EXECUTIVE SUMMARY

The COVID-19 pandemic has made evident the distinct role that post-acute care settings play within our nation’s healthcare system, and has underscored opportunities to more effectively use these settings for patient care. The way in which the different areas of post-acute care have each managed the pandemic provides new insights regarding their respective capabilities, the implications of which our public health system must consider for future preparedness: not just for pandemics, but for the growing number of Medicare-eligible beneficiaries (10,000 people turning 65 every day) who are increasingly living longer, with more complex care needs.

The need for hospital and institution-based post-acute care capacity – that can keep patients safe from infections – has become even more apparent since the start of the public health emergency. Short-term acute care hospitals (STACHs), which typically discharge more than 40% of Medicare FFS patients to post-acute care, have faced enormous pressures in managing not only patient volume during COVID-19 surges, but an overall increasingly more complex population. This more acute patient mix has renewed demand for multispecialty post-acute care regimens that integrate medical, rehabilitative, and behavioral care. Long-Term Acute Care (LTAC) hospitals and Inpatient Rehabilitation Hospitals (IRHs), as well as Skilled Nursing Facilities (SNFs), all offer these capabilities, but in varying degrees. The pandemic has presented an opportunity to investigate how the differences among these post-acute care settings influenced their respective roles during the public health emergency.

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1 Post-acute care includes long-term acute care (LTAC) hospitals which provide hospital-level care for medically complex patients; inpatient rehabilitation hospitals and inpatient rehabilitation units (collectively referred to as IRHs herein) which provide hospital-level intense medical rehabilitation focused on restoring functional independence for individuals with disabilities resulting from an injury, illness or medical condition; skilled nursing facilities (SNFs) which provide skilled nursing, medical management and therapy services to individuals; and home health agencies (HHAs) which provide skilled care delivered by health care professionals in the patient’s home for the treatment of a medical condition, illness or disability. Together these settings are typically referred to as the post-acute care continuum.

2 The term Inpatient Rehabilitation Facility (IRF) is a Medicare construct that includes inpatient rehabilitation hospitals and units. The Social Security Act collectively refers to inpatient rehabilitation hospitals and units as rehabilitation facilities and CMS has also historically legislatively referred to inpatient rehabilitation facilities or “IRFs”. We have chosen to refer to inpatient rehabilitation settings (including hospitals and units) within this paper as IRHs as they are licensed hospitals and not facilities.
ATI Advisory (ATI) has previously performed research assessing the role of LTAC hospitals during the COVID-19 pandemic. This paper will review the contributions that IRHs have made within an evolving patient and payer landscape affected by a global pandemic, and will highlight the benefits IRHs have conferred throughout the public health emergency. ATI performed an analysis of Medicare FFS claims data (100% Medicare FFS Part A claims incurred January 2019 – November 2020 and paid through December 2020) and conducted interviews with a range of STACH and IRH clinicians and executives knowledgeable about the full payer experience to inform this work.

Over the course of the pandemic, IRHs have demonstrated their capability to manage complex patients with medical and rehabilitative needs. ATI’s research uncovered three major themes related to the unique role IRHs play in post-acute care. Although our work focused on IRHs during the public health emergency, these themes have implications for how IRHs can continue to meaningfully serve within the post-acute care continuum beyond the pandemic:

**IRHs Rapidly Adapted Their Hospitals.**

Interviewees described IRHs demonstrating a high level of flexibility – made possible by their multidisciplinary staff – as they reorganized their physical environments to accommodate stricter infection control requirements. This included isolating patients, establishing COVID-19 and non-COVID wards, and drastically changing the use of therapy gyms to avoid putting patients and staff at unnecessary risk. Federal waivers and prior authorization relief offered by managed care plans at various times and to different degrees throughout the pandemic supported IRHs in these initiatives.

**IRHs Served as a Critical Post-Hospitalization Institutional Setting.**

Although in several regions IRHs did not treat as many COVID-positive beneficiaries as anticipated early in the pandemic, they provided critical capacity in treating non-COVID beneficiaries to boost STACH throughput and close gaps in the care continuum. Our interviewees repeatedly identified the speed at which IRHs could admit patients who could benefit from rehabilitation from the STACH – which many times meant admitting patients sooner – as the most impactful contribution to ensuring patient throughput during times of surges.

**IRHs Continue to Serve and Rehabilitate Clinically Complex Patients.**

In an environment marked by increased STACH patient complexity and a halt in elective surgeries, IRHs have served an increasingly complex patient mix that requires not only rehabilitative but also hospital-level medical treatment. Our work indicates that COVID-recovering patients have been particularly good matches for the rehabilitation setting. The prevalence of post-COVID-19 conditions has led to research urging for more holistic post-acute management of COVID-19 patients, centered around care delivered in a multispecialty setting with extensive therapy and rehabilitation capabilities. Research has also shown that COVID-recovering patients may be more susceptible to certain medical events such as stroke, and implies they may require long-term supervision under specialists with inpatient rehabilitation proficiencies, such as physiatrists.

In time, the demands of the COVID-19 pandemic will diminish, but our health system must be prepared to meet the ongoing challenges related to reinforcing a post-acute care continuum that can support the needs of all Medicare beneficiaries, and can also be responsive to the demands of a public health emergency. ATI Advisory’s work focused on specialty hospitals operating in the COVID-19 landscape has uncovered a critical need for the clinical capabilities and supports available in a hospital-based asset class that can quickly deliver capacity and share resources.

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3 Per *JAMA*, five of 10 survivors of COVID-19 developed a broad array of pulmonary and extrapulmonary clinical manifestations, including nervous system and neurocognitive disorders, mental health disorders, cardiovascular disorders, gastrointestinal disorders, skin disorders, and signs and symptoms related to poor general well-being, including malaise, fatigue, musculoskeletal pain, and reduced quality of life.
efficiently to ensure safe, timely, and equitable health care. As policymakers and payers consider more home-based models, such as Hospital at Home and SNF at Home, it is critical that these constituents support the public health infrastructure made up of specialty hospitals and institutions that provide life-saving medical care and rehabilitation to thousands of patients every year.

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**The IRH Care Model**

Our work uncovered that there continues to be confusion – among those making discharge decisions, public health constituents, families, and patients – regarding what an inpatient rehabilitation hospital is, and particularly how this hospital setting differs from an LTAC hospital or skilled nursing facility.

