Weakened Weekends

Why Americans Should Expect More from our Healthcare System on Weekends

Daphne Laurel Bernstein

A Capstone Project
Submitted in partial fulfillment of the requirements for the degree of
MS Gerontology – Management of Aging Services
University of Massachusetts, Boston
Morris Bernstein fell and suffered a fractured hip just days before Christmas, 2005. His surgery was postponed until after the holiday. He was later transferred to a skilled nursing facility for rehab just before New Year’s Day. An older, but relatively healthy man, with great character and spirit, passed away on January 2, 2006. A lingering question remains...Would the outcome have been any different had it not happened during the holiday season? This is in dedication to his memory.
Escalating healthcare costs have put our seniors, our healthcare system and our economy at risk. In recent decades, healthcare expenses have increased more than the Gross National Product (GNP), and it is expected that these costs will continue to soar in upcoming years as baby boomers increase utilization of acute and long-term care services. Because healthcare costs have grown at such a rapid rate, it creates a serious national problem that must be addressed. In response to this concern, measures to find new care efficiencies have been proposed and implemented, and policy makers have pushed through various pieces of significant legislation, including the Affordable Care Act of 2010 (ACA).

Since the year 2000, healthcare spending has doubled, putting great strain on the Medicare and Medicaid programs, which supported 45,830,913 beneficiaries in the year 2012. These programs amount to 22% of the $3.6 trillion in federal spending. Most of the $567 billion in Medicare payments were spent in three areas:
- Inpatient hospital stays – 25%
- Medicare advantage plans – 22%
- Physician services – 14%

As a whole, Medicare accounts for one-third of the national deficit, and there is great concern that this amount will increase as 20% of Americans will be age 65 or older by the year 2030. This poses a threat to our Medicare program and to the seniors who rely on coverage to meet their medical needs. One of the biggest challenges in relation to Medicare spending is the high cost of chronic disease management. Chronic disease management consumes 75% of all Medicare spending, even though it is applied to a relatively small portion of all Medicare beneficiaries. (Peikes, Chen, Schore, Brown, 2009) Fifty percent of Medicare beneficiaries receive care for one or more of six common chronic diagnoses, including diabetes, heart failure, chronic obstructive pulmonary disease (COPD), cancer, chronic kidney disease (CKD), or depression. The most common of these diagnoses is diabetes, with nearly one-fourth of all Medicare beneficiaries receiving treatment for this condition. The cost of care escalates with each additional chronic condition.

The average Medicare annual payment amounts for those with multiple chronic conditions is high due to healthcare service utilization and increased hospitalizations among this population. Utilization within each care setting grows as the number of chronic conditions increase. Compared to Medicare beneficiaries that have no chronic conditions, those with one chronic condition are three times more likely to be
hospitalized, and those with three or more chronic conditions are 27 times more likely to be hospitalized. (Schneider, O’Donnell, and Dean, 2009)

For those who are hospitalized, re-hospitalizations are common, with 20% of all hospitalized Medicare patients being re-admitted within 30 days of discharge from the hospital. Several causes for re-hospitalizations have been identified, including poor care coordination, lack of patient education and follow-up, failure to address significant end of life issues, patient non-compliance, and poor medication management. Because in-patient hospitalization is the largest Medicare expense item, it represents the greatest area of opportunity for Medicare cost savings. Therefore, avoiding unnecessary hospitalizations and re-hospitalizations is a primary focus in healthcare reform strategies. Efforts to reduce unnecessary hospitalizations are being encouraged through changes in reimbursement, and tested through the implementation of various demonstration projects.

Among the proposed changes in reimbursement, is that healthcare providers will experience a 10% reduction in Medicare payments by the year 2019. Hospitals may face some of the biggest challenges in Medicare payment reductions, as hospitals with higher than national average rates for re-hospitalization will begin to be assessed penalties of up to 1% of Medicare payments, beginning in the year 2013. These penalties are significant and are causing hospital systems to rethink their discharge planning processes and to seek partnerships with outside healthcare organizations since re-hospitalization decisions are many times influenced by physicians and post-acute care providers.

A variety of demonstration projects have been initiated to test approaches designed to reduce Medicare spending and to avoid unnecessary hospitalizations. These demonstration projects fall under two major categories: (1) Value-based or bundled payment systems, and (2) disease management and care coordination programs.

Value-based payment systems are designed to incentivize healthcare providers on performance, by providing incentives for improved patient outcomes and efficiency of patient care. There are two broad approaches for these demonstration projects: (1) Pay-for-performance programs, where providers are paid incentives for achieving quality targets, and (2) bundled payment systems, where a group of various providers share a single payment for all services provided during one episode of care.

