Better care coordination requires streamlined, efficient, secure clinical communication

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Care fragmentation and other inefficiencies cost the healthcare system at least $130 billion each year, according to estimates from the Institute of Medicine.[1] No wonder, then, that effective care coordination is viewed as essential for improving the healthcare system and achieving better patient outcomes.[2]

Less widely known is how vital care coordination is to health systems' efforts to maintain their financial viability. New reimbursement models tie financial rewards and penalties to patient outcomes, such as 30-day readmission rates, that are directly related to the quality of care transitions and other aspects of well-coordinated care. The Institute of Medicine's landmark report, "Crossing the Quality Chasm," recognized the importance of effective communication to care coordination with the recommendation that "Clinicians and institutions should actively collaborate and communicate to ensure an appropriate exchange of information and coordination of care."[3] To achieve the level of care coordination required today, healthcare organizations must ensure that communication between clinicians is streamlined, efficient and secure.

The current state of clinical communications: Inefficient and error-prone

Unfortunately, clinical communication is suboptimal in many healthcare organizations. Gaps in communication have been repeatedly identified as one of the top three causes of medical errors.[4] These errors directly affect quality of care and patient safety. Communication gaps also introduce waste and inefficiencies.

Rather than a tool to enable care coordination, all too often the clinical communication process is a barrier that staff and clinicians learn to work around. For example, veteran nurses may keep a list of physicians' personal cell phone numbers to use in emergencies; such alternative work pathways introduce additional sources for human error and fail to address the lack of a reliable, effective system for communicating with physicians. Delayed or failed communication also impacts the patient experience. For example, a call placed to the incorrect physician may delay an order for pain medication or for discharge, prolonging the time that the patient is in need or waiting to leave the hospital.

These and other inefficient, error-prone communication processes not only affect clinicians' abilities to work effectively in teams, but also job

satisfaction. And with the current shortages of nurses and primary care physicians in many regions, creating more effective work environments will become increasingly important.

Ineffective clinical communication is costly. A study by Agarwal, Sands and Schneider published in the Journal of Healthcare Management found that the average 500-bed U.S. hospital loses more than $4 million annually due to communication inefficiency.[5] Security breaches with loss or compromise of electronic protected health information is a significant concern and another potential cost of an ineffective communication process. A 2014 study found that 90 percent of the hospitals and clinics surveyed reported at least one breach in the past two years. The average cost of breaches during the previous two years was $2 million per organization.[6]

In today's healthcare environment, improved care coordination is a necessity. A comprehensive, efficient communication process is the first step.

The obstacles to care coordination

Healthcare organizations must ensure that communication between clinicians is streamlined, efficient and secure to manage the health and wellness of their communities. The aforementioned report by the Institute of Medicine recognizes the importance of effective communication to care coordination and highlights some of the challenges.

"Although the need for care coordination is clear, there are obstacles within the American healthcare system that must be overcome to provide this type of care. Redesigning the healthcare system in order to better coordinate patient care is important for the following reasons:

- Current health care systems are often disjointed, and processes vary among and between primary care sites and specialty sites.

- Patients are often unclear about why they are being referred from a primary care physician to a specialist, how to make appointments and what to do after seeing a specialist.

- Specialists do not consistently receive clear reasons for the referral or adequate information on tests that have already been done. Primary care physicians do not often receive information about what happened in a referral visit.

- Referral staff deal with many different processes and lost information, which means that care is less efficient."[3]

New initiatives have been developed to help care teams more effectively manage care transitions. Payment reform is also underway to restructure fee-for-service payments to ensure smooth transitions by promoting teamwork and collaboration across care settings.

By facilitating communication and collaboration between clinicians, PerfectServe is able to provide health systems with a number of key elements that enable them to improve care coordination and transitions.

