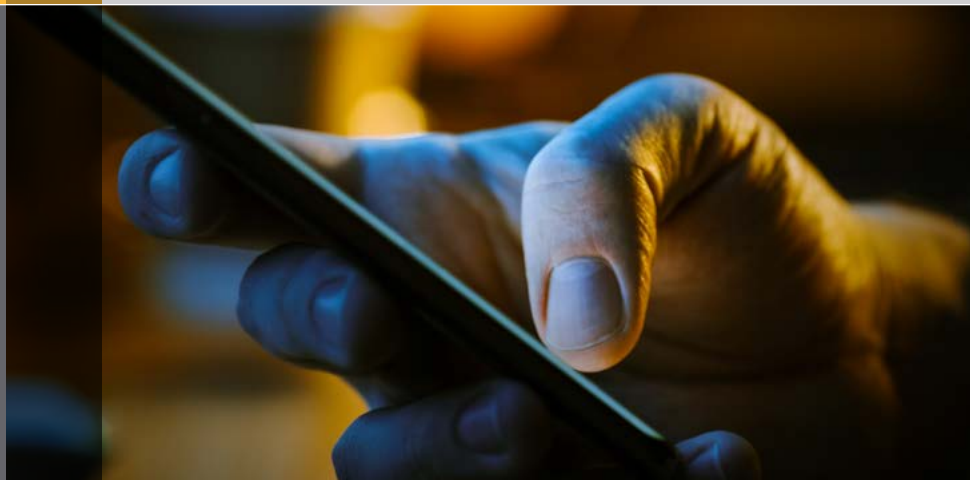




**UNINTENDED CONSEQUENCES:
Pandemic-Driven Self-Service
Options Drive Surge in Duplicate
Patient Records**



The explosive popularity of telehealth to ensure ongoing access to care during the COVID-19 pandemic has brought with it an equally rapid rise in patient self-scheduling—an upward trajectory accelerated by the need for streamlined methods of scheduling COVID-19 tests and vaccinations.

Born of necessity, self-scheduling has nonetheless exacerbated the already grim state of patient matching. Desperate for appointments, many patients inadvertently create multiple medical record numbers (MRNs) as they work through the scheduling process, wreaking havoc on healthcare organizations' Electronic Master Patient Index (EMPI) and electronic health record (EHR) systems, as well as the ongoing quest for a 1%-or-lower duplication rate.

A patient portal-based COVID-19 self-triage and self-scheduling tool in place at the University of California, San Francisco (UCSF) Health is a prime example of the self-scheduling boom. Created in February 2020 for UCSF's primary care patients, the tool was accessed 1,327 times and completed 1,129 times by 950 unique patients during the first 16 days of use. Further, 56% of patients placed in the non-urgent disposition following self-triage used the tool to schedule visits in the 10 days during which video visit direct scheduling was active — and did so much faster than patients who used the health system's hotline.ⁱ

The popularity of self-service options is not expected to wane in the future. According to a HIMSS survey, 77% of patients are willing to continue using some form of telehealth post-pandemic and 41% cite it as their preference in certain circumstances.ⁱⁱ Meanwhile, Forrester estimates that virtual visits for general medical care will exceed 440 million in 2021.ⁱⁱⁱ

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ISSUE: Creating more duplicates

For provider organizations, self-scheduling has become a double-edged sword, particularly with the rapid uptake in use by patients who are not experienced in how to properly execute a search for their existing medical records. While it checks the boxes of increased patient satisfaction, lower call volume and fewer resources dedicated to scheduling, self-scheduling is exacerbating one of healthcare's most intractable problems: duplicate and overlaid medical records that lead to patient matching and identification issues.

The body of anecdotal evidence continues to mount, demonstrating that hospitals and health systems that launched self-scheduling portals to address demand for telehealth and COVID-19 vaccination appointments are experiencing sizable upticks in duplicate patient records. In most cases, that bump comes despite their best efforts at patient education.

One west coast health system hoped that requiring patients to schedule appointments for COVID-19 vaccinations via the personal health record integrated with its EHR would streamline the process. However, the system created new (often multiple) records whenever the patient's existing record could not be located. With upwards of 6,500 vaccination appointments each day, the surge in duplicates and overlays in their EHR's identity queues was massive—creating additional problems when affected patients tried to schedule their second vaccination.

Another health system, this one in the Pacific Northwest, teamed up with several other organizations with the goal of vaccinating tens of thousands of patients per day. After several days, however, its EMPI had amassed several thousand potential duplicates requiring remediation before they could impact downstream systems.

Yet another hospital was forced to pause self-scheduling—which it had hoped would speed vaccination registrations—after a surge of duplicates overwhelmed the system. The option remained offline until the HIM department could clean up the mess and implement new procedures to avoid another overload.