Within these value-based payment programs, providers have the option to form or enter into an Accountable Care Organization (ACO), or become part of a medical home (MH), also known as a patient-centered medical home (PCMH). An Accountable Care Organization is a group of partnering providers who receive a single comprehensive Medicare payment during an episode of care. Working together to achieve higher quality outcomes, the ACO group of providers has the opportunity to receive additional payment rewards for achieving care efficiencies and producing improved patient outcomes. A patient-centered medical home is a care model led by a medical provider overseeing the comprehensive and continuous care needs through a coordinated network of care and service options.

These new initiatives and care models encourage providers to examine their business practices and challenge healthcare organizations to achieve improved quality standards. Collaboration among providers, improved communication processes,
incentives to find new efficiencies in care systems, and patient-centered initiatives are designed to achieve improvements in our healthcare delivery system. While there is hope that these programs will help us reduce unnecessary medical expenses, we have not yet realized significant reductions in unnecessary hospitalizations or Medicare spending.

In January, 2012, the Congressional Budget Office (CBO) released two reports with their findings on the outcomes achieved in the value-based payment demonstration projects and in the care coordination and disease management demonstration projects. While parts of these demonstration projects suggest some potential in reducing Medicare spending, these programs, on average, have failed to meet primary objectives in reducing Medicare payments and avoiding unnecessary hospitalizations.

Only one out of four value-based payment demonstration projects was successful in meeting primary objectives to reduce Medicare spending, and that was simply due to the providers in this project agreeing to accept a 10% reduction in Medicare payments for all services rendered. None of the other value-based payment programs were successful, either because provider incentives for quality ratings wiped away any cost savings, or because providers may have manipulated diagnostic coding practices to make patient outcomes appear more favorable.

Care coordination and disease management demonstration projects aim to improve the coordination of care as patients transition from one care setting to the next, and help patients avoid complications that may lead to a re-hospitalization event. These strategies typically involve additional resources, such as case management, to monitor and consult with patients before and after discharge from the hospital. Post-discharge follow-up may be done over the telephone, but could also involve in-person visits to the patient at his/her home or other care setting. Improved communication to the patient’s primary care physician is also a common element in these programs. Similarly, disease management programs provide outreach to patients as they transition across the care continuum, providing patients with information regarding their chronic condition(s) and helping them to manage symptoms effectively. Most of these types of demonstration projects utilize similar processes to improve care coordination and to ensure effective disease management.

The CBO evaluated the 34 programs that participated in six major disease management and care coordination demonstration projects. All of these programs aimed to reduce Medicare costs by reducing hospitalizations. While
there was great support and anticipation for these demonstration projects, “the 34 programs had little to no effect on hospital admission or regular Medicare expenditures” and “Medicare spending was either unchanged or increased in nearly all of the programs.” These programs also had little to no effect on the processes, care measures, and quality indicators. (Nelson, 2012) The main reason why these programs resulted in an unanticipated increase in Medicare spending was due to the expense required for additional case management and other resources.

None of these proposed initiatives can be successful, alone or combined with other strategies, as long as there are variances in how our healthcare system functions on weekends compared to weekdays, which involves a significant decrease in medical staffing and resources, and limited accessibility to needed services on weekends.

There were, however, some successes noted in these demonstration projects. For example, it was found that significant in-person interactions with patients can reduce hospitalizations by at least 10%, and that programs in which fees were at risk, resulted in the largest cost savings.

Overall, the Congressional Budget Office has determined that value-based payment, and disease management and care coordination demonstration projects have, on average, failed to meet program objectives to reduce hospitalizations and achieve a Medicare cost savings.

As a nation, we have invested a tremendous amount of resources on these demonstration projects, with relatively little success. Policymakers and providers are working together to explore possible solutions as we head toward the risk of a “fiscal cliff” and further complications to our provider and payment systems. Perhaps, it is time for us to consider one aspect that hasn’t received much attention, and that is the fact that our healthcare system stalls outside of normal business hours, particularly on weekends.

None of these proposed initiatives can be successful, alone or combined with other strategies, as long as there are variances in how our healthcare system functions on weekends compared to weekdays, which involves a significant decrease in medical staffing and resources, and limited accessibility to needed services on weekends.

Most healthcare professionals agree that there is a definite difference in the way that healthcare organizations function on weekends compared to weekdays, and that this differential creates complications that may negatively impact care practices and patient outcomes. However, little research has been done to study these differences, and the impact that weekends may have on quality service delivery and clinical results.

At a time when policymakers and industry experts are seeking solutions to improve efficiencies, achieve better clinical outcomes, avoid unnecessary hospitalizations, and decrease healthcare costs, looking at ways to improve weekend care practices and eliminating the “weekend effect” may be key in helpings us achieve
better patient outcomes, avoiding unnecessary hospitalizations, and reducing Medicare spending. As one physician states, “The consequences of service deficiencies during off-hours include higher mortality and re-admission rates, more surgical complications, and more medical errors. Given the health care industry’s renewed focus on ensuring patient safety and providing high-quality medical care, why hasn’t the situation changed?” (Shulkin, 2008)

Research on the differences between weekend and weekday care practices is extremely limited. Following, is an examination of these findings from acute care and other care settings.