An IRH admits patients who require intensive therapy provided through a physician-led, team-oriented approach to care that focuses on remediating handicaps so that patients can reengage in their respective environments. Many IRH patients are recovering from the debilitating effects of traumatic injuries, strokes, spinal cord injuries, brain injuries, orthopedic and neurological conditions, and other serious injuries, and therefore require specialized services and acute levels of care that prioritize recovery. In order to qualify for reimbursement under the Medicare program, IRHs must meet Medicare conditions of participation for acute care hospitals as well as certain rehabilitative-focused admission, staffing, and service thresholds for their patients. Patients within qualified IRHs are cared for through a coordinated interdisciplinary team led by a rehabilitation physician that includes a rehabilitation nurse, a social worker or case manager, and a licensed therapist from each therapy discipline involved in the patient's treatment. The patient documentation requirements for IRH physicians exceed those of any other physician – including practitioners in general acute-care services.

Medicare-qualified IRHs must also meet the compliance threshold, which requires that no less than 60 percent of total patients admitted to an IRH have as a primary diagnosis or comorbidity at least one of 13 conditions specified by CMS. Furthermore, in order for a patient to receive Medicare coverage for a stay within an IRH, the patient must meet the intensity of therapy requirement (commonly referred to as the “3-Hour Rule”). This generally requires that at the time of admission to an IRH, a patient can actively participate in and benefit from intensive therapy that typically consists of three hours of daily (non-consecutive) therapy at least five days a week.

An IRH's level of service and capability differs from that of a SNF, which is not a hospital. SNFs provide nursing, therapy and short-term rehabilitation in a facility setting that also serves long-term resident populations receiving support for multiple activities of daily living, mostly from aides (e.g., certified nursing assistants (CNAs)) who provide this direct hands-on care. Patients may be admitted to a SNF because they need extended skilled medical treatment (such as complex wound care, IV drug administration, etc.), and/or need short-term rehabilitative therapies.

Both IRHs and SNFs offer rehabilitative services, but the intensity and staffing differ. Compared to IRHs, SNFs typically staff fewer hours of daily skilled care (partially demonstrated through limited presence of onsite physicians) and are not held to regulatory rehabilitation standards. While IRHs must provide three hours of rehabilitation daily (or in some cases, at least 15 hours of intensive rehabilitation therapy within a 7-consecutive day period), SNFs provided 62 minutes of therapy per day in 2020. Importantly, this therapy measure reflects, in part, the implementation of

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CMS guidelines define a rehabilitation physician as a licensed physician with specialized training and experience in inpatient rehabilitation. This requires a one-year hospital internship followed by at least two years of training or experience in the medical management of inpatients requiring rehabilitation services.

The compliance threshold, or what is commonly referred to as the “60 Percent Rule”, is a Medicare facility criterion that requires inpatient rehabilitation hospitals to discharge at least 60 percent of their patients with one of 13 qualifying conditions. If an IRH does not meet the compliance threshold, Medicare pays for all of its cases on the basis of the inpatient hospital prospective payment system (PPS) rather than the IRH PPS.
the SNF Patient Driven Payment Model (SNF PDPM), which studies showed resulted in a 30% decline in SNF therapy minutes in 2020.6

— HOW IRHS FARED IN FIRST FULL YEAR OF THE PUBLIC HEALTH EMERGENCY

IRHs exhibited flexibility during the pandemic and addressed gaps in the post-acute care continuum. This led to a certain level of resiliency during a time of declining total Medicare FFS service volume, a significant portion of IRHs’ patient base.

Total Medicare FFS STACH discharges declined in 2020 compared to 2019 levels (see Figure 1: “National Medicare FFS STACH Discharges Declined in 2020”), and share shifted (see Figure 2: “Some Post-Acute Care Settings Experienced Loss in Share of Discharges”) among post-acute care settings during 2020. This is a function of more patient volume shifting from Medicare FFS to Medicare Advantage as well as the COVID-19 pandemic reducing total STACH discharges. Although all post-acute care settings experienced declines, in some settings (such as SNFs) the declines were more pronounced. National IRH FFS volume declined year over year (in part due to a reduction in elective surgeries and fewer stroke cases), though a monthly view tells a slightly more nuanced story.

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6 The SNF Patient Driven Payment Model or PDPM, is a reimbursement model for SNFs that was introduced October 1, 2019.
Some IRHs reported via interviews their highest census yet during the surges in 2020, and as shown in Figure 3 ("After Significant Declines in First Half of 2020, IRH Volume Slightly Rebounded in September"), on a national level 2020 IRH Medicare FFS monthly volume was sometimes flat or even slightly increased versus the prior year. This trend is especially pertinent in the IRH share of facility-based STACH discharges\(^7\), where IRHs appeared to fill gaps left by SNFs (see Figure 4: “Increased Share of STACH Facility-Based Discharges Suggests IRHs Have Filled Gaps Left by SNFs"), as the overall patient

\(^7\) Including discharges to LTAC Hospital, IRH, and SNF only.
population – not just COVID-positive patients – became increasingly complex, as indicated by Case Mix Index\(^8\) (see Figure 5: “National IRH CMI Peaked in April and May 2020, and Remained Elevated Through November 2020\(^9\)).

**Figure 4: Increased Share of STACH Facility-Based Discharges Suggests IRHs Have Filled Gaps Left by SNFs**

<table>
<thead>
<tr>
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<th>April 2019</th>
<th>April 2020</th>
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</tr>
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<td>LTAC Hospital</td>
<td>3.8%</td>
<td>5.0%</td>
<td>1.2%</td>
</tr>
<tr>
<td>IRH</td>
<td>14.9%</td>
<td>19.7%</td>
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</tr>
<tr>
<td>SNF</td>
<td>81.4%</td>
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<tr>
<td></td>
<td>July 2019</td>
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<tr>
<td>LTAC Hospital</td>
<td>3.6%</td>
<td>4.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>IRH</td>
<td>15.3%</td>
<td>19.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>SNF</td>
<td>81.1%</td>
<td>75.4%</td>
<td>-5.7%</td>
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<tr>
<td></td>
<td>October 2019</td>
<td>October 2020</td>
<td>∆</td>
</tr>
<tr>
<td>LTAC Hospital</td>
<td>3.8%</td>
<td>4.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>IRH</td>
<td>16.1%</td>
<td>20.1%</td>
<td>4.0%</td>
</tr>
<tr>
<td>SNF</td>
<td>80.1%</td>
<td>75.6%</td>
<td>-4.6%</td>
</tr>
</tbody>
</table>

Source: ATI Advisory analysis of 100% Medicare FFS National claims incurred April 2019 – October 2020 and paid through December 2020

**Figure 5: National IRH CMI Peaked in April and May 2020, and Remained Elevated Through November 2020**

Source: ATI Advisory analysis of 100% Medicare FFS National claims incurred October 2019 – November 2020 and paid through December 2020

Note: IRH CMI is the CMG weight on the IRH claim itself. CMI prior to October 1, 2019 deemed not comparable year over year given the IRH Prospective Payment System model shifted from FIM\(^\text{TM}\)-based case mix groups to functional items found in sections GG and H on the IRH Patient Assessment Instrument after this date.

