CarePort® powered by WellSky®

The evolution of care: A care delivery report

from CarePort®, powered by WellSky®

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Key findings

- While hospital inpatient volume has returned to pre-COVID-19 pandemic levels, there have been noticeable changes in patient acuity and discharge destination.
- Patients referred to post-acute facility and home-based care settings are generally now higher acuity than they were prior to the pandemic.
- There has been a shift to home-based post-discharge care and away from facility post-acute care, increasing the need for care coordination.
- Both home health agencies (HHAs) and SNFs are struggling to meet patient demand due to staffing shortages.
- The capacity challenges at post-acute facilities and with home care agencies are contributing to increased length of stay in acute settings.

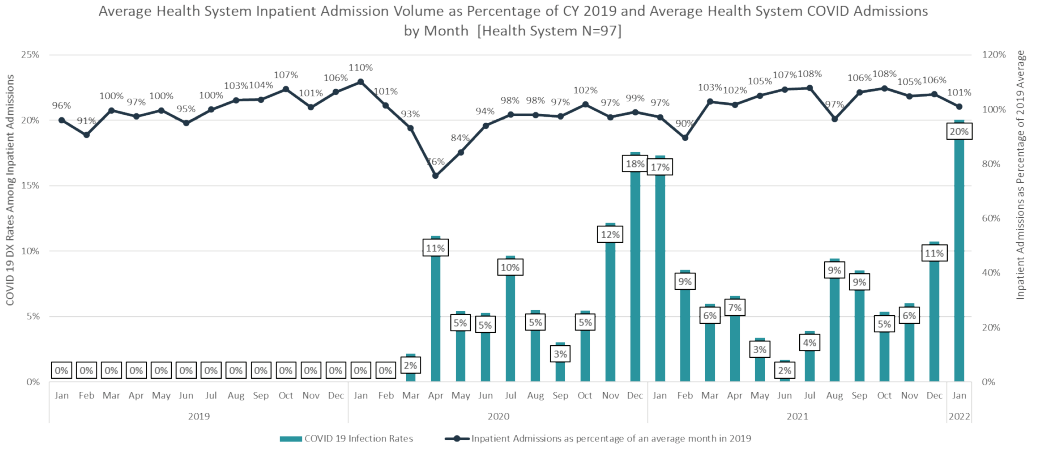
The COVID-19 pandemic has fundamentally changed the way care is delivered in the U.S. With traditional care settings like hospitals and skilled nursing facilities (SNFs) reserved for high-acuity – oftentimes COVID-19 patients – in the earliest months of the pandemic, more people chose to age, receive care, and recover in the home. While growing consumer preference to receive care in the home pre-dated the pandemic, COVID-19 has inarguably accelerated the shift to home-based care.

CarePort, powered by WellSky, a market leader in care transitions, leverages its care coordination solution to support more than 1,000 hospitals and 130,000 post-acute care providers across the United States. In this report, based on proprietary data from acute and post-acute providers, CarePort explores the ways the COVID-19 pandemic has changed care delivery and sheds light on the implications for patients and providers as we enter a new era of healthcare.

COVID-19 and the impact on acute and post-acute care

During the first COVID-19 wave experienced by the U.S in March 2020, 20% of patients admitted to CarePort's hospital clients had a COVID-19 diagnosis. As hospitals nationwide grappled with an influx of COVID-19 patients, they were forced to halt elective surgeries and shut down various units – driving a 30% decrease in inpatient volume as a result.

When broken down by geography, CarePort's data shows many regions across the country experienced a similar initial dip in April 2020 and subsequent recovery in hospital inpatient volume, despite the pandemic affecting different regions of the country at different times, and with varying severity. By August 2020, most regions had recovered to within 5% of pre-pandemic inpatient volume.



The types of patients seeking inpatient care have changed

CarePort typically categorizes patients based on major diagnostic categories (MDCs), as defined by the Centers for Medicare & Medicaid Services (CMS). MDCs group patients into certain categories based on primary diagnoses. In examining the distribution of patients by MDCs during the COVID-19 pandemic, the typical primary diagnosis codes for patients – meaning the type of patient – seeking hospital care experienced a notable shift.