### Previous Research

Most of the previous research done on out-of-hours healthcare services centers on the clinical practices and outcomes in the acute care settings, and typically focuses on either a specific diagnosis, or on a specific specialty unit in the hospital, such as the emergency department (ED) or the intensive care unit (ICU). Perhaps one reason why most of the research has been focused on the acute care environment is because inpatient hospital care is central to the healthcare reform debate and a major factor in increased healthcare spending.

Almost one in five hospital stays begin on either a Saturday or a Sunday, with a lower percentage of elective admissions experienced on the weekends compared to during the week, and a higher percentage of weekend admissions coming through the emergency department (65% on weekends compared to 44% during weekdays). Other than labor and delivery, the most common reasons for hospital admission during the weekend are pneumonia, cardiac-related conditions, blood infections, mood disorders, and chronic obstructive pulmonary disease. For these patients admitted on the weekends, delays in treatment and major procedures are common, with weekend admissions receiving 36% of their major procedures during their entire stay on the first day of admission, compared to weekday admissions receiving 65% of their major procedures during their entire stay on the first day of admission. In other words, this study indicates that weekend admissions receive one-half of the major procedures during the first day of admission compared to the percentage of major procedures that patients receive during the first day when admitted during the week. (Ryan, 2010)

Studies show that weekend admissions are associated with higher mortality rates and extended delays in diagnostic testing, treatment, and surgery. Many of the studies that have been conducted in the evaluation of outcomes related to weekend hospital admissions have
highlighted emergency admissions for time-sensitive conditions, such as myocardial infarction, stroke, chronic obstructive pulmonary disease, and aortic aneurism. Some studies have measured outcomes in high-acuity locations within the hospital, such as intensive care units, operating rooms, emergency rooms, and safety-net teaching hospitals. Most of these studies suggest a correlation between emergency weekend hospital admissions and an increase in unfavorable outcomes, commonly referred to as “the weekend effect”.

Several studies show evidence that there is an increase in mortality for patients exhibiting acute myocardial infarction when admitted on the weekends compared to weekdays. One study suggests that higher mortality rates in these weekend admissions is a result of a lower rate of invasive cardiac procedures during weekend hours, and that better access to medical care on weekends could improve patient outcomes. (Kotis, 2007)

Patients admitted to the hospital on weekends with other diagnoses and care needs can also experience delays and differences in clinical protocols. An older study revealed that patients with left-sided diverticulitis present a higher risk and have worse short-term outcomes when admitted to a hospital on a weekend compared to those admitted during the week. (Worni, 1960) Patients admitted to a hospital with acute nonvariceal upper gastrointestinal hemorrhage on the weekends have a higher mortality rates, and lower rates of early endoscopy, compared to similar patients admitted during the week. (Ananthakrishnan, 2009)

Compared to weekday admissions, patients admitted on the weekends with other conditions are also likely to experience gaps in treatment times. When admitted on the weekend, non-hip fractures experience surgical repair delays, and patients with angina, acute cholecystitis requiring gall bladder removal, and complicated hernia requiring hernia repair, experienced delays in more than two days for treatment. (Ryan, 2010)

There has also been some research related to the differences in out-of-hours care that is specific to specialty units within a hospital. For example, one study found that patients admitted to an intensive care unit (ICU) on a weekend had a significant increase in mortality rates (Mourad, 2011), and another study showed that there was no variance in patient outcomes for patients admitted to an intensive care unit when staffing patterns were enhanced to include 24/7 onsite intensivists. (Arabi, 2006)

If patient outcomes on an intensive care unit are the same for patients admitted during the weekend as they are during the week when there is no variance in staffing patterns, then could hospital weekend staffing variations be a key reason for higher mortality rates and less desirable outcomes for patients admitted to the hospital on the weekend compared to during the week? Absolutely.
In one examination of various studies related to hospital care during out-of-hours, clinical staffing levels were lower on weekends than on weekdays and hospitals functioned less effectively during these hours. Weekends, particularly, were associated with higher mortality rates among diverse patient populations. (Cordova, 2012)

Weekend staffing variations among clinical personnel is not the only difference in hospital staffing patterns, and studies find that there is also a lack of the hospital administrative teams, senior management staff, department chairs, nurse managers, and professional staff. Decreased management oversight and reduced experienced and skilled resources lead to system inefficiencies and could negatively impact patient care. “Silent hospital corridors can also reflect sparse staffing and a lack of institutional leadership, which make important hospital services and consultative expertise difficult to obtain.” (Shulkin, 2008)

Alterations in physician availability during weekends may also negatively impact patient care. Studies show that weekend physicians, who are typically less familiar with patients, are more likely to handoff care to another provider, even though frequent handoffs between physicians is linked to poor outcomes and adverse events. (Mourad, 2011) Transferring care responsibilities from one physician to another poses additional threats of medical errors, as does transitioning patients from one level of care to another.