Other healthcare organizations are standing up independent EMPIs for self-registration around COVID-19 tests and vaccinations, knowing that doing so will only delay the inevitable. Duplicates will most certainly be created when those records are ultimately merged with their main EMPI and integrated into patients' official records.

Polluted EMPIs and EHRs aside, duplicate records threaten the progress being made toward containing the pandemic, leading to issues such as inaccuracies in the longitudinal care record, delayed communications of test results and data collection gaps. One HIMSS executive shared that some public health nurses were forced to rely on Google searches in their efforts to correctly identify some patients so they could be contacted with COVID-19 test results.^{IV}

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RECOMMENDATION: A multi-faceted approach

Stand-alone EMPIs and halting self-scheduling are just temporary patches to a long-term problem. Now that they have had a taste of the ease and convenience self-scheduling has to offer, patients are demanding access. Unless real solutions are found to the patient identification issues exacerbated by the unintended consequences of self-scheduling, an already significant problem will only get worse.

Already, inaccurate patient identification costs the average healthcare facility \$1.2 million per year and contributes to everything from denied claims and adverse events to duplicate testing and delays in diagnosis and treatment. Further, about 18% of patient records are duplicates^v and approximately 1 in 5 are incomplete, including an estimated 40% of demographic data missing from commercial laboratory test feeds for COVID-19.^{vi} One study even found significant variation across states in the data sent from laboratory reporting systems to public health departments. For example, while patients' addresses were included in nearly 90% of cases in Wisconsin, the same was true of just 55% of cases in Indiana.^{vii}

The patient matching problem persists despite multiple attempts to identify a solution. Everything from a national patient identifier to USPS address-formatting tools to stronger matching algorithms has been put on the table, and all have their merits. However, there is no magic bullet nor a one-size-fits-all solution.

Internally, healthcare organizations can take a few immediate steps to chip away at their duplicate rates and get them close to the recommended 1%. The first is to conduct a cleanup of the master patient index to help identify and resolve existing duplicates, overlays and shell records. Some clinics and healthcare organizations may not have the resources or manpower to carry out this very crucial and time-consuming task, so they have outsourced remediation services to companies that provide ongoing EMPI/EHR monitoring and management. These services not only provide cost-effective and efficient cleanup of a system's MPI, but they also work proactively by rapidly identifying, validating and reconciling duplicate records before they can infiltrate and contaminate downstream and outside systems.

At the industry and national levels, the cure also includes continued pressure to remove obstacles standing in the way of a national patient identifier, along with industry-wide standardization, third-party data, and expert analysis and intervention. In 2020, Patient ID Now, a coalition of healthcare organizations, was founded to help eliminate regulations that create barriers to public-private collaboration on solutions to the problem of inaccurate patient identification.

Additional actions healthcare systems can take include:

- Increasing patient education around proper use of self-scheduling tools.
- Auditing standards in conjunction with Patient Access to determine what policies are in place to ensure the MPI remains clean.
- Training employees on the standards.
- Conducting ongoing quality assurance to identify problem areas and intervene with education and training when necessary.
- Leveraging existing tools, including the USPS address-formatting tool, to help standardize data as much as possible in lieu of national guidelines.

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Sudden Duplicate Surges Require Rapid Relief

When HIM departments find themselves battling a sudden weekly influx of thousands of new potential duplicates, even the most regimented team of professionals will be quickly overwhelmed. For many, the only solution has been to take registration and scheduling portals offline until duplicates can be identified and remediated, thereby eliminating a valuable weapon in the battle against COVID-19.

IDRelief™ from Just Associates enables rapid and continuous remediation of high volumes of possible duplicate/crossover pairs—without taking away a powerful pandemic response tool. And it can often be up and running within a week.

Briefly, the client organization provides Just Associates with the potential duplicate report generated by its EHR and a data extract. IDRelief puts that data through a series of steps and processes to identify pairs with like-discrepancy patterns. This includes our proven methodology for leveraging multiple third-party data sources to improve decision-making without the need to perform time-consuming searches. When necessary, data normalization is also undertaken.

A remote team of highly trained experts who understand the uniqueness of patient records also applies our proprietary workflow to the continuous review and identification of duplicates for ongoing remediation. Throughout the entire process, comprehensive quality assurance procedures will ensure IDRelief maintains the unsurpassed industry standard of service for which Just Associates is known.

CONCLUSION:

Until duplicates rates are normalized, the full benefits of self-scheduling, telehealth, and other patient-centric tools to help ensure access to care during and after the pandemic will remain just beyond our grasp. Truly moving the needle on minimizing duplicate and incomplete patient records requires a multi-faceted solution that brings together USPS tools, third-party data, expert analysis and intervention, and industry-wide standardization.

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