

December 2020

Fact or Myth: Generational Preferences and Trends in Patient Medical Bill Statement Notification Types

It is often the default assumption in the medical billing industry that paper is necessary and sufficient as a means of collecting patient payments with minimal attention given to patient payment collection strategies for digital patient statement notifications (i.e. email and SMS). When digital notifications are considered it is often assumed that only younger patients will engage.

This report examines that assumption. Medical bill statement notifications received by patients of independent practices were analyzed over time, segmenting patient cohorts by generation (Silent, Baby Boomer, Gen X, Millennial, and Gen Z) and breaking out notifications by paper vs. digital, paper, email, and SMS.





Introduction

Many medical billers are reluctant to adopt digital-first communication strategies or even digital-assisted strategies for patient billing.

Assumptions include a belief in a lack of interest from older patients or the belief that established processes already reach as many patients as needed.

These assumptions are challenged by key findings presented in this paper:

- 1 Digital notifications comprise a near if not absolute majority of all notifications received by patients across all age groups, not just younger patients. In fact, all but one age cohort received the majority of their notifications from digital rather than conventional paper channels, and the sole exception (the Silent generation) received a full 48% of all their notifications by email or text as opposed to conventional paper bills.
- 2 Contrary to what is commonly presumed, there was no trend for older patients to rely more heavily on paper statements over time. Likewise, there was no identified trend for younger patients to shift to receiving more digital statements over time.
- 3 Interestingly, although minor, the relative rate of adoption of digital as opposed to paper notifications over time was highest among both the oldest (Silent) and youngest (Gen Z) generations. Conversely, paper trended slightly negative over time as a percent of all notifications specifically for Silent and Gen Z patients.
- 4 Email notifications experienced pronounced growth as a percent of all notifications over the nearly two year time period analyzed. This was true across all patient age cohorts, but the strength of the correlation increased progressively by age. The strongest correlation was seen for Gen Z ($r = .780$), followed by Millennials ($r = .605$). The correlation was weaker though still notable for Gen X ($r = .428$), but it became relatively minor for Baby Boomers and Silents.
- 5 SMS notifications followed a temporal pattern that in many ways was the inverse of the trend for email. SMS became a gradually smaller portion of notification composition over time, though this pattern was again more pronounced with the younger generational age cohort. It was a solidly negative correlation for Gen Z ($r = -.680$) and Millennials ($r = -.585$), modestly negative for Gen X ($r = -.399$), and relatively minimal for Baby Boomers. Meanwhile, the trend was actually slightly positive indicating no change or slightly increased adoption of SMS notifications for the oldest generation of patients over time.

An unsurprising finding is that paper notifications are most common for older generations of patients.

More interestingly, the findings suggest that older generations may to some extent be playing “catch up”, with growth rates for digital channels among Silents and Boomers outstripping in pure percentage terms the rate of growth in digital statement use for younger generations.

The fact that even among the Silent generation almost half of all notifications came via digital channels, and that Baby Boomers received more digital than paper notifications at a rate of 64:36, should dispel the myth that older patients are not reachable or are not amenable to patient engagement or payment opportunities through these channels.

Doctors and billers who have resisted digital as a strategy may want to rethink their assumptions in light of these findings.

Methodology

For this analysis, data was pulled by month for all months from December 2018 to November 2020 (24 months in total). For each month the count of statements was queried, as a function of both notification type (email, SMS, paper) and the age cohort of the patient. To distinguish the different age cohorts, the standard Pew Research Center definition was used for the age ranges of each generation and the specific birthday cutoff points that divide them. The generations selected for this analysis were Silents (born 1928 to 1945), Baby Boomers (1946-1964), Gen X (1965-1980), Millennials (1981-1996), and Gen Z (1997-2003).

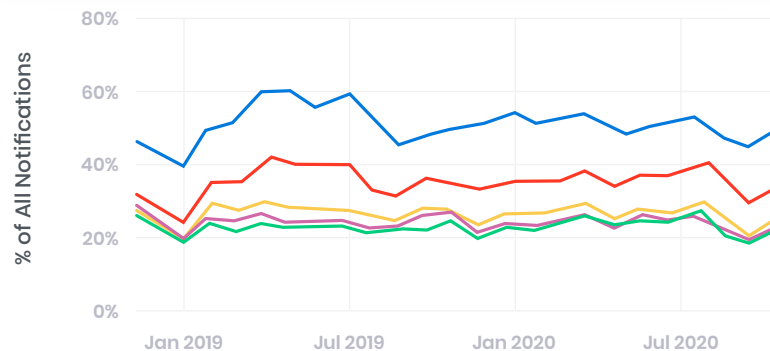
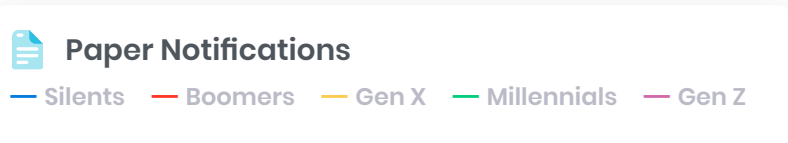
For Gen Z only data from patients who were over the age of 18 were analyzed, as patients younger than that age likely would have confounded results by having parents or guardians manage the payments.