The types of patients IRHs served during the pandemic can be further examined on a regional level (please see case studies below). On a macro level, early in the pandemic, IRHs identified two key tactics to assist their partner STACHs and admit patients rapidly. Depending on the needs of their referral partners, IRHs increased bed capacity and/or developed new admission models.\(^8\) An IRH Chief Nursing Officer noted:

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8. Case Mix Index or CMI, is the measure of a patient’s anticipated healthcare resource requirements based on their specific diagnoses.
9. CMI prior to October 1, 2019 deemed not comparable year over year given the IRH Prospective Payment System model shifted from FIM\(^\text{TM}\)-based case mix groups to functional items found in sections GG and H on the IRH Patient Assessment Instrument after this date.
“We demonstrated adaptability; we could customize services...because we are IRHs, we have to be prepared to treat medical complexity, and [therefore could] adapt to infection control guidelines, we worked with acute care hospitals and attended daily census calls – this communication enabled us to bring patients over sooner.”

The response of the public and private sectors drove markedly different surge patterns across the country. This required a heterogenous approach to care that was dependent on the mix of patients currently flowing through the local health system. IRHs – which regularly practice patient-centered, multispecialty care – found that they could apply this expertise during the pandemic to quickly shift to the needs of their region. Clinicians and leaders within IRHs repeatedly pointed to instances in which they proactively adjusted their staff and physical footprint based on the changing federal (Centers for Disease Control and Prevention) and state criteria. Closely monitoring this guidance (such as the need for negative pressure rooms) enabled IRHs to better match their capacity to the requirements of their referral partners.

Feedback and claims data suggest IRHs nationwide were more utilized for non-COVID patients (except in the early epicenter of New York and New Jersey) and therefore these hospitals ended up gradually re-purposing dedicated COVID-19 units (see Figure 6: “National COVID-19 STACH Discharges by Care Setting”). However, the COVID-19
patients IRHs did admit had significantly higher illness severity versus COVID-19 patients admitted to SNFs and HHAs. For example, more than a quarter of COVID-19 patients admitted to IRHs were on a mechanical ventilator prior to being discharged from the STACH, compared to 5% of SNF patients. COVID-19 patients discharged to IRHs also had almost a third more comorbidities and complications compared to SNF patients. Together these measures indicate that IRHs served an important role in taking some of the most clinically severe COVID-19 patients. This is not surprising given typical COVID-related symptoms and complications (including debility and stroke) are conditions IRH clinicians work with every day.

The lack of experienced-based behavior and protocols due to the unprecedented nature of the COVID-19 virus required a high level of innovation and receptivity to new approaches that at least some IRHs appeared to embrace. Typical barriers to IRH admissions and treatment plans were eased by certain flexibilities, including prior authorization relief granted by managed care plans and federal waivers. Inpatient rehabilitation hospitals (both free-standing hospitals and units) benefitted from waivers granted under CMS' existing authority under Social Security Administration (SSA) Section 1135 (applicable in any public health emergency) as well as certain waivers granted under the Coronavirus Aid, Relief, and Economic Security (CARES) Act that expanded CMS' existing waiver authority specific to the COVID-19 public health emergency (together we have referred to the Section 1135 and CARES Act waivers as “Federal Waivers” herein).

The Federal Waivers utilized by IRHs include flexibility around the “60 Percent Rule” (referred to as the “60 percent waiver” herein) and commingling of acute care and inpatient rehabilitative patients, which enabled inpatient rehabilitation hospitals to convert their rehabilitation beds to medical/surgical beds and admit acute care patients. This latter flexibility provided much needed capacity to overflowing intensive care units (ICUs). The major waivers granted under the CARES Act that impacted inpatient rehabilitation hospitals and units were the “3-Hour Rule” waiver (which allowed IRHs the flexibility to reduce therapy minutes and allow therapy to be based on patient need and tolerance) and waivers that expanded the types of services that could be performed via telehealth.

Importantly, even under these expanded flexibilities, Medicare FFS claims data analysis (focused on CMI and DRG patterns) indicates that IRHs continued to treat complex patients with similar diagnoses to prior years (data not shown). Interviews that covered the full payer spectrum support this finding, and suggest that IRHs have maintained admission protocols (overall, IRHs typically admit only one-half to one-third of referrals they receive) that align with their focus on intense rehabilitation and recovery. Furthermore, some IRHs reported their highest discharges to the community yet (see Figure 7: “IRHs Shifting More Discharges to Community (Home + HHA) Versus SNFs, March-November”), which may have been in part due to patient preference shifting away from institutions, but still placed a significant responsibility on IRHs to ensure they could send these (increasingly more complex) patients home safely during a tumultuous time.

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10 CMS has the authority to grant Section 1135 waivers, but CMS action is needed before they apply (i.e., they are not automatically implemented upon declaration of a public health emergency).
11 As defined above, the “60 Percent Rule” is a Medicare facility criterion that requires inpatient rehabilitation hospitals to discharge at least 60 percent of their patients with one of 13 qualifying conditions. Under the waiver, inpatient rehabilitation hospitals and units could exclude patients from their inpatient population for purposes of calculating the applicable thresholds associated with the requirements to receive payment as an inpatient rehabilitation hospital.
12 Please see the CMS website for more detail regarding Section 1135 waivers.
13 Diagnosis Related Group.
14 Includes patients discharged to home with or without home health.
Regional Case Studies: Medicare FFS Trends

As mentioned above, IRHs across the country handled the demands of the pandemic based on the needs of their specific region. Evaluating how IRHs adapted to local needs is one way to highlight their unique contributions.