Addressing clinical communication needs with PerfectServe

PerfectServe Synchrony™ is a multimodal, interoperable and secure comprehensive communications and collaboration platform that addresses the full suite of communication needs of care team members across the continuum. PerfectServe Synchrony routes voice, text and Web- and system-generated communications based on clinician workflow and personalized algorithms, allowing physicians, nurses and other care team members and practice groups to selectively filter and control when and how they are contacted. PerfectServe's rules engine filters communication events based on multiple variables unique to each clinician, which can be updated easily via a phone or mobile device.
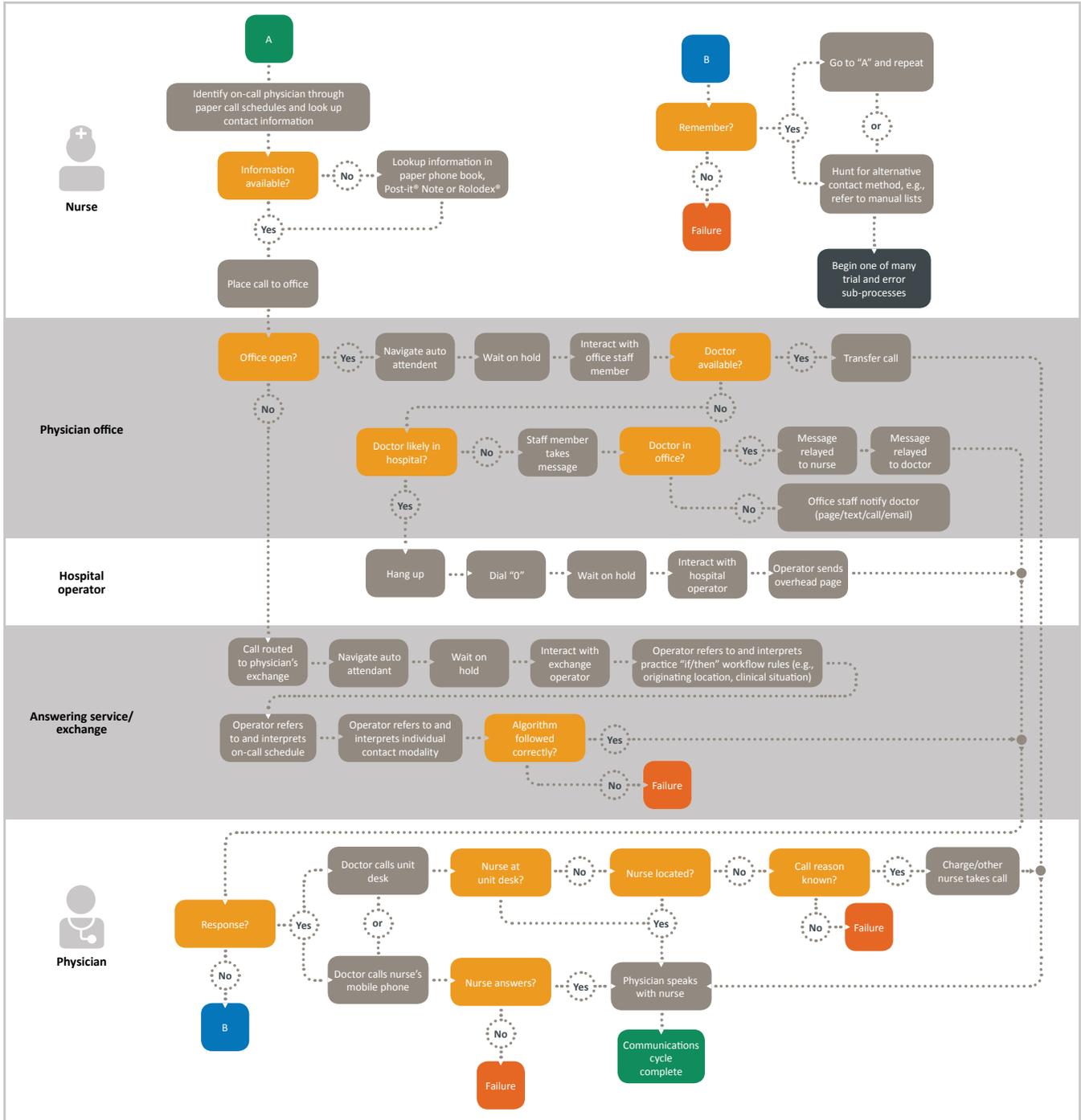
To contact a physician using PerfectServe, the individual calls a single extension or uses the web-based texting function. By indicating either the physician's name or specialty, the caller is automatically connected to the physician via the mode of communication preferred by the physician at the time. If the physician prefers not to take the call or text at the time, a message is sent. Either way, the contact is tracked and documented. The caller does not need to know the physician's call schedule beforehand— PerfectServe stores this information and routes calls and messages accordingly. Data are housed securely in PerfectServe's secure cloudbased infrastructure, ensuring compliance with HIPAA regulations.

