Direct MRI Scheduling: Improving Patient Access To Imaging Care In An Underserved Patient Population

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Purpose

To improve access to imaging care in an underserved, at-risk, primarily Hispanic and Black patient population with 80% of patients having Medicare/Medicaid as their primary insurance.
Methods

- IT solution was implemented within the EMR to enable MRI scheduling at the point of care in subspecialty clinics, a program we entitled MRI Direct Scheduling (MDS)
- MDS eliminates the need for patients to separately contact the Access Center for an imaging appointment
Methods

• With MDS, patients complete their clinic visit with an imaging appointment in hand, and with screening and preparatory information directly communicated

• MDS could mitigate existing barriers to imaging care including language and health literacy challenges associated with MRI scheduling, MRI screening, and pre-exam preparation by providing scheduling at the point of care in clinic
Methods

• A standardized video-format training module was developed to educate scheduling staff at the clinical sites on the new IT workflow

• Module completion was a requirement for the granting of access to the workflow embedded within the EMR

• Marketing materials were developed, and interdepartmental leadership meetings were held to pitch the use of MDS by the clinics
Methods

• MDS was piloted by the Orthopedics Dept as follows
• Direct scheduling was enabled for 7 MRI units at 4 free-standing urban outpatient imaging facilities within a four-mile radius
• Descriptive statistics were collected on MDS utilization in 2017-2020 (note: 2020 data was impacted by COVID-19 outpatient volumes)
• Logistic regression model was applied to identify demographic factors significantly associated with MDS utilization (p<0.05)
Results

• 25% of all Orthopedic MRI exams were scheduled through MDS, indicating a high level of engagement with the program

• In the same period, there was increase in Orthopedic MRI volume growth of 39% and 38% in 2018 and 2019, which saw an overall growth of 6% and 8% in MRI, respectively

• MRI Orthopedic volume increased year-over year in 2017 by 14%, in 2018 by 16%, and in 2019 by 16%
Results

MRI Growth

- 2018: 869 (3%)
- 2019: 1,102
- 2020: 1,298

- Ortho Growth
- MRI Growth
- Direct Scheduling over total Ortho Vol
Results

• Ease of access to appointments and was identified by Orthopedics leadership as a cause for this improvement in volume capture for Orthopedic – ordered MRI’s

• Non-Hispanic White patients were 15% less likely to utilize Direct Scheduling compared to Hispanic and Non-Hispanic Black patients (p<0.001)
Conclusions

• The MDS program experienced a high level of engagement by Orthopedics patients, particularly Hispanic and Non-Hispanic Black patients

• The direct pathway for securing imaging appointments was associated with increases in MRI volume for the health system