Discharge planning is considered to be extremely important in safely transitioning patients to the next care setting, in reducing unnecessary re-hospitalizations, and avoiding additional and unexpected healthcare costs. For older patients, effective transitional care is critical in ensuring success in the next care setting and preventing avoidable health complications. “Especially in an elderly population, cycling into and out of hospitals can be emotionally upsetting and can increase the likelihood of medical errors related to care coordination.” (Mor, 2010)

Transitioning from one care setting to the next, is often traumatic to the patient and the family, and can lead to medical errors. Particularly for the oldest and most frail patients, such as nursing home residents, these transfers to and from the hospital create complications and risk. “It is well established that transferring a patient from a familiar environment (e.g. the SNF/NF where s/he resides) to a new, unfamiliar, and potentially bewildering location like an emergency room can cause severe and sometimes permanent decompensation and lead to medical errors.” (American Medical Directors Association, 2010) Long-term care providers and physicians frequently observe the negative consequences that result from intra-facility transfers. “Frail nursing home residents are sensitive to small changes in environment and susceptible to iatrogenic infections.” (Young, 2010)

Discharge planning becomes very difficult to effectively coordinate care interventions when the care continuum is fragmented, then complicated by weekend barriers. “Lack of coordination in the handoff from the hospital to community care,
growth of the hospitalist movement that contributes to handoffs, gaps in social supports, high rates of low health literacy, and poor delineation of discharge responsibilities among hospital staff all place patients at high risk of post-discharge adverse events and re-hospitalization." (Greenwald, 2007) Post-acute providers may face delays in reaching the physician accepting responsibility, and achieving physician-to-physician collaboration is problematic. (American Medical Directors Association, 2010) Additionally, skeleton staffing of case management and discharge planning teams that may be less familiar with patients and available community resources, may compromise transitional care plans.

There are many complications in transferring information from one care setting to the next, particularly on weekends. Medication reconciliation is a challenge for the receiving post-acute care provider when pharmacy services are limited on weekends and it may be difficult to reach a contact person on the hospital floor. Additionally, post-acute care providers may have difficulty communicating directly with the discharge planner and receiving valuable information.

Post-acute care providers typically also experience significant differences in weekend operations and reduced staffing patterns, and these alterations can complicate transitional care processes and quality care. There has been some research that evaluates the differences in weekend staffing and care delivery in skilled nursing facilities, but research is limited, and findings are sometimes lack significance or contradict previous studies.

One study reports that skilled nursing facilities have slightly fewer staff and more residents on weekends, resulting in a higher resident to staff ratio on weekends, but this did not seem to pose a greater risk to the residents’ health. However, resident inactivity was much higher on weekends than during weekdays, with fewer resident to staff interactions. (Shore, 1995) In another study, it was found that there was a significant decrease in nursing and CNA staffing levels in skilled nursing facilities on weekends, and that this altered staffing pattern was directly associated with increased resident falls, and with gaps in required documentation. (Weinberg, 2002)

Alterations in weekend staffing in skilled nursing facilities, along with reductions in management support and physician coverage, may cause inefficiencies, impact quality of care, and lead to unnecessary hospitalizations. Data based on all hospitalizations for dually eligible Medicare and Medicaid beneficiaries in 2005, found that 72% of all hospitalizations came from

"The night nurse calls an on-call physician who is unfamiliar with Ms. B. Told that she has a cough and fever, the physician says to send her to the emergency room, where she’s found to have normal vital signs except for the low-grade fever, a normal basic-chemistry panel and white-cell count, but a possible infiltrate on chest x-ray. She is admitted to the hospital and treated with intravenous fluids and antibiotics. During her second night in the hospital, Ms. B. becomes confused and agitated, climbs out of bed, and falls, fracturing her hip. One week after admission, she is discharged back to the nursing home.” (Ouslander, 2011)
skilled nursing facilities, accounting for 85% of the total cost for potentially avoidable hospitalizations. (Ouslander, 2011) Transfers from a skilled nursing facility to a hospital may be more likely for certain conditions on the weekend than on weekdays because on-call physician practices are common, and on-call physicians are somewhat likely to send patients to the hospital so that they can be seen by a physician. One study suggests that the physical presence of medical professionals, such as a physician or a nurse practitioner, is vital in reducing hospitalizations, and that while Directors of Nursing agree with this, physicians perceive that accessibility by pager is equally effective. (Young, 2010)

Patient outcomes are directly related to the hospital day of discharge. Friday is the most common day for hospital discharge, but patients discharged on this day have an increased risk for physical decline and death, and are more likely to be re-hospitalized within 30 days. (Gibson, 2009) One of the complications in Friday discharges is that home health and social support services are often not initiated until Monday, leaving discharged patients without needed services. (van Walraven, Bell, 2012)

As hospital length of stay has decreased, patients are commonly discharged to skilled nursing facilities following accident, illness, or surgery for rehabilitation services. Physical therapy, occupational therapy, and speech therapy are considered important rehabilitation services for the majority of short-term stay patients who are covered at a daily rate by Medicare, Medicare Advantage, private insurance, or other payers, but these services may be limited in some SNFs during the weekends. Even though the onset and the continuation of these services are commonly a primary condition of skilled nursing services, research related to the availability of these services on the weekends could not be found, and more research in this area would be extremely valuable.

