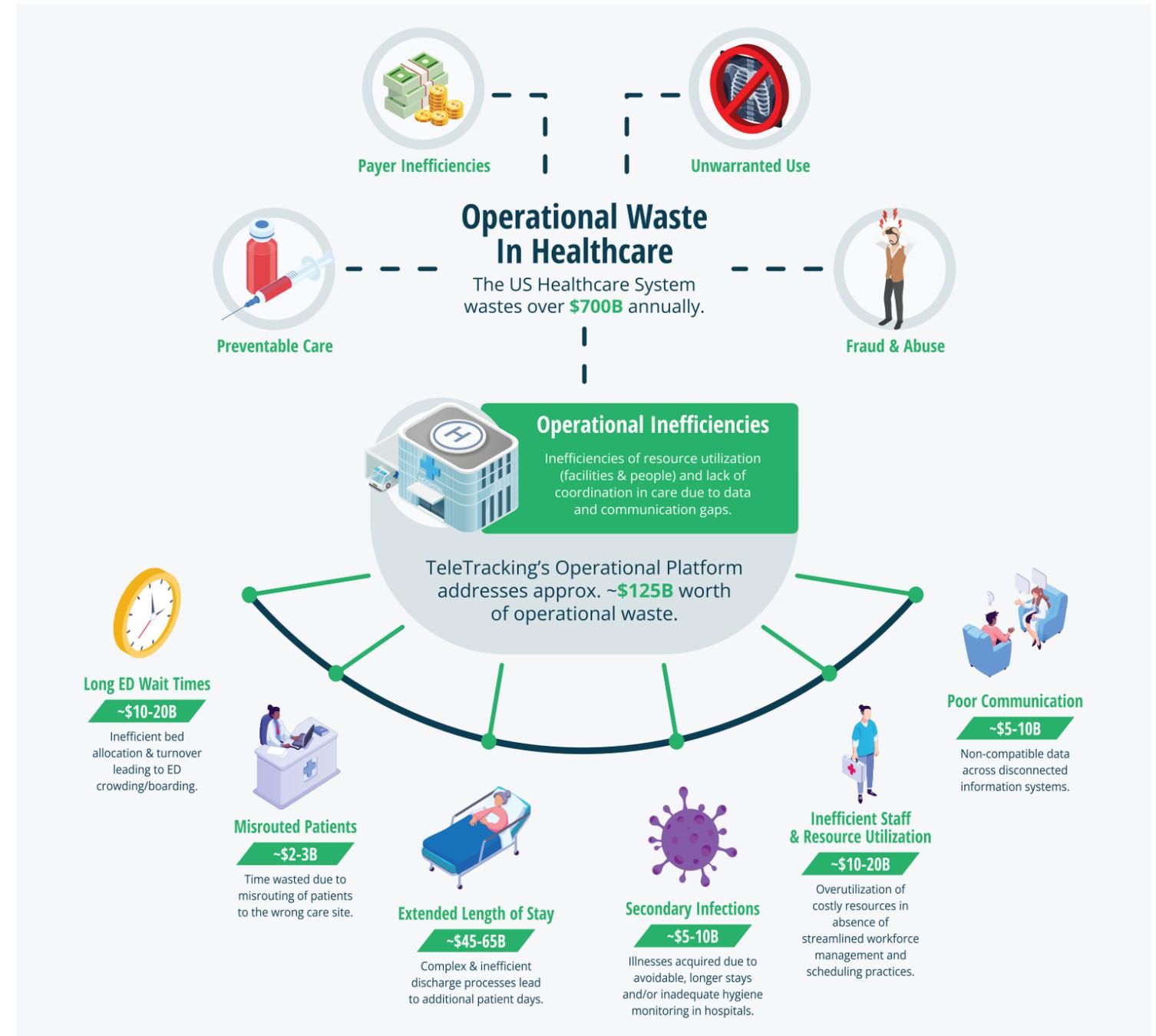
inefficiencies at hospitals and providers. Hospitals, therefore, are wasting between \$560-\$600 billion every year on less than optimized processes for caring for patients. These operational declines not only affect hospital and health system financial performance, but directly impact the quality of clinical care delivered, and ultimately, patient health outcomes and safety.

Healthcare Myopia: Clinical Vs. Operational Focus

As a result of the hospital and health system's lack of focus for many years on operations in favor of advancing best clinical practices for patient treatment and care - and rightfully so - operational inefficiencies have worsened to the point where clinical progress is not being delivered as effectively as it can be.