Seattle Region\textsuperscript{15}: An example of IRHs shifting resources to help with surge versus COVID-specific patients

Life Care Center of Kirkland, Washington, a long-term care facility located in a suburb east of Seattle, was the first site of a COVID-19 outbreak in the United States. Within a four-week span after report of the first death on February 29th, 2020, 39 residents of the organization’s Eastside facility had died from complications related to COVID-19.\textsuperscript{xv}

As long-term care facilities grappled with keeping their patients and staff safe, the region reassessed discharge care pathways; in April 2020, the number of STACH discharges to IRHs within the Seattle region increased approximately 30\% year over year, while discharges to SNFs in the same period decreased almost 60\%. Notably, this same month also had the highest number of COVID-19 STACH discharges (through the November 2020 evaluated period),\textsuperscript{xv} even though Seattle IRHs admitted very few Medicare FFS COVID-19 patients during the same timeframe (the conducted

\textsuperscript{15} Includes King, Pierce, and Snohomish counties.
Role of Inpatient Rehabilitation Hospitals During the COVID-19 Pandemic

The increase in overall Medicare FFS STACH discharges to IRHs suggests IRHs’ value-add was in providing capacity for complex patients who would eventually require rehabilitative services. The claims data supports this finding in a few ways. First, a comparison of Medicare FFS IRH DRGs between 2019 and 2020 shows that IRHs’ most prevalent DRGs remained largely the same year over year, indicating that IRHs were admitting appropriate patients. Furthermore, the IRH CMI as well as average length of stay (ALOS) for Seattle patients were above the national average (see Figure 9: “Seattle Region: IRH ALOS and CMI”). This indicates a more acute population and therefore relative need for hospital-based recovery programs, as well as that IRHs may have been relieving their STACH partners through admitting patients out of ICUs a day or two earlier than normal.

Individual interviewees echoed these trends. An IRH within a large Seattle-based health system discussed their role in relieving STACH capacity for rehabilitative-appropriate patients. It is possible that the increased census levels they experienced in 2020 were in part due to their ability to admit patients earlier (24 to 48 hours in some cases), which was facilitated by the Federal Waivers as well as prior authorization relief. Patients who would have traditionally stayed in acute care were transferred to the IRH to begin a timely path towards rehabilitative recovery. Under the Federal Waivers, CMS waived requirements related to housing patients in previously excluded areas (including inpatient onsite rehabilitation units)16, which enabled IRHs to convert their beds to admit acute care patients, such as spinal cord patients who would eventually require inpatient rehabilitation. For example, in one Seattle IRH, the clinician

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16 Under the Section 1135 waiver, many beds in IRHs effectively became “swing beds,” which enabled IRHs to admit inpatient acute care patients as well as rehabilitative patients to the same bed, depending on need.
interviewee stated that post-operative brain injury patients were brought early on to medical/surgical beds onsite within the IRH, the advantage being that patients could acclimate to the IRH setting prior to starting rehabilitation and take advantage of the around-the-clock nursing staff. This theme of “staged rehabilitation,” during which patients can adjust to a new setting prior to starting intensive rehabilitation, has been recognized as a key contributor to a successful rehabilitative stay.\textsuperscript{xvi}

Although there are many factors affecting outcomes, Seattle IRH 30-day All Cause readmissions in 2020 were lower than the national average (all and COVID-specific) and 90-day mortality rates for non-COVID patients discharged from Seattle IRHs were below the national average as well (data not shown).\textsuperscript{xvii} Notably, during 2020 Seattle was also a relatively high utilizer of STACH discharges to home settings (for all and for COVID-specific patients), further evidencing cooperative discernment on the part of STACH discharge managers and IRH admission officers alike.

\textbf{Takeaway:} The Seattle market presents one example of a region in which it is possible that the constraints of the pandemic (along with the flexibilities under the Federal Waivers and prior authorization relief) drove more rapid patient transitions from the STACH to inpatient rehabilitation. This led to IRHs admitting patients earlier from the STACH and perhaps points to the (pre-pandemic) inefficiency in using STACHs as “holding spaces” during the transitional period between the completion of emergency/surgical care and the start of rehabilitative care. Studies stating that earlier discharges to inpatient rehabilitation can have positive implications for patient recovery\textsuperscript{xviii} along with IRHs’ propensity to discharge to the community (from January – November 2020, IRHs nationwide discharged just over three-quarters of cases to the community, either to home or home with home health)\textsuperscript{xix} suggest that some patients could benefit from an earlier STACH discharge to inpatient rehabilitation.

IRHs in other regions can use these early findings to inform their own patient discharge conversations with partner STACHs. IRHs, especially those housed within STACHs, showed an ability to manage and treat patients earlier in their recovery process. This has implications not only for the timeliness in which patients can be discharged to inpatient rehabilitation, but also the complexity of patients discharged to this setting.
Role of Inpatient Rehabilitation Hospitals During the COVID-19 Pandemic

In July 2020, 109% of Texas’ ICU beds were filled. Texas has been particularly impacted by the pandemic; of the nation’s 100 ICUs that have spent the most weeks at or over patient capacity from July 2020 to September 23, 2021, Texas is home to 17, the highest in the nation. This prolonged surge in patient volume, mostly driven by COVID-19 patients requiring extended care in an acute setting, has essentially eradicated room for patients requiring sudden, emergency care.

Claims data and interviews suggest that IRHs within the Houston region have served as a relief valve, with STACHs discharging COVID-19 patients to IRHs at a rate significantly higher than the national average. For example, nationwide Medicare FFS STACH COVID-19 discharges to IRHs were 1-2% in 2020; in Houston up to 7% of Medicare FFS STACH COVID-19 discharges were discharged to IRHs (see Figure 10: “Houston Region: COVID-19 STACH Discharges by Care Setting”). A comparison of IRH DRGs in 2020 versus 2019 revealed that within the top 10 DRGs (in terms of case volume), the only change was DRG 177 (related to respiratory infections and inflammation with complications, which could include COVID-recovering or COVID-19 patients), suggesting the increase in utilization was partly due to Houston

Figure 10: Houston Region: COVID-19 STACH Discharges by Care Setting

Source: ATI Advisory analysis of 100% Medicare FFS National claims incurred March – November 2020 and paid through December 2020

17 Includes Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties.
18 Reports indicating more than 100% capacity may imply that the hospital utilized space in other parts of the building to house patients.
IRHs admitting more COVID-19 patients versus other regions (although local interviewees also stated the patient mix was incredibly different and they admitted more complex patients overall).

Interviewees reported the implementation of COVID-dedicated units within STACH-based IRHs led to a few synergistic results. Although IRHs have specialists on staff, IRH clinicians were augmented by practitioners that typically operate within the STACH setting (e.g., a recovering trauma patient diagnosed with COVID-19 could be admitted to the IRH unit within a STACH and visited by his neurosurgeon who works in the same building). Likewise, IRHs contributed their expertise as they shared their staff as well as learnings from COVID-specific and recovering patients. For example, some IRHs deployed their outpatient therapists to acute care hospitals. This process allowed therapists trained in proper body mechanics to teach acute care nursing teams how to move or prone (placing the patient so they are lying face down, which can improve oxygenation for patients with and without ventilator needs\textsuperscript{xxiii}) complex (including frail and bariatric) patients, as IRHs early on found that the methods used within some STACHs were incorrect.\textsuperscript{xxiv}

**Takeaway:** IRHs in Houston were at the forefront of admitting patients with a novel disease. Interviewees emphasized a large part of their ability to do this stemmed from the fact that conditions associated with COVID-19 patients, including cognitive and balance impairments and debilitation, are part of IRHs’ core skill set. Furthermore, their expertise in how to move and transition patients within an acute care setting enhanced safety of the patient and employee, and added to the effectiveness of care. This experience with COVID-19 patients has spurred new research and drafting of best practice recommendations, including a focus on post-COVID recovery treatment protocols that are highlighting the importance of rehabilitative therapy. For example, clinicians from a Houston-based IRH identified many COVID-recovering patients had been discharged from acute care without a plan for ongoing therapeutic support. This group is funnelling their on-the-ground pandemic experience into developing post-COVID patient treatment protocols to address these gaps, and are planning to present these findings to primary care physicians to better educate and promote the importance of therapy for COVID-recovering patients.