The MDCs experiencing increased inpatient stays were diagnoses associated with the COVID-19 patient population; data shows an increase in inpatient stays where the primary diagnosis indicated a problem in the lungs (breathing problem or respiratory issue) or an infection. More patients were admitted under primary diagnosis code U07.1, the respiratory MDC eventually associated with the coronavirus population. Meanwhile, other MDCs (including disorders of musculoskeletal system and connective tissue) experienced decreased inpatient stays as joint replacement and other elective surgeries were paused.

As MDCs are typically very stable, these patient mix changes are meaningful but unsurprising due to the pandemic.

Higher-acuity patients discharged to skilled nursing and home health

CarePort data shows that the average patient discharged to SNFs and home health care is now more acute (9.7 on the Elixhauser Comorbidity Index as of December 2021) than in 2019 prior to the pandemic (8.7 on the Elixhauser Comorbidity Index), which equates to an 11% increase in average comorbidity score. On average, these more complex patients have a greater need for services post-discharge.

The Elixhauser Comorbidity Index is a method of categorizing comorbidities of patients based on the International Classification of Diseases (ICD) diagnosis and is designed to predict two frequently reported health outcomes: risk of in-hospital mortality and risk of 30-day readmissions.

For example, as compared to prior periods, patients now referred to post-acute and home-based care are older and have more comorbidities, such as congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), hypertension, neurological disorders, diabetes, and obesity, among other conditions. The average Elixhauser Comorbidity Index of a SNF patient has increased by 9% since 2019. For the average home health patient, CarePort data shows a 7% increase in patient comorbidity scores from 2019 to 2020.

The shift to home-based care: challenges and opportunities

Discharge patterns to post-acute care have shifted. According to CarePort data, there has historically been a fifty-fifty split in referrals to SNF and home health – but the pandemic shifted these referral ratios. By March 2021, home health referrals had reached 116% of 2019 totals and comprised 60% of sent referrals, while SNF referrals lagged at 40%.

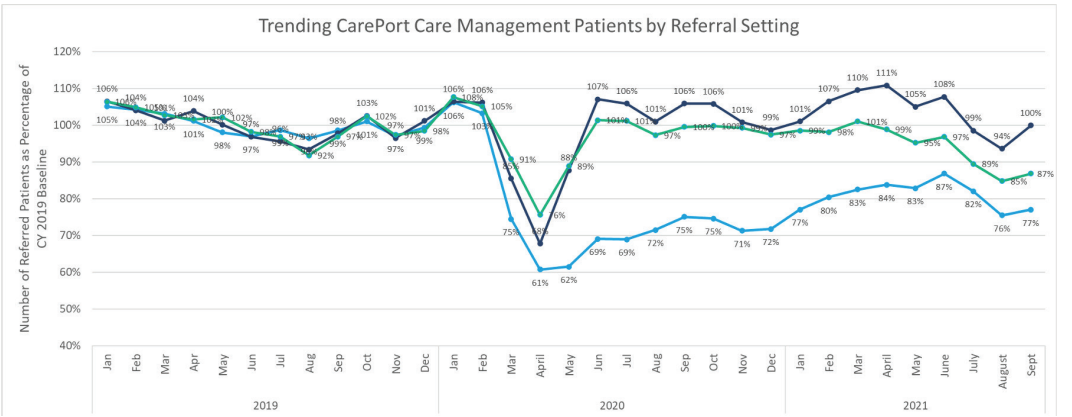
In reviewing data from a health system that uses CarePort, it's evident that the decision-making process regarding where patients are discharged has changed. Patients and their families continue to favor home-based post-acute care. In 2019, **41%** of the patients requiring post-acute care were discharged from this CarePort client health system to a SNF. Between January and November 2021, only **35%** of patients were sent to a SNF.

In what appears to be the new normal, discharge planning teams, patients, and their families are increasingly opting for home-based care over institutional care settings such as nursing homes and SNFs. Spurred by the COVID-19 pandemic and the fear of contracting the virus, more patients than ever before are choosing to receive care in the comfort of their own homes.