There are myriad operational red flags that exist across hospitals and health systems today that can result in

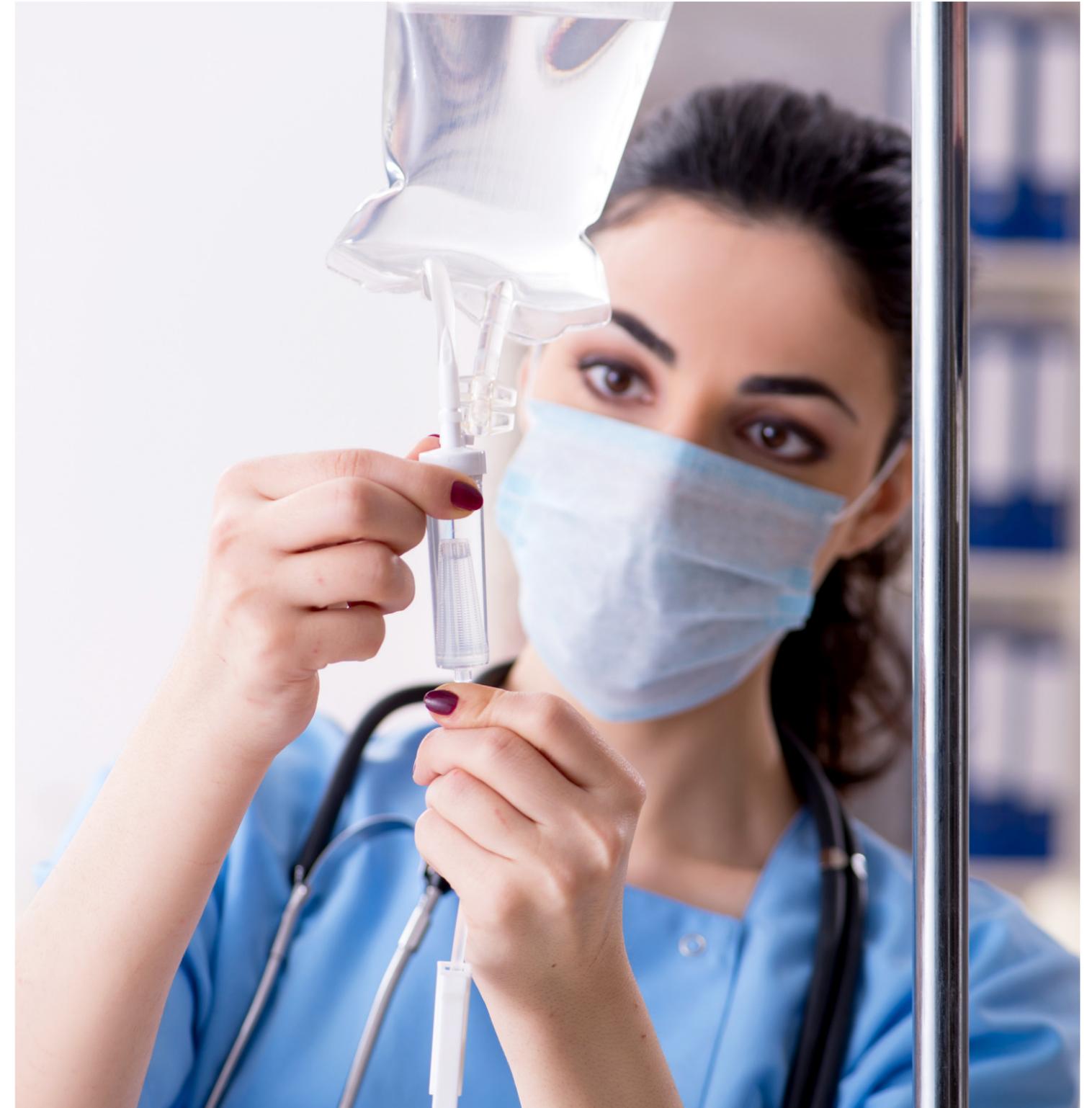
Optimized clinical care cannot be delivered to patients if operational processes are flawed.



jeopardized patient care and safety. These red flags create significant barriers to delivering optimized clinical treatment and/or are drags on continued financial growth and sustainability. Thematically, they are all tied together to a lack of visibility across hospital or system operations, including choke points or breakdowns in multiple operational workflows that are blind spots to capacity and, ultimately, patient care delivery. These bottlenecks result in a significant lack of knowledge between clinical and operational workflows because they don't talk to each other from a process, data and technology perspective, preventing the delivery of a truly integrated patient care model marshalling best clinical approaches across departments and functions through a hospital or system-interconnected care facilities and settings. In fact, healthcare facilities have historically managed workflow processes linearly instead of in a coordinated unison approach because of outdated mechanisms and IT systems for capturing and communicating data.