Several IRH interviewees acknowledged that as part of a large hospital system, they are not always at the forefront, but COVID-19 presented a scenario in which referral partners have seen firsthand the benefits IRHs can offer via the flexibility to admit and treat patients with a previously unknown condition. IRH clinicians noted there was sometimes a challenge in “getting patients to IRHs” (a reference to hesitation on the part of their referral partners when designating appropriate post-acute care settings), but are optimistic that the pandemic has through practice re-educated discharge planners that despite the pressures of insurance plans, there are appropriate reasons to not discharge patients to another care setting when they require IRH levels of care. A Vice President of Post-Acute Services within an IRH commented:

> “We hope through the pandemic we have opened the door for some patients who went to a SNF and now can consider an IRH.” \textsuperscript{xxv}

--- **SHAPING IRHS’ FUTURE ROLE IN POST-ACUTE CARE**

The COVID-19 pandemic elevated the role of IRHs via their contributions toward managing and treating both COVID-19 and non-COVID patients. IRHs have an opportunity to not only participate but lead initiatives in post-acute care recovery beyond the pandemic. The following are suggestions for the ways that IRHs can continue to communicate their value to clinicians, payers, families, and patients alike.
IRHs Quickly Distinguished Their Medical Capabilities. As highlighted throughout this work, IRHs needed to flex their capacity based on the needs of regional referral partners, which shifted during 2020. This included admitting both COVID-19 patients and non-COVID patients – the value being the speed at which they were able to admit patients who have become increasingly more complex over the last year. Per a former National Medical Director for Rehabilitation at a nationwide specialty hospital:

“IRHs increased the level of complexity and vulnerability of patients [they] were able to take.” xxvi

As discussed below, this speed was predicated by IRHs adapting their typical admission pathways, but also required a hospital skillset that could treat the types of patients flowing through the system. Some IRHs admitted patients earlier from the STACH (this was facilitated by flexibilities such as prior authorization relief and Federal Waivers), which was especially important in high surge regions. For example, an IRH within a STACH in New Jersey admitted stroke patients after two to three days, half the typical stay for stroke patients. xxvii The interviewee stated this was possible because IRHs, which already have hospital-level care, could augment this care with relevant STACH-based specialists (e.g., neurology consultants).

Similarly, a large IRH in Michigan took a leading role in COVID-dedicated care by developing the first dedicated unit in the state. Within 24-48 hours, the hospital was assessing patients from non-traditional referral sources who were requesting if they could accommodate COVID-positive patients: “[Hospitals] we would hear from 3-4 times a year we heard from pretty regularly – we became a distinct service line.” xxviii

Importantly, these actions may never have occurred without the typical staff that is employed within an inpatient rehabilitation hospital. Many IRHs “loaned” or shared their staff with acute care hospitals, meaning that rehabilitation specialists were managing ICUs under the guidance of an ICU specialist and that IRH nurses were fully engaged in general acute care environments. Recognizing and leveraging the versatility of this staff beyond traditional rehabilitation modalities continues to be particularly important given the current nursing and broader staffing shortages within health systems. A Vice President of a New Jersey-based IRH emphasized the enhanced skillset of his team, resulting from significant acute care exposure and their contributions towards establishing new learning protocols and treatments:

“The competency of a typical IRH nurse is much more now, they can take care of a much more complex patient.” xxix

With many elective surgeries postponed or cancelled during the COVID-19 pandemic, IRHs would have experienced a significantly steeper decline in census had they not embraced the needs of the changing medical landscape. Per a Senior Vice President & CMO of a New York-based IRH:

“The COVID-19 patient, especially if staying in the ICU, is suffering not just one impairment, they are cognitively affected. Myopathy, de-conditioning, psychological conditions, this is an emotional disease...that requires a multidisciplinary approach. [We] can’t just have one intervention. Complex problems require complex solutions based on science and evidence. We are trying to offer that as much as possible and believe [patient] complexity will be constantly increasing...” xxx
Upon reflection, a Senior Health Policy Advisor commented, “A lot of rehab hospitals discovered they were hospitals and could take care of really sick patients – and SNFs discovered the opposite.”

**IRHs Embraced Technology.** Inpatient rehabilitation hospitals utilized telemedicine for both inpatient (consultations and rounding) and outpatient (follow-up visits and delivering therapy services remotely) services. The need for technology-based care offerings to enhance safety of patients and staff (and more efficiently utilize personal protective equipment, or “PPE”) accelerated the uptake and implementation of virtual models that perhaps would have taken much longer outside of a pandemic environment. Google Cloud research found that 90% of clinicians are now using telehealth compared to 32% pre-pandemic. The advantage is that these models have not only been established but also heavily utilized due to societal preferences in a mostly contactless environment. One IRH clinician stated that during the height of COVID-19 surges, she saw 60% of patient volume via telehealth. Though these numbers have since dropped, even with the option of face-to-face care many patients remain partial to telehealth. This holds promise for the continuation of these models beyond the constraints of the pandemic.

Within IRHs, telehealth continues to provide several immediate patient benefits, especially related to expanding access. For example, during the public health emergency, certain state licensure flexibilities allowed patients in rural regions who normally would have had to drive across state lines for specialty rehabilitation to access care online. Also, virtual offerings have provided IRH patients broader access to specialists, especially important for patients in need of behavioral health care. Historically the inpatient setting has not presented itself as an obvious telemedicine candidate, so IRHs arguably had more to achieve in a shorter period of time, including the challenge of how to treat and perform consults for patients who prior to the pandemic had been seen in person.