Data related to other post-acute care systems, such as home health care, hospice care, infusion services, dialysis care, assisted living, and other levels of care, is extremely limited, indicating that more research is needed on this topic to be able to identify opportunities to improve patient care and collaboration among various care providers, particularly on weekends. To address some of these gaps in research, two small studies of healthcare organizations were conducted to test the differences between weekend and weekday practices of acute and post-acute care providers. Following, is a description of these two studies and conclusions.

Two Surveys: Do Healthcare Organizations Function Differently on Weekends?

Two surveys were conducted to evaluate the differences in how healthcare organizations function on the weekend compared to weekdays. In the first survey, Survey I: The Differences between Weekday and Weekend Healthcare Services, healthcare professionals from acute care, post-acute care, and other healthcare settings
were asked a series of ten questions related to their perceptions of how their own organization and other healthcare organizations function on the weekends compared to weekdays. In the second survey, Survey II: Home Care and Hospice Services on Weekends Compared to Weekdays, professionals from home care and hospice were asked a series of ten questions related to their perceptions of how their own organization and other healthcare organizations function on the weekends compared to weekdays.

In Survey I, there were 33 healthcare professionals who participated in the survey, and there were 17 participants in Survey II. Both surveys were online questionnaires, with links to one of the surveys sent via email to participants throughout the country. Most of the questions were multiple choice questions, with none of the questions requiring an answer to advance to the next question. More than one answer was allowed in each of the multiple choice questions. There were also certain questions that allowed for open comments, and in these cases, remarks were counted and grouped by topic. Invited survey participants were considered leaders of their organizations, but identities of each participant were anonymous.

Survey I: The Differences between Weekday and Weekend Healthcare Services, included participants from a wide range of healthcare settings, with 36% of participants working in a hospital setting, 27% working for a skilled nursing facility, 18% in physician services, 12% in a long-term acute or acute rehab setting, 9% in home care, 3% in assisted living, and the remaining 30% working in other types of healthcare organizations.

When asking these providers what day(s) of the week are most common for their organization to receive new referrals, respondents claim that Friday was the most common day for their organization to receive new referrals, with 40% of all respondents indicating that this was the single busiest day of the week for new referrals. The next most common reply was that all days are about the same for new referrals, followed next by Thursdays, Mondays, Tuesdays, and Wednesdays. Almost 10% of respondents replied N/A and none of the respondents said that Saturdays and Sundays are when the most referrals are made to their organization. Clearly, Fridays are considered to be the most common day for new referrals to healthcare organizations.

The fact that Friday is the most
common day for new referrals is seen as being problematic in some care settings. Some respondents noted that reduced staffing and resources are common and may have the potential for impacting patient care. One respondent notes, “Heaven help those who develop acute needs on Friday afternoon or during the weekend. The services are just not there.”

Survey participants were asked what day(s) of the week are most common for discharges from their own healthcare organization. Here again, Fridays were noted as being the most common day for discharge, with 33% of respondents noting that this day was the busiest day for discharges from their own organization. The next most common responses were either not applicable or that all days were about the same for discharges from their own organization, with almost 60% of answers falling into one of these two options. Thursdays, Wednesday, Mondays, Tuesdays, and Saturdays, followed the most common answers. None of the respondents noted that discharges typically happen on Sundays.

Some survey participants said that Friday discharges may put patients at a disadvantage, and that Fridays may be less favorable days for discharge compared to other days of the week. For example, one survey participant said, “As an independent Nurse Case Manager - I note a HUGE difference in a discharge on the weekend vs. one during the week when there is a more robust staff on board as well as physicians who are familiar with the patients.” Another response indicated that, “hospitals have limited discharge planning staff on the weekends” which may be cause difficulties in making transitions from the hospital setting effective because of the lack of resources.

Survey participants were asked if they notice any change in how their organization, and other organizations, function on the weekend compared to during the week. 64% said that their organization functions differently on the weekends, 18% said that their organization sometimes functions differently on the weekends, and 18% said that their organization does not function differently on the weekends compared to weekdays. When asked if they notice a difference in how other
healthcare organizations function on the weekend compared to weekdays, 64% said yes, 21% said sometimes, 12% said that they were not sure, and 3% said no. Responses to these questions show that 82% of healthcare professionals indicate that there are differences in how their own organization functions on weekends, at least some of the time, and 85% of healthcare professionals indicate that there are some differences in how other healthcare organizations function on weekends, at least some of the time, compared to weekdays.