According to September 2021 CarePort data:

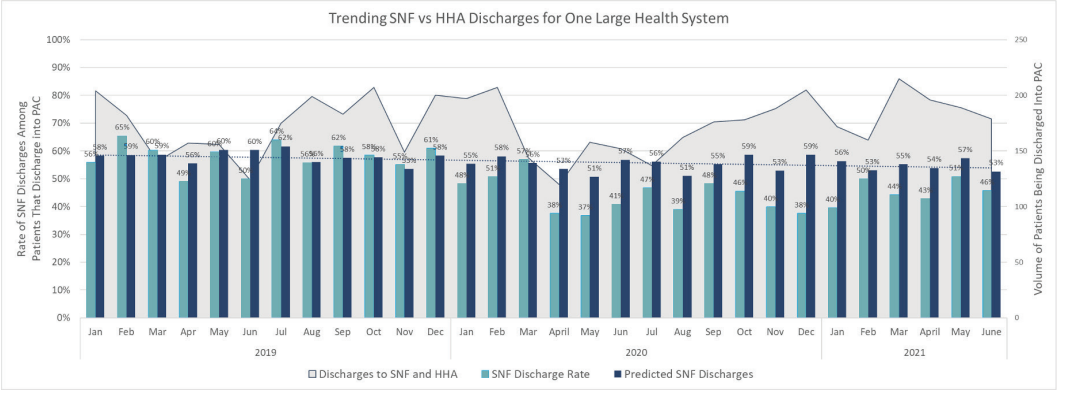
Home health referral volumes ↑ 10%

SNF referral volumes ↓ 18%



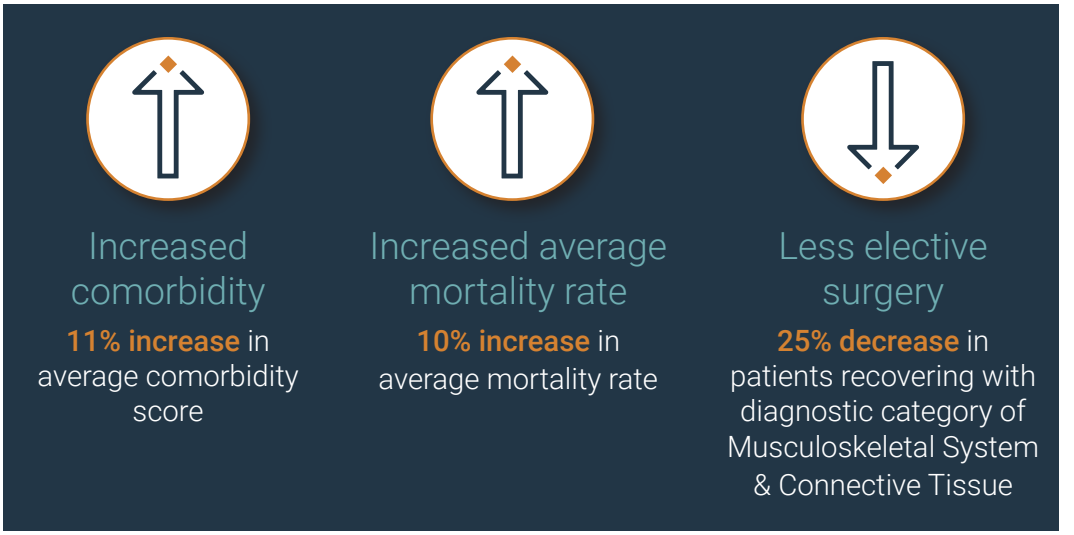
This graph demonstrates referral patterns from CarePort client hospitals between January 2019 and September 2021. The data illustrates the continued trend in which referral patterns favor home health care over SNF-based care.

As more patients choose home-based care, this has resulted in a more acute patient population being cared for by home health – as highlighted by data from one large health system below.



Beginning in April 2020, this graph demonstrates that actual SNF discharge rates lagged far behind predicted SNF discharge rates, indicating that patients who normally would have been discharged to a SNF were instead discharged to home health care. Prior to April 2020, predicted SNF discharges and actual SNF discharge rates were more closely aligned.

Data from this health system shows that the average patient discharged into home health care is more acute. Patients in the hospital have increased comorbidity and mortality rates:



**As compared to 2019 levels*

Not only do patients and their families increasingly prefer home-based care, but so do payers, due to the more cost-effective care delivery model. More capital is flowing into the home health space as well. In the first six months of 2021, venture capital invested more than $500 million into U.S. startups focused on eldercare and home health care.[1]

[1] https://news.crunchbase.com/news/eldercare-senior-home-care-start-ups-funding/

Potential overutilization of the SNF setting is costly. The Medicare Payment Advisory Commission (MedPAC) reports that **the average SNF episode ($13,700) is 2.5x more expensive than a HHA episode ($5,462).**

CarePort client health systems show a large variance in referral patterns, demonstrating an opportunity to encourage more patients to utilize home health care.