To get clear data on how statement composition was changing over time, while accounting for growth in the number of statements overall, raw data on patient counts was converted to a percentage of all statements for the month for a given age cohort or notification category.

In some cases, the chart data is described using the correlation statistic r , also known as the correlation coefficient, which measures the strength and direction of a correlational relationship. The larger the absolute value of r , the stronger the relationship between the independent and dependent variables. A positive r value reflects a positive correlation, while a negative r value reflects an inverse or negative correlation.

For each month the values for each generational cohort sum to 100%, so fluctuations up or down do not reflect changes in notification volume for that particular age cohort alone but rather how the number of statements sent varied over time relative to the number of statements sent to other cohorts.

The percent composition for a given generation could drop either because they were receiving fewer notifications or because other generations were receiving more notifications and the growth in notifications for other generations exceeded the growth in the number of statements for that generation.



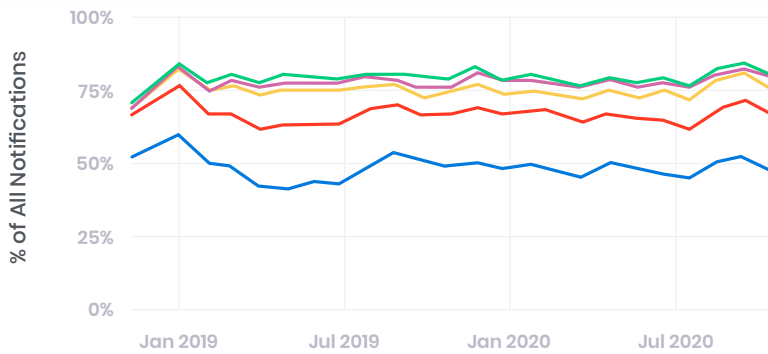
Results

Breakdown of Different Notification Methods by Generation

The proportion of paper notifications reveals a baseline level of monthly variability across generations, but across all age cohorts there was no net upwards or downwards trend in the rate of paper notifications over the 24 month period.

Digital Notifications

— Silents — Boomers — Gen X — Millennials — Gen Z

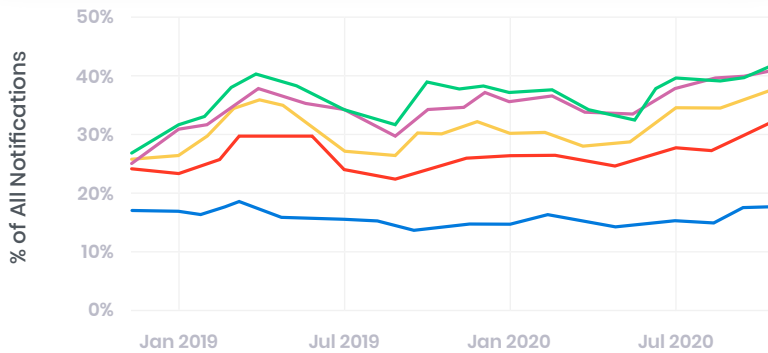


Unsurprisingly, paper notifications comprise a greater proportion of all notifications for older generations compared to younger generations. This trend is particularly evident in the rates for Baby Boomer and Silent generation patients.

For digital notifications (i.e. email and SMS), Silent generation patients received a far lower percentage of their overall notifications through digital channels than did any other generation. Nevertheless, even Silent generation patients received nearly half of all their notifications through digital channels (47.9%), confirming that digital channels are significant across all generations.