Healthcare professionals claim that there are two primary ways that their own organizations function on weekends compared to weekdays, which are in staffing patterns and in service availability.

Variations on weekends included the following, in order of response frequency:
- Reduced staffing
- On-call services
- Less experienced staff
- Fewer management staff
- Office closed

Reduced staffing, the most common response in relation to variations in care operating practices on weekends, was seen in responses across all healthcare service types. Home health, hospice, and community-based services seem to have the greater variances in weekend staffing patterns. Many respondents also noted that on-call approaches to care, common in physician practices as well as home health and hospice care, was problematic in providing hands-on care, and prevents effective communication with delays in response times. Not only are there fewer staff, but weekend staff tend to be less experienced and tend to have less familiarity to patients. This can cause poor outcomes and can lead to unnecessary hospitalizations on the weekend. Reduced management teams causes there to be a lack of oversight of systems and decreases accountability of team members. Also, it was found that a decreased management team lowers the skills and expertise levels on the weekends, possibly leading to worse patient outcomes. Physician services, home health, hospice, and other providers say that their offices are closed on the weekends, and that this causes great difficulty in handling administrative functions, with payer verification being
a primary issue. Not being able to verify payers or to get payer authorization puts organizations at risk for non-reimbursement, or prevents healthcare organizations for agreeing to advance transitional care steps to help move the patient to the next level of care. Additionally, a lack of administrative support may cause difficulties in getting needed information and supplies.

Healthcare professionals notice differences in the ways that other healthcare organizations function, including the following areas:

- Staffing
- Service availability
- ER/walk-in clinic utilization
- Care coordination
  - Communication delays
  - Services not provided
  - Payer verification
  - Difficulty getting information from other providers
  - Delays in start of care

Respondents noted much of the same variations in staffing and service availability in other healthcare organizations that they see in their own organization, but also noted some additional differences in the ways that other healthcare organizations operate. For instance, patients are encouraged to utilize emergency departments and walk-in clinics when access to other forms of care is not available. Care coordination difficulties with other healthcare organizations are particularly frustrating to care providers. Survey participants note that variances in staffing, on-call staffing, and closed offices, may cause long delays in communication.

Discharge planners say that lack of home health and other community-based services cause problems in continuity of care and can create gaps in services, which may put patients at risk.

“Many insurances and payers are not available on weekends”, is a common response from survey participants. Even verifying Medicare and Medicaid benefits can be a problem, which may cause patients to remain in their current care setting longer than necessary. The problem that insurance companies and insurance case managers are not available on the weekend seems to be a primary concern, as either the discharging or receiving healthcare provider may be at risk for not getting authorization or reimbursement.

Providers voice frustration with not being able to get needed information from other care providers, mostly due to staffing variations on weekends. Post-acute providers note that it is sometimes difficult to get information needed for admission or onset of care when hospital case managers may be unavailable on weekends. All of these variations in weekend operations cause delays in transitional care processes.
Even though respondents commonly voiced concern that services are not available on the weekends, that staffing patterns are significantly reduced, that on-call systems replace normal business practices, and that patients are triaged so that only those with emergency situations are addressed while other patients’ start of care or treatment is delayed until Monday, only 36% of survey participants said that there was a delay, at least some of the time, in assessment, treatment, or start of care, depending on the day of the week.

This response is surprising and somewhat difficult to reason. Perhaps patients that are referred on the weekends do not truly need care until Monday, and perhaps the 36% reflects the percentage of patients who would not need to receive prompt service, even though survey participants referenced significant problems with lack of service availability on the weekends, and made frequent comments regarding the problems associated with the common practice of delaying start of care or treatment until Monday.

Another possible explanation is that variances in weekend services is part of our culture and is considered acceptable practice, although participants in this survey voice concerns about weekend variations.

Overall, in Survey I: The Differences between Weekday and Weekend Healthcare Services, healthcare professionals from all types of healthcare settings note some differences in how our healthcare system functions on the weekends compared to weekdays, and some specific areas represent opportunities to improve weekend care practices to improve collaboration and communication among providers, reduce unnecessary hospitalizations, and achieve better outcomes.

Survey II: Home Care and Hospice Services on Weekends Compared to Weekdays, is a survey designed very similarly to Survey I, but focuses on home care and hospice services specifically since (1) there is such limited research regarding weekend variances in these care options, and (2) because respondents in the first survey often claimed that a lack of services in these community-based organizations caused significant challenges in transitioning patients home safely.
Participants represented home and community-based services, with 88% of the organizations offering hospice services, 88% offering Medicare-certified home health care services, 35% offering non-skilled home care services, and 24% offering some other type of home and community based service. Many agencies offered more than one type of home and community based service.

