



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

Shlomit Goldberg-Stein¹ , Mark Liszewski², Eras Chong², Kenny Ye², Bradley Clemente² , Judy Yee²

¹Northwell Health, Northwell-Hofstra School of
Medicine

²Montefiore Medical Center, Albert Einstein
College of Medicine

RSNA 2021

Shlomit Goldberg Stein, MD



@ShlomitGStein



sgoldbergste@northwell.edu

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



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