Email Notifications

— Silents — Boomers — Gen X — Millennials — Gen Z

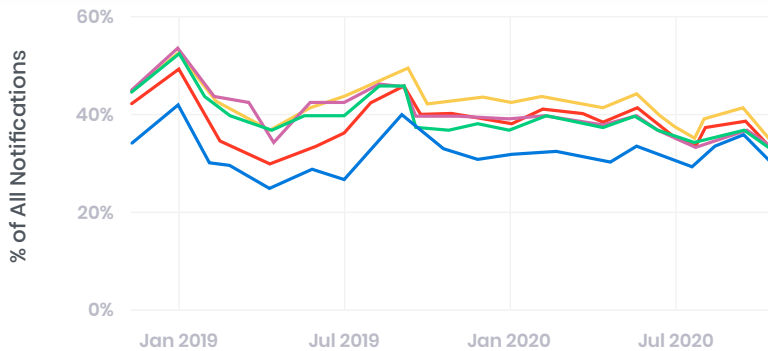


Breaking out digital notifications between email and SMS, email notifications alone trended towards comprising a greater proportion of patient notifications over time. This trend was most pronounced among the younger generations, especially Millennials ($r = .605$) and Gen Z ($r = .780$).

Gen X still showed a significant drift towards emails being a larger component of their statement composition over time ($r = .428$). However, the significance of this trend declined for older generations. For Boomers the trend was quite muted ($r = .159$) and for Silent generation patients there was only very minimal growth in emails relative to other statement types ($r = .066$).

SMS Notifications

— Silents — Boomers — Gen X — Millennials — Gen Z

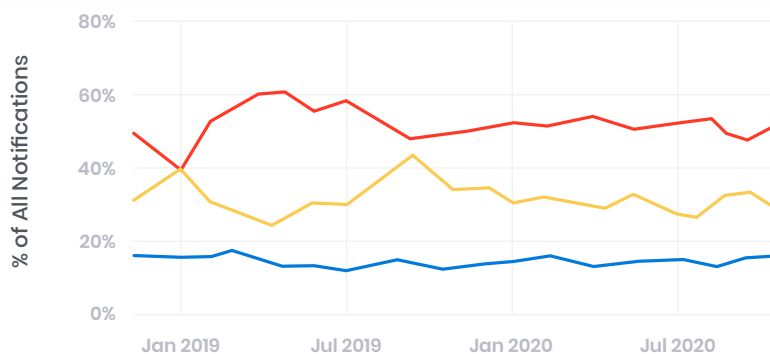


By contrast, the trend for SMS notifications trended towards becoming progressively less common over time for all generations.

It should be noted that the trend once again was most pronounced for the younger generations, with the steepest decline in SMS notifications among Millennials ($r = -.585$) and Gen Z ($r = -.680$), an

Silents (Age 75 and over)

— Email — Paper — SMS



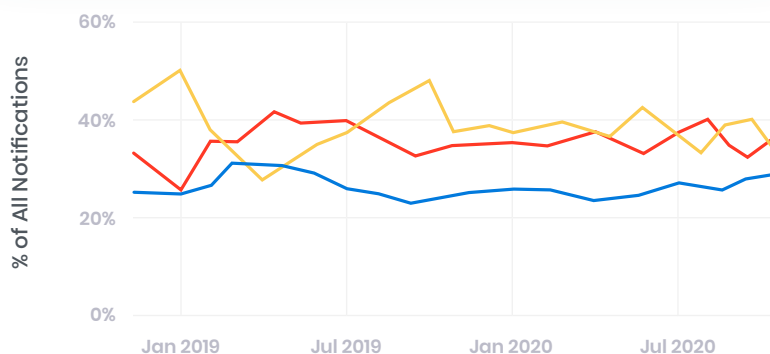
intermediate decline among Gen X ($r = -.399$), a muted decline among Boomers ($r = -.139$), and a slight increase among Silents ($r = -.038$).

Breakdown of Different Generational Cohorts by Notification Method

Silent generation trendlines for the percent of all notifications by notification type show a slight shift away from paper and towards more digital notification methods, specifically with SMS.

Baby Boomers (Age 56 to 74)

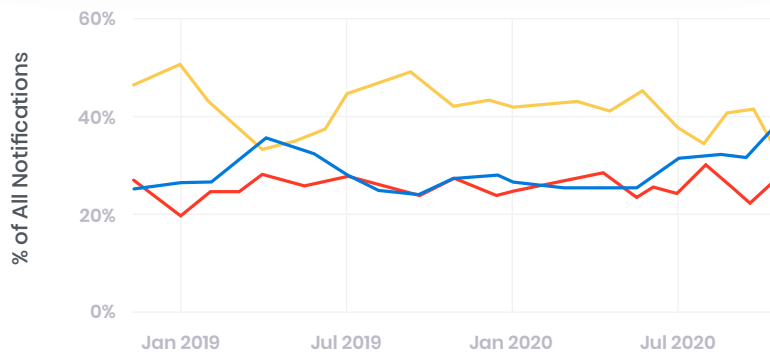
— Email — Paper — SMS



For the Boomer generation, trendlines are largely flat with no trend towards greater adoption of email, SMS, or paper over time.