Moving From Operational-Clinical Disconnect to Interoperability

There needs to be a renewed focus by the U.S. healthcare system on the fact that there is direct correlation between efficient operational processes, including data and logistics management, and best clinical outcomes – that they are interdependent. Optimized clinical care cannot be delivered to patients if operational processes are flawed. If the operational processes for how patients are treated during their care journeys through a hospital or health system are not revamped to create vastly improved efficiencies, even the best clinical treatment practices can be neutralized as they will be hampered in reaching nor fully realized by the total hospitalized patient population at any given time.



Ultimately, the lack of integration between operational and clinical processes, workflows, data and technologies will continue to be a barrier to a 360-degree robust delivery of true integrated care to the patient. The value of what the EMR delivers to care decision-making is undermined without an advanced Operational Platform to ensure its patient clinical data is visible and accessible across all workstreams and workflows by all care provider teams touching a patient's care. In fact, it can be argued, that an EMR in many ways is working in a closed ecosystem in healthcare facilities and systems without strong operational processes supported by a foundational operational technology platform that is scalable and adjustable to changing patient capacity and treatment needs.



EMRs + Operational Platforms: A Powerful One-Two Punch for Care Workflow Optimization

While EMRs have addressed the need for patient care documentation and billing, these systems need a companion Operational Platform to ensure operational and clinical efficiencies can be carried over to support hospital care workflows to create a 360-degree view of patient care. With the emergence of distributed digitally connected healthcare models, [centralized Command Center hubs](#) and Operational Platforms are critical to ensure that the best efficiencies and outcomes are realized from these models. These Command Centers create interconnected points of care through shared visibility to care access, care delivery and care transitions, working with other nodes of care outside of networks to create a boundaryless care ecosystem that [focuses on the patient, not just the bed.](#)

The need for Operational Platforms in combination with EMR technology has even been recognized in [global healthcare markets like the National Health Service \(NHS\)](#) in the U.K., which is a government single-payer system that has been cautious to embrace technology innovations. In fact, there already is ample evidence that Operational Platforms are solving critical inefficiency issues in the U.K. Even now, Maidstone and Tunbridge Wells (MTW) NHS Trust is pioneering the way forward [expanding bed capacity for patient care](#), monitoring and controlling patient flow coming into its Emergency Department and optimizing integrated care opportunities, [utilizing these platform technologies.](#)

A Roadmap for Remediating Operational Risk

Hospitals and health systems need to optimize how their clinical and operational workflows could be more closely integrated. Implementing operational risk assessments to identify vulnerabilities and processes that need to be changed or corrected is a critically important step. These assessments need to be performed to ensure roadblocks in operational processes are fixed before clinical workflows are integrated.

As clinical workflow and documentation technologies are already embedded in many hospitals and health systems across the U.S. today, it is important that operational software technology be implemented as soon as possible, even before operational risk assessments are completed. As risks are uncovered and inputted into operational technology

systems, these platforms can help guide and accelerate the inefficiency fixes needed to smoothly assimilate clinical workflows and technologies like EMRs so both operational and clinical systems talk to each other and exchange data and analytics that always provide a clear view into capacity and patient care performance management.



Hospitals and health systems considering undertaking an operational risk assessment should ask themselves the following questions:

1. What are the clinical and operational challenges my hospital faces today?
2. What are my operational processes for ensuring maximum patient access to my hospital? What are the strengths I can further build on, what are the weaknesses in those processes and what are ways I can work to correct them?
3. What are my operational processes for delivery of patient care at my hospital? What are the strengths I can further build on, what are the weaknesses in those processes and what are ways I can work to correct them?
4. What are my operational processes for handing off my patients to other care settings, what are the strengths I can further build on, what are the weaknesses in those processes and what are ways I can work to correct them?
5. What are my operational processes for maximizing patient capture at my hospital? What are the strengths I can further build on, what are the weaknesses in those processes and what are ways I can work to correct them?
6. What are my processes for optimizing staff workflows and productivity at my hospital? What are the strengths I can further build on, what are the weaknesses in those processes and what are ways I can work to correct them?