Leveraging the **CarePort Discharge Decision Support Predictive Algorithm**, hospitals can make more informed discharge decisions that help ensure patients are discharged to the right level of care. Through predictive analytics, the **CarePort Discharge Decision Support Predictive Algorithm** evaluates the most appropriate post-acute level of care and patient readmission risk depending on cost, quality, outcomes, and similar patient profiles.

According to CarePort's predictive algorithm, more than 10% of the average health system's post-acute discharges to skilled nursing facilities would have been strong candidates to instead receive post-acute care in the home.

As an increasing number of patients opt for home-based care, there are challenges associated with ensuring patients receive the appropriate level of care or services – particularly around care coordination. For example, in the nursing home setting, patients are provided a "one-stop-shopping" experience – physicians, nurses, physical therapy, medication management, nutrition services, home medical equipment (HME), durable medical equipment (DME), and other services are all offered all in place. By contrast, for patients to successfully recover in the home, all services must be carefully coordinated to ensure that the patient's medical and non-medical needs are met within the home. Without coordination of care from the hospital to home and between providers post-discharge, patients are at high risk of being readmitted.

Post-acute, home, and community referral challenges

Hospitals are more challenged than ever to find post-discharge services for their patients. For example, CarePort data shows a rise in the number of referrals sent per patient that need to be sent before nursing home, home health, or hospice care can be secured.

32% increase in the average number of referrals sent per patient per discharge to SNFs*

42% increase in the average number of referrals per patient sent to home health

15% increase in the average number of referrals per patient sent to hospice

**Based on CarePort data from January 2019 to June 2020*

Post-acute providers are struggling to keep pace with a dramatic influx in referrals. SNFs and home health agencies are facing unprecedented staffing challenges. Efficient, tech-enabled, and automated referral processes are needed more than ever in the current environment.

CarePort Referral Management allows post-acute providers to receive, respond, and review all patient referral activity in a single electronic system – providing a simplified and automated process that enables a short-staffed workforce to better focus on patient care.

CarePort analysis highlights the importance of quick and efficient referral response times: **nearly half of placed patients go to the post-acute provider that responds within 15 minutes of an acute referral.**

Using CarePort Referral Management to facilitate faster referral responses, **SNFs could see a 67% increase in new referral volume and home health agencies could see a 17% increase in new referral volume.**

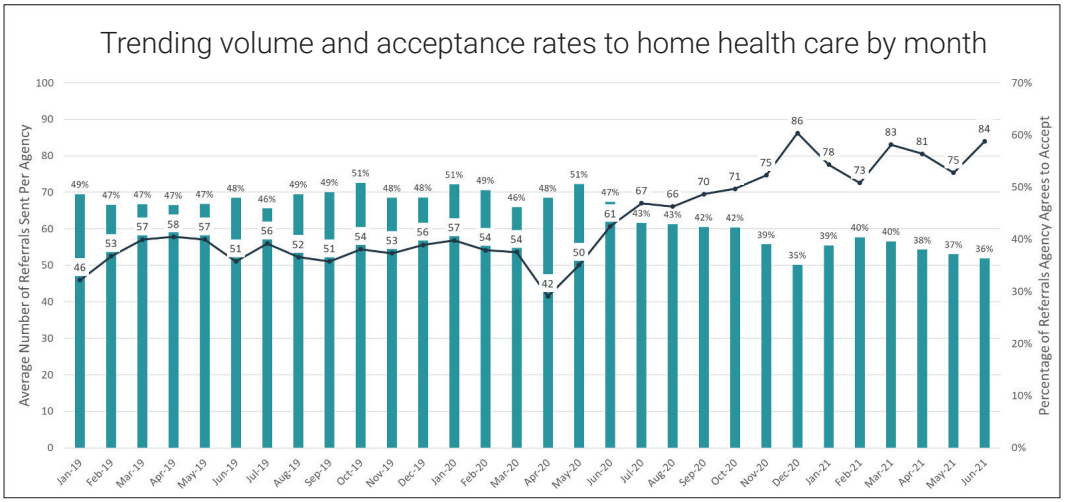
CarePort Referral Management streamlines the referral process and increases post-acute provider visibility to referral sources in the CarePort database to achieve operational effectiveness and serve as a better referral partner for hospitals, physician groups, and ACOs. Post-acute providers can also monitor the effectiveness of their marketing activities to enhance market presence, increase census, adapt to industry needs, and achieve better patient outcomes.