Gen X (Age 41 to 55)

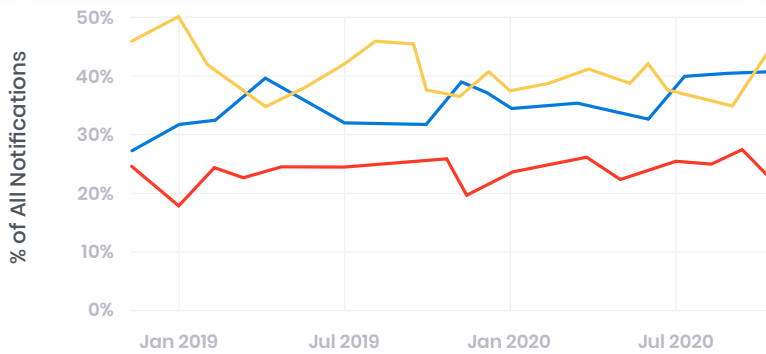
— Email — Paper — SMS



For Gen X, a slightly positive trend towards more email and less SMS over time was observed.

Millennials (Age 24 to 40)

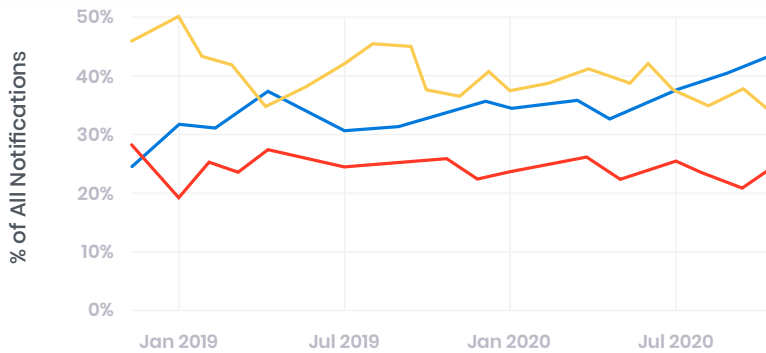
— Email — Paper — SMS



Millennials followed a slight positive trend towards more email and less SMS over time, similar to Gen X.

Gen Z (Late teens/early 20's)

— Email — Paper — SMS



For Gen Z, trends are largely flat with a move towards more email and less SMS over time.

Conclusion

This data makes clear that patients of all ages, whether digitally native or not, increasingly welcome access to a variety of communication methods including email, text, and paper.

Furthermore, contrary to popular belief, older generations are not dramatically less likely to use digital methods for statement notifications (email/SMS), even though older generations are indeed much more

reliant on paper statements overall. In fact, there may even be a slight trend towards progressively more SMS use among the older generation as older patients play “catch up” to the higher rates of adoption among young patients in prior years.

This research should inform billers and practices that their patients are more ready than they might think to adopt digital technology. Instead of a “digital assist” strategy where email and text are used to supplement paper statements, all age cohorts appear willing to engage with a “paper assist” strategy where digital is the default notification method - with paper bills sent, when necessary, to augment communication.

Fact or myth? Yes, it is a fact that generational differences should be considered in patient bill outreach but a myth that digital should not be a part of medical biller’s strategy today.

About Inbox Health

Inbox Health is transforming medical billing one patient at a time with personalized and intelligent interactions that deliver a clear and convenient billing experience for every patient. The company launched its operating system for billers in 2018, since then, Inbox Health has quickly become the industry standard for medical billers and practices that want to increase collections and shorten revenue cycles while reducing administrative costs. Inbox Health is a venture backed software company supporting billers across the United States. The Inbox Health platform automates the patient communication process using bi-directional correspondence, proprietary algorithms, machine learning and artificial intelligence so every patient understands their medical bills and has access to different payment mechanisms, and medical billers and providers achieve optimal patient receivables.

Inbox Health Labs / Inbox Health’s rapidly growing proprietary data set of over 30 million unique patient bill payment interactions provides a trove of potential insights. Inbox Health Labs strives to provide valuable research to the medical biller community by analyzing the data to discover key findings that are topical to prevailing and emerging trends in the industry as well as changes that are the consequences of the major events of the day.

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