To date, PerfectServe has helped more than 50,000 physicians and 118 hospitals nationwide address their communication issues and improve efficiency.
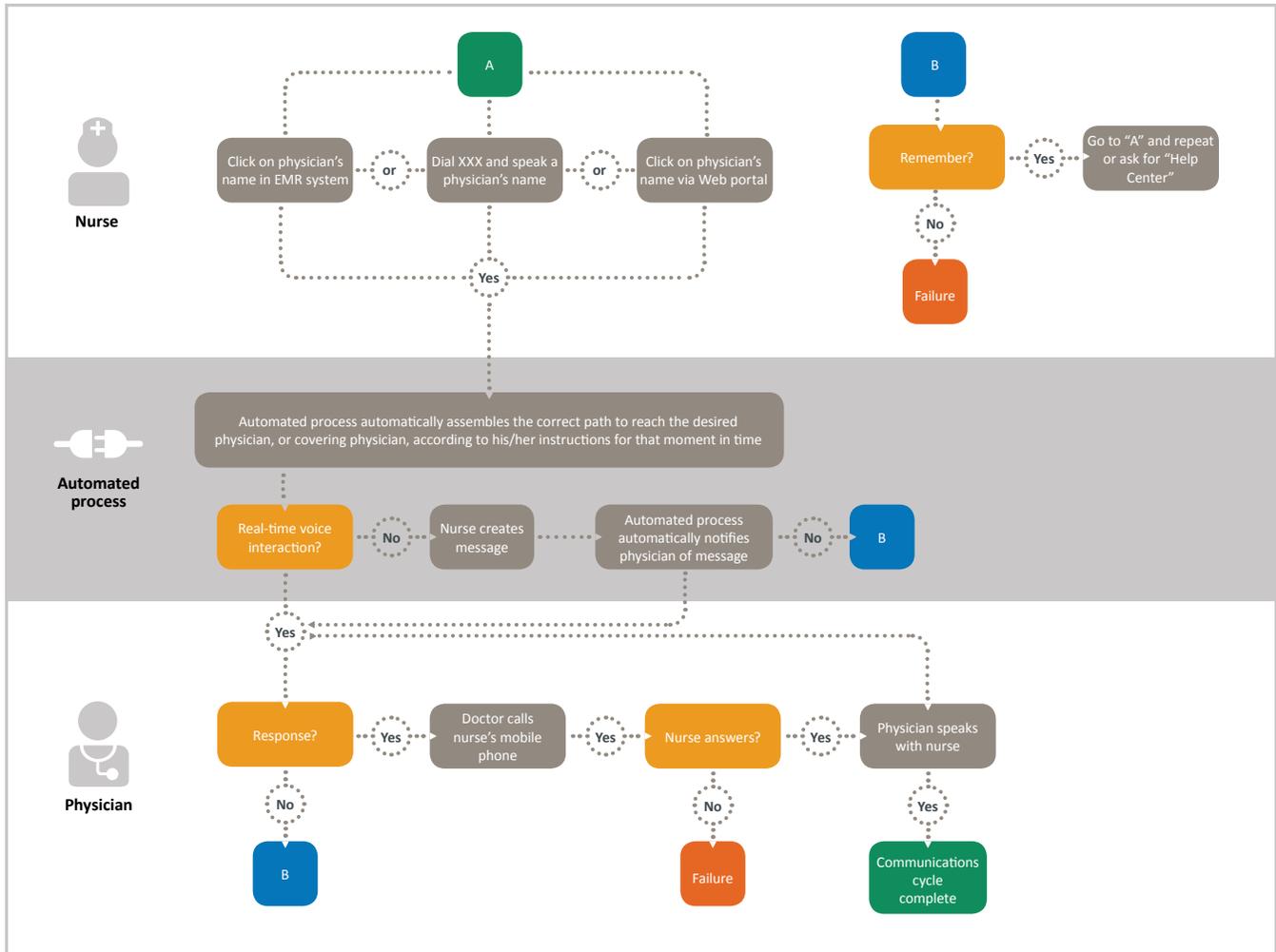
Advancing care coordination