Coupled with CarePort Community, post-acute providers can facilitate community referrals and coordinate care for patients who require services at home or have DME needs.

Home health referral and staffing challenges

Ignited by increased patient demand for at-home recovery, as well as agency staffing challenges and capacity restraints, hospitals are struggling to locate home health agencies that are able to accept patients in a timely fashion.

While there has been a 33% increase in referrals sent to home health, home health acceptance rates have decreased by 15%.



Even if hospitals can secure placement, there are still obstacles to overcome. Timeliness to start of care, a key home health measure, is critical to ensuring optimal patient outcomes. In fact, **CarePort data has found that the risk of hospital readmission rises by 3% each day after a patient is discharged and is not seen by a home health provider.**

CarePort Connect alerts care providers when patients experience key care events, such as delays in home health start of care or a rehospitalization. With this real-time data, providers can collaborate with one another in the care of shared patients, helping to ensure timely care interventions and monitor their patients throughout their entire care journeys. This leads to enhanced care coordination, elevated patient outcomes, reduced readmissions, more timely follow-ups, and seamless transitions of care.

CarePort Insight is an analytics and reporting tool that enables providers to enhance network performance and program management via a curated set of risk-adjusted, real-time measures and public data. By putting relevant quality and efficiency measures and reporting right at their fingertips, providers can build and maintain effective post-acute care collaboratives, optimize provider performance in real-time, and track outcomes for patient cohorts across the care continuum on one unified platform. With CarePort Insight, care teams can also track critical outcomes such as 30-60-90-day readmission rates, post-acute LOS, and care delivery for patients belonging to specific value-based care programs and initiatives (ACOs, BPCI-Advanced, high-utilizers, etc.).

SNF referral and staffing challenges

Despite patients' growing preference for home-based care, hospitals are also experiencing challenges identifying SNFs that are able to accept their patients. Nationwide, SNFs are facing an unprecedented staffing shortage, which is limiting SNF capacity.

The average rate that SNF providers have declined referrals from 2019 to 2021. In other words, SNFs are now declining referrals 10% more often.

CarePort Care Management helps hospitals and health systems optimize care transitions through a robust post-acute network—no matter what EHR is used.

Leveraging **CarePort Care Management,** hospitals can:

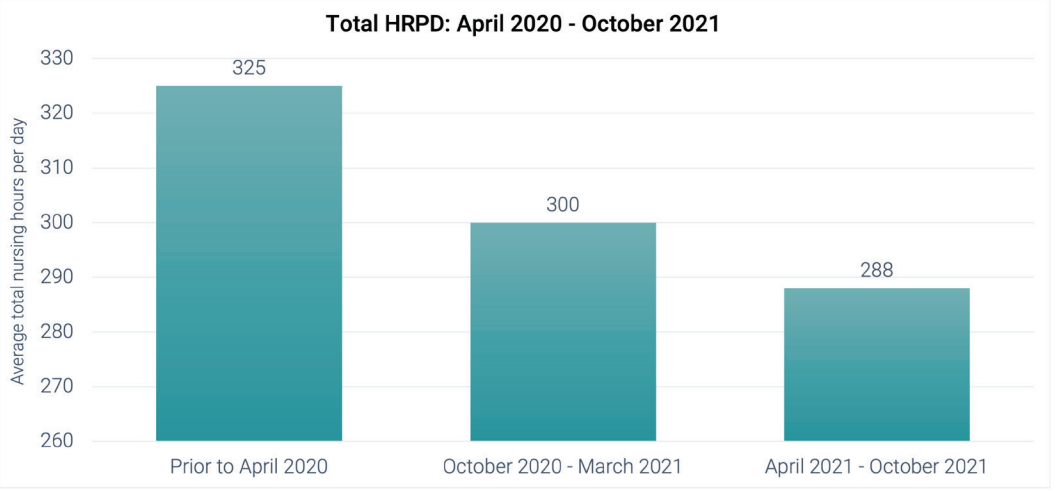
- Navigate and effectively transition patients to the next step in their care, as well as improve patient engagement and satisfaction by enabling patient choice
- Improve collaboration with post-acute providers through increasingly efficient network management and closed loop handoffs
- Simplify and streamline care management processes by electronically managing the end-to-end care transition process

While nursing home staffing shortages are nothing new for the industry, the COVID-19 pandemic, widespread labor shortage, and vaccine mandates for long-term care employees have exacerbated the issue in an unprecedented way.