Survey participants overwhelmingly note that Friday is the most common days for new referrals to their organizations, with 65% recognizing Friday as the most common day for new patient referrals, followed by 30% saying that Thursday is the most common day, and 30% saying that all days of the week are about the same for new patient referrals.

Unlike referral patterns, day of the week for discharge among these agencies is not a factor, with 65% of survey participants saying that all days of the week are about the same for patient discharge. This response is anticipated as death typically defines end of services for hospice, and home health care discharge patterns are less influenced by day of the week since services may be continuous, and services are not provided on-site.
When asked if their organization functions differently on the weekends compared to weekdays, 71% of respondents said yes. Not only is this large percentage of these agencies reporting differences in how they operate on weekends surprising, but the individual comments in descriptions of these differences are significant.

Key differences involved variations in staffing. Almost all respondents noted that clinical teams were significantly reduced on weekends, and that offices were closed. While some comments suggest that agencies continue to admit new patients and to provide necessary visits, comments such as, “on the weekend we have only one RN working and 1 CNA. We limit admits depending on the schedule” were common and signify that some agencies delay start of care on Mondays in some instances. On-call RN coverage is common in these agencies, and patients might be triaged based on severity of need. Even among hospice agencies, where patient needs are heightened and the average length of care is extremely short, on-call services are used as an approach to cover services on weekends. An example of how on-call services are frequently used in these agencies, one survey participant described, “Office is closed. RN on-call for Home Health 8 am - 5 pm for admits and/or necessary visits. Hospice RN on-call.”

Out of all the respondents that included open comments in their answers, 83% noted that visits were only scheduled if necessary, and 60% indicated that all other visits are delayed until the agency resumes normal staffing patterns on Monday. Percentages could be even higher since these responses were general comments and not responses to questions that asked specifically if visits are only scheduled if necessary, or if admissions are delayed until Mondays, if possible.

In summary, similar to Survey I of various healthcare provider types, Survey II, indicates that home health care and hospice agencies function differently on the weekends compared to weekdays in terms of staffing, service availability, and resources, and that these variations represent opportunities to improve weekend care practices to improve collaboration and communication among providers, reduce unnecessary hospitalizations, and achieve better clinical outcomes.
Our current healthcare system stalls outside of normal business hours. Variations in staffing patterns, service accessibility, and access to normal healthcare resources put our seniors, our healthcare system, and our economy at risk.

Exact reasons for gaps in weekend service are unknown, but it is possible that these differences exist for many reasons, and are complicated given the complexities of our healthcare system. The fabric of our country is woven on Judeo-Christian values, with many industries allowing individuals to recognize sacred religious traditions associated with the Sabbath and days of worship. Healthcare faces a unique challenge to meet the needs of patients while incorporating religious and personal preferences of staff members, as well as patients, and their families and caregivers.

Another possible reason for weekend variances is that hospitals have always served as a safety net, and until recently, that system adequately met the needs of our society. In previous decades, the frailest and the sickest patients were cared for in the hospital. Today, these patients are treated outside of the hospital—in skilled nursing facilities, assisted living communities, and at home with home care and hospice services. Before, life expectancy for critical illness was shorter, and today more and more people are living longer with multiple chronic diseases, and are managing symptoms of these conditions outside of the hospital system.

The challenges we face in improving gaps in weekend coverage are complex, but there are possible solutions. Policymakers must partner with experienced providers in forming new processes and approaches. Organizations should evaluate the current skill mix on weekends, and consider staggering hours to increase licensed, professional, and executive teams on weekends since maintaining skill level and management teams may help increase efficiency during weekend hours, as a care team rich with experience and clinical expertise is associated with lower mortality. (Mourad, 2011) Availability of the full interdisciplinary team, including physicians, pharmacists, ancillary staff, and others can help to improve outcomes. Having 24-hour accessibility to clinical personnel for advise has proven to reduce hospitalizations, so making sure that each patient has a phone number or other access to clinical consultation would be valuable.

Hospital physicians should be mindful that the first 48 hours after discharge are critical and that physician-to-physician communication helps to reduce the risk of further complications and re-hospitalizations. Written physician instructions should be supplemented with conversation so that receiving physicians are fully informed and that all providers understand the patient’s treatment plan. Ancillary and laboratory services should be in place so that stat lab results are obtained within four hours on weekends. Insurance companies should have some mechanism of providing insurance authorization, and the Common Working File could be enhanced to make payer verification easier and more reliable on weekends. Home health care and hospice agencies should consider creative staffing solutions to avoid putting patients at an unnecessary risk when start of care is delayed until Monday. Therapy teams in skilled nursing facilities should also find ways to stagger hours so that critical therapy days are not missed. Of course, electronic medical records that can be shared by groups of
providers would greatly improve our ability to maintain a comprehensive and accurate patient record over an extended period of time.