PerfectServe helps organizational leaders advance care coordination in several ways. By reducing variability and increasing the efficiency of the communication process, PerfectServe allows physicians, nurses and other care team members to operate more effectively and readily participate in information exchange.

Streamlining nurse-to-physician communication. By reducing the cycle time of each clinical communication event, PerfectServe reduces unnecessary delays in decision-making. Prior to PerfectServe implementation, the nurses at a 200-bed hospital in California used an onerous system to contact physicians about patient needs. The process included numerous steps during which a gap or error could occur. After the PerfectServe implementation, the communication process consisted of fewer steps and had less variability (see charts). The average cycle time for nurse-to-physician communication was reduced by 60 percent compared to pre-implementation.

Pre-implementation process at a 200-bed hospital

Nurse

- A
- Identify on-call physician through paper call schedules and look up contact information
- Information available?
  - No → Lookup information in paper phone book, Post-it® Note or Rolodex®
  - Yes → Place call to office
- B
- Remember?
  - Yes → Go to "A" and repeat — or — Hunt for alternative contact method, e.g., refer to manual lists → Begin one of many trial and error sub-processes
  - No → Failure

Physician office

- Office open?
  - Yes → Navigate auto attendent → Wait on hold → Interact with office staff member → Doctor available?
    - Yes → Transfer call
    - No → Doctor likely in hospital?
      - No → Staff member takes message → Doctor in office?
        - Yes → Message relayed to nurse → Message relayed to doctor
        - No → Office staff notify doctor (page/text/call/email)
      - Yes → (Hospital operator)
  - No →

Hospital operator

- Hang up → Dial "0" → Wait on hold → Interact with hospital operator → Operator sends overhead page

Answering service/exchange

- Call routed to physician's exchange → Navigate auto attendant → Wait on hold → Interact with exchange operator → Operator refers to and interprets practice "if/then" workflow rules (e.g., originating location, clinical situation)
- Operator refers to and interprets on-call schedule → Operator refers to and interprets individual contact modality → Algorithm followed correctly?
  - Yes →
  - No → Failure

Physician

- Response?
  - Yes → Doctor calls unit desk — or — Doctor calls nurse's mobile phone
  - No → B
- Doctor calls unit desk → Nurse at unit desk?
  - No → Nurse located?
    - No → Call reason known?
      - Yes → Charge/other nurse takes call
      - No → Failure
    - Yes → Physician speaks with nurse
- Doctor calls nurse's mobile phone → Nurse answers?
  - Yes → Physician speaks with nurse
  - No → Failure
- Physician speaks with nurse → Communications cycle complete

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Post-implementation process at a 200-bed hospital

In addition, by offering a secure means for sending text messages, nurses were able to safely include more detailed information in their communication to physicians, improving the physician's ability to respond quickly to a specific patient need and removing waste from the communication process.