CarePort data highlights SNF staffing shortages:

Total nurse hours per resident per day (HRPD) is a critical component of both the CarePort Quality Score and the CMS Nursing Home Five-Star Quality Rating System. Total Nurse HRPD measures the ratio of registered nurse (RN), licensed practical nurse (LPN), and certified nursing assistant (CNA) hours per resident per day.

CarePort data verifies this trend, demonstrating that total staffing hours in SNFs – Total Nurse HRPD – continues to decrease, indicating that fewer nurses are present in facilities; CarePort data shows that Total Nurse HRPD decreased by **37 hours** between April 2020 and April 2021. Though staffing is an important predictor of SNF quality, decreasing staffing numbers in SNFs does not necessarily pose a danger to residents currently under care.



Hospital discharge planners, case managers, patients, and families leverage CarePort Guide to streamline the post-acute care selection process.

CarePort Guide helps alleviate difficulties associated with identifying high-quality post-acute care for a patient's specific needs through a maintained national database of post-acute providers including home health agencies, SNFs, and hospice providers.

Discharge delays to post-acute & home contributes to longer hospital LOS

The time that a patient stays in the hospital prior to discharge to SNF, home health, or hospice has increased since the COVID-19 pandemic began in the U.S. in March 2020 – peaking in January 2021.

10% increase

For patients discharged to SNFs, hospital average length of stay (ALOS) has **increased 10%**

8% increase

For patients discharged to home health, hospital ALOS has **increased 8%**

Indicating that patients are higher acuity and hospitals are struggling to secure post-acute referrals

CarePort®
powered by WellSky®

Supporting care transitions **across the continuum**

CarePort Care Management

Optimize discharge planning and utilization review with an EHR-agnostic, cloud-based solution

CarePort Referral Management

Receive and respond to all patient referrals electronically in a single system

CarePort Guide

Guide post-acute care selection and help patients choose high quality care

CarePort Connect

Manage patients across settings with real-time data and alerts

CarePort Transition

Streamline patient transitions to the appropriate next level of care

CarePort Insight

Evaluate patient outcome and post-acute provider performance

CarePort Interop

Identify and notify physicians and PACs of hospital admits, transfers, and discharges through the CarePort network

Conclusion

CarePort data highlights the strong dependencies between providers across the continuum. For example, staffing shortages for post-acute providers, including SNFs and HHAs, have contributed to increasing hospital LOS due to delays in discharge. With more hospitalized patients choosing home-based care post-discharge, providers across the continuum are tasked with working together as never before. Because the patients going home are more complex, care coordination is required to ensure both access to and timely delivery of these services. As demonstrated in CarePort data, patients suffer costly adverse outcomes – such as hospital readmissions – in the absence of coordinated care transitions.

If the past two years are any indication, patients increasingly expect to age and receive care at home. However, though home-based care is undoubtedly on the rise, traditional care environments including hospitals and SNFs remain a critical part of the care continuum. In fact, as aging baby boomers require more care, the healthcare system will need both traditional facilities and home-based care options to keep pace with increasing demand.

CarePort's data shows that as demand for post-acute and home-based care continues to increase, the path to success hinges on technology-enabled care coordination. Although staffing challenges exist across all settings of care, we cannot meet the growing demand for care through staffing alone. Technology that powers enhanced efficiency and automated workflows is needed to ensure safe and high-quality transitions of care across the continuum at scale.

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CarePort is the leading care coordination network with thousands of providers connected across the U.S. The end-to-end platform bridges acute and post-acute EHR data, providing visibility into the entire patient journey for providers, physicians, payers, and ACOs. With CarePort, healthcare professionals can efficiently and effectively coordinate patient care to better manage patients as they move through the continuum. CarePort helps providers meet and comply with the patient event notification Condition of Participation as part of the CMS Interoperability and Patient Access final rule and the IMPACT Act. Read more about CarePort on careporthealth.com, Twitter and LinkedIn.