“IRHs learned how to stratify patients who could be seen via telehealth and who required face-to-face care, with the goal being continuation of care and diversion of inappropriate ER visits, prevention was the focus.” (Vice President of Operations, IRH)

Virtual care enabled these patients to continue to leverage the expertise of IRH clinicians outside the four hospital walls. IRH clinicians have pointed to improved compliance, on-time rate, as well as an enhanced continuum of care, as key benefits to integrating telehealth within their hospitals, some even calling it a “tremendous asset to delivering care.” These initial successes suggest the medium has great potential to supplement care originating in an IRH.

**IRHs Modeled How to Implement Necessary Changes in Patient Care.** An increasingly more complex patient population – coupled with the demands of strict infection control protocols – likely required IRHs to reassess how they could more efficiently admit and effectively treat patients within their settings. COVID-19 required faster decision-making, yet the novelty of the disease meant that there were no standardized protocols for clinicians to follow. Especially in the early days of the pandemic, EHRs – where many decision-making models usually sit – had not yet developed information specific to the needs of COVID-19 patients, requiring new methods to be developed in real time. Outside of the constraints of technology (and supported by Federal Waivers, telehealth, and prior authorization relief) some IRHs created new structures that originated due to the COVID-19 pandemic, but can also be applied in general practice to improve typical admission processes, refine care pathways, and address gaps in care.

For example, an IRH with a nationwide presence created new admission tracking protocols to better match capacity to demand from their referral partners. Unique admission pathways were established for patients based on specific characteristics (e.g., COVID-positive but asymptomatic, COVID-negative but had been exposed, etc.), which were beneficial not only for understanding real-time capacity dynamics, but also enabled strict separation protocols that reduced infections and outbreaks.
The surge in COVID-19 cases was anticipated to lead to an acute care bed shortage on a regional basis, and in areas such as New York City, the expected need for beds was twice the number of licensed beds in the state. As many IRH units within hospitals converted their rehabilitation beds to medical/surgical beds to accommodate the need for more medical/surgical beds in general acute care hospitals, some free-standing IRHs became the sole provider of rehabilitation-dedicated capacity throughout the pandemic. This required not only faster but more efficient decision-making that could reduce patients occupying beds in settings inappropriate for their needs. A New York-based IRH addressed this challenge by reversing their typical admissions process to engage physiatrists in the beginning, rather than at the end of the IRH referral screening process in order to expedite decision-making. Due to strict admission standards, it is possible for as many of 50% of IRH referrals to be deemed inappropriate (i.e., post review by a physiatrist, 50% of patients referred to IRHs from a STACH are not accepted for IRH admission), which can lead to unnecessary administrative work. Although this process required more upfront engagement by physiatrists, it also reduced the referral to admission time by a full day, a commendable achievement when STACH throughput was most needed.

COVID-19 did not – and arguably still does not – have evidenced-based protocols. IRHs’ willingness to adapt and implement new models can guide more informed decision-making across discharge pathways, staffing, and even care techniques, and could be influential in not just rehabilitation medicine but across a range of medical specialties.

**IRHs Demonstrated Effective Infection Control.** Many interviewees from IRHs stated that their ability to quickly elevate their infection control protocols greatly contributed to rapid admissions of patients from STACHs. Admissions depended on the efficient utilization and availability of PPE, as well as the timing of rapid testing results, which led to varying processes not only among post-acute care providers but among different regions in the country. As licensed hospitals, IRHs benefited from a certain prioritization related to allocation of PPE and receipt of rapid test results, and strong infection control models, which supported admitting and treating patients whether they were COVID-positive or not.

Whether through IRH-specific COVID-19 infection control procedures (such as the model developed by Encompass Health in 2018) or enhanced protocols in partnership with public health constituents to ensure a coordinated pandemic response (e.g., Lovelace Health’s new policies created in conjunction with an infectious disease epidemiologist at the New Mexico Department of Health), our research suggests that IRHs have exhibited strong infection control practices during the course of the pandemic. The following figure shows the percentage of Medicare FFS patients who at the time of their STACH discharge to IRH, SNF, or HHA were not infected with COVID-19, but then subsequently contracted COVID-19 within their respective discharge setting, as evidenced by the COVID-specific ICD-10 code on a claim from their specific discharge setting (see Figure 11: “Share of COVID-19 Cases Acquired within STACH Discharge Setting: March-November 2020 (National”). From March – November 2020, the rate of COVID-19 infection acquired in the post-STACH setting remained below 1% within IRHs, while for SNFs the same rate was 4.1%, or approximately 5 times higher.

It is important to recognize that the ALOS varies within each discharge destination (also shown in Figure 11) – especially the institutional (IRH and SNF) settings. The longer average post-hospital stays in SNF settings, where there is also a long-stay residential population, can increase exposure to certain viruses, and therefore elevate the risk of infection. On average, a patient stays twice as long in a SNF (24.8 days) versus an IRH (12.6 days).

“We shifted more resources to infection control – we previously only had one person – and not one single staff member [was infected] manning the COVID unit.” (President & CEO, IRH)

19 ICD-10 code of B97.29 was used for January-March and U07.1 for April-November to capture COVID-19 on claims.
Waivers & Prior Authorization Relief Supported IRHs in Their Efforts to Help STACH Throughput and Relieve Capacity Constraints. As mentioned throughout this work, during the public health emergency several flexibilities were (temporarily) implemented that aided IRHs in admitting patients rapidly, including managed care plans offering prior authorization relief, and the Federal Waivers.

Beginning in March 2020, many managed care plans voluntarily suspended prior authorization in response to the COVID-19 public health emergency. The American Medical Rehabilitation Providers Association (AMRPA) compared utilization data between Medicare FFS and Medicare Advantage patients discharged to IRHs and found that during April – June 2020, Medicare Advantage beneficiaries were admitted to IRHs at a rate proportionate to their traditional Medicare beneficiary counterparts. This change was not driven primarily by COVID-19 patients, which made up a small proportion of the reviewed IRH admissions. Importantly, the analysis demonstrated the Medicare Advantage population admitted during the public health emergency was not materially different from the population admitted prior to the pandemic in terms of age, CMI, and average length of stay. Per AMRPA, “this data would seem to refute concerns that prior authorization policies prevent unnecessary, lower acuity, or inappropriate IRH admissions.” xiv

The Federal Waivers (and especially prior authorization relief) were important not just to maintain STACH throughput, but also perhaps reaffirmed the role that inpatient rehabilitation hospitals play in post-acute care.
Qualitative feedback from interviews suggests that even as IRHs have maintained strict admission criteria, the COVID-19 pandemic has helped discharge planners “relearn how IRHs fit into rehab alternatives.” In a similar theme, some IRH clinicians and executives specifically mentioned how the implementation of the 60 percent waiver could possibly stand as a reminder that the “60 Percent Rule” is a guideline for reimbursement and not admission, and does not preclude IRHs from admitting patients from outside the list of 13 qualifying conditions. However, interviewees suggested that in practice, there can be a strong preference (on the part of STACH discharge managers and IRHs alike) to admit only those who possess one of the qualifying conditions.