Fostering improved physician-to-physician communication.
PerfectServe allows physicians to easily contact their colleagues. The calling physician can access the feature via a smartphone app or by dialing a toll-free number. This feature allows him or her to bypass an answering service, front-office staff or a switchboard to quickly contact colleagues for real-time consultations on patient care issues. If the receiving physician is unavailable, the calling physician can leave a secure voice message, which

the recipient will receive either immediately or at a predefined future time.

A health system in the Midwest implemented PerfectServe to address inefficient communication processes. Implementation of PerfectServe streamlined communication between hospitalists, emergency department physicians and primary care physicians. In addition to a more efficient communication process among the physicians, the health system saw an increase in referrals to the hospitalist practice from outside physicians, who had previously referred patients to competitors because of the difficulty they experienced when trying to contact the hospitalist practice. This enabled physicians to have more control over the communications they received, to have easy and immediate access to colleagues and to know that pertinent information was filtered and delivered appropriately.

Accelerating team notification. The ability to mobilize specialized multidisciplinary teams quickly is essential to achieving care coordination for acute events. A health system in Michigan used PerfectServe to streamline communication at its designated stroke center. Acute stroke treatment is now a standardized process, based on reliable, rapid team notification. The ED staff makes a single call to PerfectServe; the on-call schedules are automatically analyzed through PerfectServe. The entire acute stroke care team is contacted simultaneously based on the individual preferences of team members and the specific rules established for the team. Physicians are able to differentiate acute stroke alerts from less urgent calls and can respond more quickly. Leaders can easily track and analyze call times and patient data. Using these data, they can identify and address areas of concern.

With the new process in place, neurologists on call for acute stroke respond to an ED call in an average of two minutes, down from an average of 22 minutes prior to PerfectServe implementation. The average time from door-to-completion of a CT scan was reduced from 78 minutes to 46 minutes.

Improving the patient transfer process. Communication efficiency is especially important during clinical transitions, such as patient transfers. A health system in the Atlanta area sought to improve the process by which patients are transferred to an acute care facility within the system. The system partnered with an external transfer center and expanded

PerfectServe to include the center. Working with staff from the health system and the transfer center, PerfectServe created a tailored algorithm to facilitate streamlined communication for all transfers. The algorithm included "quick phrases," which the transfer center staff can use to speed requests to a physician on call. For example, the staff member can call the PerfectServe number and say, "trauma surgery," and immediately be connected with the trauma surgeon on call.

In the first year after implementation, the center processed almost 2,700 transfers. The majority (87 percent) of communication events initiated by the transfer center received a response from a physician within five minutes. More than half of these responses were received in less than a minute, meaning that the transfer agent was able to speak directly to the physician responsible for accepting the transfer. With the improved communication process, the health system has seen improved efficiency, such as a reduction in the door-to-balloon time for patients with acute cardiac events. In addition to streamlining the care process, the health system has seen a 30 percent increase in referrals from hospitals outside the system.