All of us who are deeply committed to serving seniors—policymakers, healthcare professionals, and others—must consider the negative consequences associated with variations in weekend healthcare services. It is time to ensure that our weekends are not weakened by poor care practices and gaps in services, so that our seniors, our healthcare system, and our economy can continue to thrive.
1. What healthcare services does your organization provide?
   - hospital
   - physician services
   - ltac/acute rehab
   - snf
   - home health care
   - assisted living
   - other

2. If patients are referred to your organization, what day(s) of the week do you receive the most referrals?
   - Monday
   - Tuesday
   - Wednesday
   - Thursday
   - Friday
   - Saturday
   - Sunday
   - All days of the week are about the same
   - N/A

3. If your organization discharges patients, what day(s) of the week are most of your patients discharged?
   - Monday
   - Tuesday
   - Wednesday
   - Thursday
   - Friday
   - Saturday
   - Sunday
   - All days are about the same for discharges
   - N/A
4. Are there any differences in how your organization functions/provides care on the weekends compared to weekdays?

- yes
- no
- sometimes
- not sure

5. If yes, in what ways does your organization function/provide care differently on weekends compared to weekdays?

6. Do you notice a difference in how other healthcare organizations function/provide care on the weekends compared to weekdays?

- yes
- no
- sometimes
- not sure

7. If yes, what differences do you notice in how other healthcare organizations function/provide care on weekends compared to weekdays?

8. In your organization, is there any delay in assessment, treatment, or start of care depending on the day of the week that they come to you for services?

- yes
- no
- sometimes
- don't know

9. If yes, please describe how the day of the week impacts assessment, treatment, or start of care.
10. Is there anything else that you would like to mention in relation to the differences in how healthcare functions outside of normal business hours?
1. What services does your organization provide?
- Medicare-certified skilled home care
- Non-skilled home care
- Hospice care
- Other

Other (please specify)  

2. If patients are referred to your organization, what day(s) of the week do you receive the most referrals?
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday
- All days of the week are about the same
- N/A

3. If your organization discharges or discontinues care, what day(s) of the week are most of your patients discharged/discontinued?
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday
- All days are about the same for discharges
- N/A
4. Are there any differences in how your organization functions/provides care on the weekends compared to weekdays?

☐ yes  ☐ no  ☐ sometimes  ☐ not sure

5. If yes, in what ways does your organization function/provide care differently on weekends compared to weekdays?

6. Do you notice a difference in how other healthcare organizations function/provide care on the weekends compared to weekdays?

☐ yes  ☐ no  ☐ sometimes  ☐ not sure

7. If yes, what differences do you notice in how other healthcare organizations function/provide care on weekends compared to weekdays?

8. In your organization, is there any delay in assessment, treatment, or start of care depending on the day of the week that they come to you for services?

☐ yes  ☐ no  ☐ sometimes  ☐ don't know

9. If yes, please describe how the day of the week impacts assessment, treatment, or start of care.
10. Is there anything else that you would like to mention in relation to the differences in how healthcare functions outside of normal business hours?

Arabi, Y., Alshimemeri, A., Taher, S., “Weekend and weeknight admissions have the same outcome of weekday admission to an intensive care unit with onsite intensivist”, 88-92, 2010


Fonarow, G., Abraham, W., Albert, N., Stough, W. et all., “Day of Admission and Clinical Outcomes for Patients Hospitalized for Heart Failure”, Heart Failure, 2008; 1:50-57


Gibson, J., “Timing of Hospital Discharge as a Predictor of Readmission”, Health & Healthcare, March 11, 2009


References:
Mourad, M., Adler, J., “Safe, High Quality Care Around the Clock: What will it Take to Get us There?”, Society of General Internal Medicine, 2011 DOI: 10.1007/s11606-011-1795-5


Ryan, K., Levit, K., Davis, H., “Characteristics of Weekday and Weekend Hospital Admissions”, Healthcare Cost and Utilization Project, Statistical Brief #87, March 2010


Varmava, AM, Sedgwick, JEC, Deaner, A, Ranjadayalan, K, Timmis, AD, “Restricted Weekend Service Inappropriately Delays Discharge After Acute Myocardial Infarction”, Heart, 2002 March; 87(3) 216-219
Weinberg, A., Lesesne, AJ., Richards, C., Pals, J., “Quality Care Indicators and Staffing Levels in a Nursing Facility Subacute Unit”, JAMDA Long-Term Care: Management Applied Research and Clinical Issues, January 2002, Vol 3, Issue 1, pgs 1-4
Wong, H., Morra, D., “Excellend Hospital Care for All: Open and Operating 24/7”, Journal of General Internal Medicine, 26(9):1050-2, 2011