“Any list of diagnoses is problematic because it artificially limits access to patients who could benefit from admission to an IRH who have both medical management needs and therapy needs.” (Vice President of Post-Acute Services, IRH)

“This is the key role we have in patients who are critically ill. If we carry that experience into heart disease, cancer, and transplants – there’s value there.” (Chair of Rehabilitation Medicine, IRH)

As we learn more about the types of patients IRHs admitted and treated during the public health emergency, there may be an opportunity to re-assess which (and what point in time) patients can benefit from inpatient rehabilitation. As mentioned above, some IRHs admitted patients sooner than usual for certain DRGs, and in doing so particularly demonstrated their medical – in addition to rehabilitative – capabilities. This underscores the common feedback we received stating that a patient’s prolonged stay in a general acute care hospital can too often be dictated by administrative barriers that delay the start of a rehabilitative regimen. An IRH Chief Medical Officer commented that from his perspective, within Medicare Advantage, patient-centered decision-making is too often outweighed by certain financial thresholds:

“The patient is coming to us on day 20 because of managed care arbitrary rules...the expertise that comes with an IRH at day 10 or day 5 is being completely ignored.”

The speed at which care decisions were made and the increased focus on clinical versus administrative tasks supports continued implementation of waivers and prior authorization relief during public health emergencies. Furthermore, IRHs’ collective experience indicates it would be worthwhile to evaluate how to preserve benefits that appear to have stemmed from these flexibilities – including improved STACH throughput and commencing patient rehabilitation earlier when possible – outside of a public health emergency, while still ensuring providers adhere to appropriate admission protocols.

In August 2021, CMS once again urged Medicare Advantage plans to waive prior authorization, suggesting that the ways in which inpatient rehabilitation hospitals and units utilized that flexibility in earlier surges may have positively informed CMS action in later surges. The checks and balances in place for ensuring appropriate IRH admissions are of utmost importance, but for purposes of equitable public health access, we also need to recognize the ways in which the waivers and prior authorization relief have helped support safety and promote better outcomes for beneficiaries in the context of the public health emergency.
Lessons Learned & Recommendations

The effects of the COVID-19 pandemic continue to reverberate through our nation’s health system. There is an urgent need to discuss how general acute care hospitals, post-acute care providers, public health officials, patients and their families will safely navigate through an evolving healthcare landscape that promises more innovation as well as constrained resources. ATI Advisory’s work focused on specialty hospitals operating in the COVID-19 landscape has uncovered that even as more care is shifted to home-based settings, there remains a need for a hospital-based asset class that can quickly deliver capacity and share resources efficiently to ensure safe, timely, and equitable health care.

As IRHs continue to build upon their experience gained from the public health emergency, they must do so collaboratively with other key healthcare constituents to ensure their learnings can guide future healthcare policy. This can be achieved by extending their collaborative work within the private and public sector, improving education around their capabilities, and reasserting the importance of rehabilitation within the post-acute care continuum.

Partnerships & Collaborative Work with Public Health and Private Sectors

The public health emergency accentuated how the choices of the private and public sectors influenced outcomes in specific regions. Private companies that chose to send employees home one week earlier had outsized impacts in decreasing contagion risks and mitigating hospital surges, which then had compound effects as the choices of the private sector were often reinforced by support from the public sector. On the other hand, an uncoordinated public health response coupled with decision-making uninformed by key practicing clinicians (such as physiatrists) exacerbated the crises within the pandemic. Several IRH executives mentioned challenges working with public health officials who attempted to divert patients away from inpatient rehabilitation and towards skilled nursing facilities, which were having trouble admitting patients. Furthermore, throughout the pandemic, Emergency Medical Services (EMS) reported more individuals expiring in the field than ever before because they feared coming to an overloaded, understaffed hospital. IRHs reported that EMS also tried to move patients directly from the field to IRHs in an effort to unburden regional ICUs. Our nation cannot afford to have patients who are delaying emergency care because we have not appropriately utilized hospital capacity when possible. IRHs can use their experience to establish new relationships in both the private and public sectors, through which they can contribute their expertise to support improved, and more consistent, decision-making that supports keeping patient pathways open even during a public health emergency. We are already seeing the beginning of this movement through the origination of non-traditional coalitions (such as the New York-New Jersey consortium including Columbia, Burke, NYU, Mount Sinai, and Kessler hospitals that are tracking COVID-19 demographic trends for future research purposes), which demonstrate that cooperation among “competitors” is possible when entities focus on the common good.

Better Education Starts with IRHs Expressing Their Value

Several IRHs emphasized during interviews their focus on the highest need, specialty cases that require not only rehabilitative, but increasingly medical and behavioral health care. However, the distinctiveness of each patient means the decision to discharge to an IRH can be complicated. Care transitions should be performed collaboratively with a rehabilitation physician who can articulate IRH capabilities and a STACH discharge team that can appropriately communicate these services to the patient and family. This requires upfront, continuous education that is not just apparent at the time of discharge.

Some IRH interviewees pointed to confusion stemming from the perceived “3-hour rehabilitation barrier,” which may artificially limit or obscure IRH-appropriate patients. One IRH described how they drew up a mock schedule that summarized an IRH patient’s typical day, highlighting that the therapy did not have to be performed in three consecutive hours. This is a simple but effective solution that demonstrates how IRHs can help widen the aperture
for their referral partners (as well as patients and their families) in terms of appropriate admissions for their settings. IRH interviewees emphasized it is their responsibility to spearhead better education (that incorporates the CMS guidelines as well as their own experience), but also mentioned they expect their hospital partners to do their best to convey to patients and families, based on evidence, the appropriate post-acute care setting.

“There seems to be a reluctance on the part of the hospitals to ‘steer’ patients to specific settings despite evidence and a MedPAC recommendation to support this effort.” (Vice President Post-Acute Services, IRH)

“IRHs should not look like nursing homes and should specialize in care for complex neurological and multitrauma cases who need medical intervention, rehab nursing and intense therapy.” (Vice President Post-Acute Services, IRH)

Several interviewees believed increased specialization will help create more advocacy for IRH care. A large IRH in Texas noted that after reaching all-time lows in April, their census jumped in the summer due to patients self-referring, suggesting that IRH care is something patients specifically seek out. Similarly, the more acute patient mix IRHs admitted during 2020 – a population that required medical intervention, rehabilitative nursing, and intense therapy – seems to have established more trust and understanding among STACH referral partners in the types of patients appropriate for IRHs. This has implications for future public health emergencies as many IRHs felt they had been underutilized from a COVID-recovery standpoint. The IRH clinicians we spoke with emphasized that the multi-factorial conditions that have manifested in up to half of COVID-19 survivors, including cognitive and balance impairments and debilitation, are core competencies within inpatient rehabilitation hospitals.