Timeliness of communications
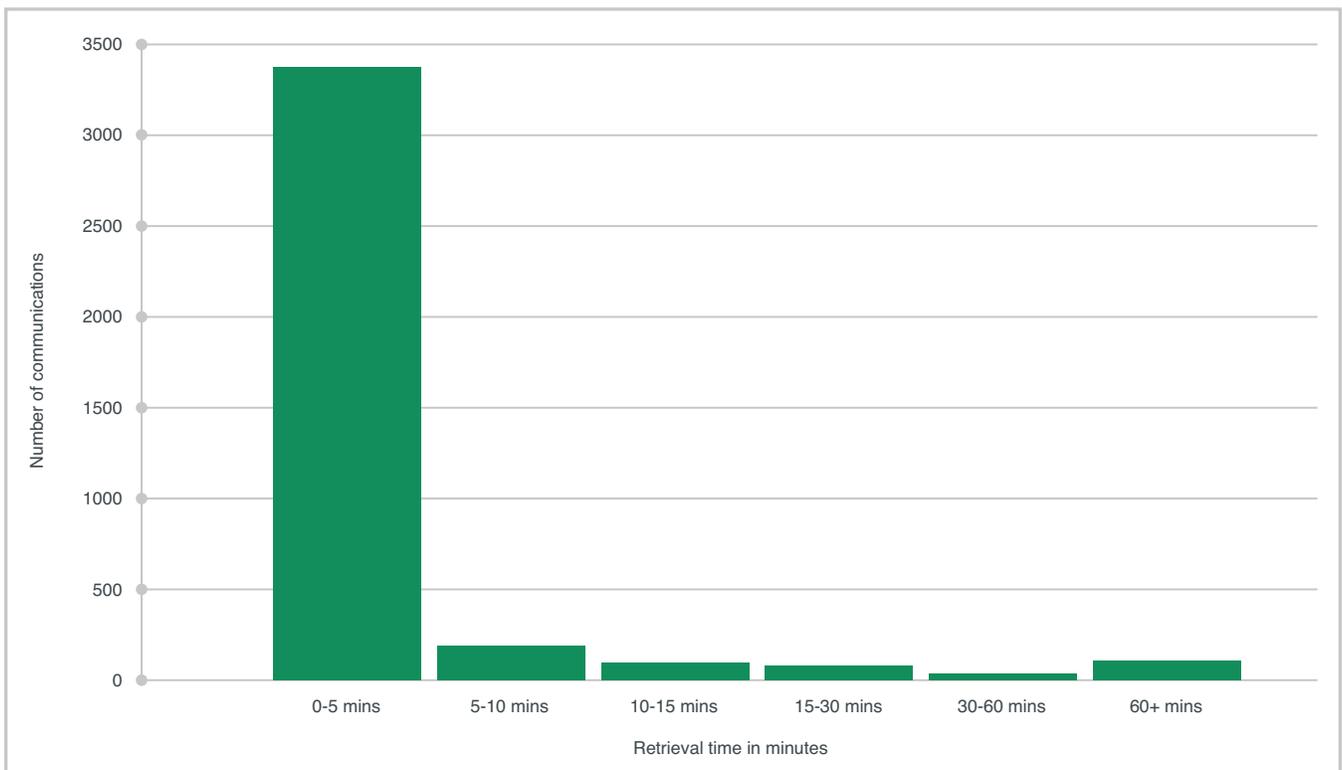
Conclusion

Lack of care coordination—which exists in our current system—fuels fragmented health care, treatment errors, preventable hospital readmissions and unnecessary costs. Healthcare leaders must rely on seamless care coordination both inside and outside the walls of the hospital if they are to survive in the current reimbursement environment. Repeated studies have shown that efficient, secure clinical communication is an essential foundation for care coordination.

PerfectServe provides healthcare's only comprehensive and secure communications and collaboration platform. The company's solution unites physicians, nurses and other care team members across the continuum and facilitates timely interaction among them. The PerfectServe platform automatically identifies and provides immediate access to the right care team member, enabling effective population health management through communication-driven workflows. More than 100,000 clinicians in organizations such as Advocate Healthcare, Ascension Health, Covenant Medical Group, Hoag, MemorialCare Health System, Orlando Health, St. Joseph Health System and WellStar Health System rely on PerfectServe to help them speed time to treatment, promote physician alignment, enhance the consult process, increase transition efficiency, provide nurses more time for direct patient care and reduce HIPAA compliance risk. Headquartered in Knoxville, Tennessee, PerfectServe has been serving the needs of forward-looking healthcare provider organizations since 2000. Follow us on Twitter, LinkedIn and Facebook and subscribe to our blog.

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