The Value & Benefits of Operational Software Technology

While acquiring and implementing technology to help guide and fix operational risks uncovered in the assessment process discussed earlier, hospitals and health systems should conceptually define the building of an Operational Platform as a supporting combination of comprehensive technology solutions and clinical operations expertise.

Operational software systems should accelerate transmission of bed capacity-related information and have the ability to build in controls and other automation tools for optimized coordination of all workflows. They should also be flexible and scalable for creating a centralized Command Center that can provide real-time 24/7 visibility into all workflows across all local health and social care geographies a health system operates in. Additionally,

Operational Platform-enabled Command Centers should be implemented in a cloud environment whenever feasible to ensure the safety and resilience of all workflows and backup of workflow data impacting operations.

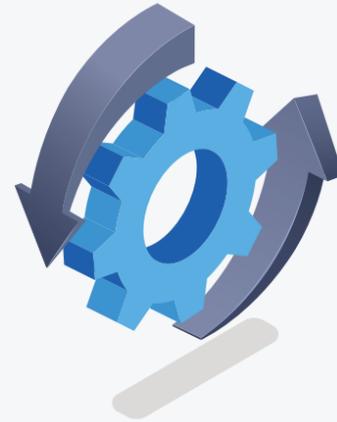
The practical, downstream effects of what operational software platforms deliver for any hospital or health system are:

- ✓ Efficient operations that enable hospitals to treat more patients with the same staff time and other resources
- ✓ Staff that have the right support tools for workflow optimization, reducing staff burnout
- ✓ Decreased need for buying new equipment, getting more out of existing assets
- ✓ Shorter hospital stays translating to higher quality metrics, less opportunities for error, resulting in more satisfied patients and staff

The impact and value of Operational Platforms across a health system or stand-alone unaffiliated hospital can encompass a number of dimensions that include:

- Predicts and troubleshoots patient flow bottlenecks
- Supports future national health or other emergency and disaster preparedness via anticipatory asset and staff resource deployment
- Facilitates optimized clinical care best practices via distribution of EMR and patient treatment data across disparate hospital workflows and systems for shared learnings
- Reduces patient access, flow and discharge inefficiencies responsible for rising operational waste and costs threatening hospital and health system financial sustainability
- Supports operational and organizational process changes that drive innovation and continuous improvement
- Streamlines care team data overload converting it to user-friendly digestible analytics for guiding needed operational changes and improving clinical efficiencies across care settings
- Provides a real-time line of sight into where patients, staff and medical equipment-related assets are at all times, cutting unnecessary new equipment purchases and balancing resource utilization efficiently hospital-wide that increases care staff time with patients

Operational Platforms deliver not only operational and financial benefits to hospitals and health systems but direct clinical advantages that complement EMRs and clinical documentation.



Staffing & Resource Utilization

- Real time electronic whiteboards
- Integrated care progression indicators and discharge milestones
- Shared resource and asset visibility
- Nurse time delivered back to patient care from administrative tasks
- Real time communications on patient care progress

Operational

- Centralized view of capacity across acute care and post-acute care network and settings
- Organization-wide workflow management and patient placement
- Centralized referral/transfer management
- Scalable Command Centers
- Shared communication for improved operations
- Predictive and prescriptive data and analytics

Financial

- Reduction in lost bed time
- Decrease in Length of Stay (LOS)
- Increase in OR utilization
- Rise in transfer volumes
- Reduction in diversion hours
- Decrease in ED boarding
- Reduction in same day cancelled procedures

Conclusion

The hospital-centered model of healthcare has never been under more pressure, with rising costs, increasing nurse and staff shortages, higher patient demands and uneven patient access to care than it is today. Digitalization is an added challenge hospitals and health systems must embrace to survive. Hospitals, therefore, need to ensure their operations continue to become more and more optimized to navigate these challenges while hospital technology systems need to work seamlessly together to create true system-wide interoperability.

As healthcare evolves and requires better interoperability, Operational Platforms will remove the labor-intensive and manual task-related inefficiencies within the hospital, acting as the nerve center for centralizing operational data insights. These insights will be necessary for hospitals and health systems to evolve and will be a key driver of the distributed digital healthcare ecosystem model that is emerging.

TeleTracking is an integrated healthcare operations platform that is Expanding the Capacity to Care™ by combining comprehensive technology solutions with clinical expertise. Our products and services help streamline care delivery and reduce delays. We understand that for every hour a patient waits to be seen, they face objectively worse outcomes; so our mission is simple—to ensure that no one waits for the care they need.



info@TeleTracking.com | 800-331-3603 | TeleTracking.com