Elevating the Importance of Rehabilitation in Post-Acute Care

Rehabilitation services in post-acute care are delivered on a spectrum, with IRHs providing the most intense services targeted toward recovery and discharge to home, while SNFs provide short-term rehabilitation in a long-term care environment. The changes COVID-19 drove within the post-acute care continuum (e.g., utilizing specialty hospitals when necessary) present an opportunity to entrain new post-acute care pathways that promote the most appropriate placements for patients requiring rehabilitation. All discharge decisions should be based on what is most appropriate and in the best interest of the Medicare beneficiary, however, it is possible there are more IRH-appropriate patients than the number that is currently being discharged (experts suggest up to 4.5 – 6.0% of STACH discharges, depending on diagnostic mix of the population, compared to ~3 – 4% currently).

Studies have demonstrated that rehabilitation services “are the cornerstone of post-acute care” and more recent research underscores the importance of rehabilitative services for COVID-19 recovering patients, but the trajectory – even prior to COVID-19 – did not necessarily align with this standard of care. For example, post implementation of SNF PDPM, one study stated that 43% of SNFs had laid off therapy staff. This reduction in therapy staff was...
further exacerbated during the pandemic as rehabilitation was relegated to a “non-essential” role in SNFs in order to prevent the spread of COVID-19.

As the nation rebuilds the post-acute care continuum, rehabilitation should be at the forefront of care regimens, especially given some patients see their physiatrist more than their primary care physician. For IRHs, this invites a renewed dedication to improving coordination amongst upstream (STACHs and LTAC hospitals) and downstream (SNFs) settings, to ensure that rehabilitation remains a priority in patient recovery. Our work uncovered examples of inpatient rehabilitation hospitals that are already engaging in this collaboration. A national multispecialty (LTAC hospital and IRH) provider has found value in sharing clinicians across its specialties, working outside “care silos,” and potentially even starting a rehabilitative regimen of care before the patient has been discharged (for those patients being admitted from an LTAC hospital). Downstream, SNFs remain an important discharge destination for IRH patients who are too complex and/or lack the family support to return home. Some IRHs have implemented bed readiness programs and have curated preferred partnerships with SNFs based on the achievement of certain quality metrics that are developed with the guidance of an inpatient physician.

These initiatives may not be brand-new, but combined with the role IRHs played within the public health emergency, they could activate or further support better relationships among post-acute care constituents. For example, as IRHs developed expertise in administering and managing COVID-19 testing protocols, they also improved the quality of both their communication and forecasting of discharge patterns to their post-acute care partners. This has potential to improve coordination along the post-acute care continuum and should stimulate conversations that support providers in reassessing appropriate patients for their respective settings.

“Discharge managers sometimes send referrals to both SNFs and IRHs...we need to figure out at the time of discharge what is best for the patient...based on where the patient has the highest likelihood of success.” (Vice President Post-Acute Services, IRH)

— CLOSING

Although our nation’s collective health system has come a long way since the first COVID-19 case, including the development and distribution of several highly effective vaccines, as we close 2021, the public health emergency is still very much in force. Healthcare providers continue to face daily challenges, many of which stem from a workforce that has been crippled by the demands of the virus. Nurse turnover rates have increased to ~22% this year, compared to ~18% pre-pandemic. In an effort to combat this, hospitals that can afford to do so have increased pay, with the average annual salary for registered nurses increasing 4% in the first nine months of this year, compared to 2.6% growth the year before the pandemic.

Our research suggests that the COVID-19 pandemic seems to have adversely shifted the labor pool in a few ways for IRHs. In addition to higher turnover rates, IRHs report they are receiving fewer applications for staff positions. Voluntary departures seem to be driven by a combination of exiting the field entirely (whether to pursue a new field or early retirement) as well as nurses shifting to perceived “higher security” medical/surgical positions and/or remote non-clinical positions. The field has also been battered by nurses who have succumbed to COVID-19. One IRH recently reported they had lost 65% of their nursing and nursing assistant staff due to a combination of these factors, and since July 2020 have been operating at reduced capacity due to their inability to recruit more staff.

The many challenges of the pandemic do hold some promise, however, if we allow our collective learnings to inform how we shape the nation’s future post-acute care continuum. In this work, we reviewed the contributions IRHs have made during the pandemic and how their role has evolved. We found that IRHs rapidly adapted their hospitals, have served as a critical post hospitalization setting, and continue to serve and rehabilitate clinically complex patients.
More recently, researchers and clinicians have been assessing new diseases spurred by COVID-19, and some IRHs have been at the forefront of researching and managing patients with such conditions, whether through their own hospitals or by working side by side with referral partners. Our research highlights that these initiatives were greatly aided through certain flexibilities under the Federal Waivers and/or prior authorization relief, which enabled IRHs to take on different roles depending on local circumstances.

Just as the pandemic required a heterogenous approach within respective communities, we can carry this same through line into care at the individual level. The COVID-19 pandemic serves as a reminder that healthcare policy and decision-making must support care regimens that are based on whole person health. This will require a more informed understanding of the capabilities within each setting and how these factors influence patient pathways of care, which together can promote foresight into the setting where the patient has the best chance for recovery. The benefits conferred by timely access to medical rehabilitation for COVID-recovering patients as well as the fact that the American Heart Association’s guidelines promote inpatient rehabilitation for patients who have suffered a stroke – the leading cause of disability in the United States and the fifth leading cause of death – reinforce the integral role that inpatient rehabilitation hospitals play in our nation’s post-acute care continuum.

“Everybody has a role. One facility or service is not a panacea. Our job is to determine the intervention that will work best for that population.” (Vice President Post-Acute Services, IRH)

Acknowledgement

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xxi  Average percentage of STACH COVID discharges to IRHs during January – November 2020. ATI Advisory analysis of 100% Medicare FFS claims incurred January 2019 – November 2020 and paid through December 2020.

xxii  In September 2020 within the Houston market, STACHs discharged 7.0% of COVID patients to IRHs. ATI Advisory analysis of 100% Medicare FFS claims incurred January 2019 – November 2020 and paid through December 2020.

xxiii  Hackensack Meridian Health.

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xxv  Per interview with New York-based IRH, performed by ATI Advisory.

xxvi  Per interview with a Senior Health Policy Advisor, performed by ATI Advisory.

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