



Focused Triage and Scheduling: Multidisciplinary Stone Clinic Optimization at Mayo Clinic in Arizona

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DEFINE

BACKGROUND

The Multidisciplinary Stone Clinic, led by the Department of Urology with multidisciplinary engagement from colleagues in the Division of Nephrology and Hypertension and Clinical Nutrition, has existed since 2016 at Mayo Clinic in Arizona. While the clinic has matured and grown over time, the processes and workflows utilized to manage the inflow of patients (new external and internal referrals) had not been reviewed or adapted in many years. Patients were being referred with limited coordination, notably lack of triage, prioritization, review of acuity, or focused scheduling, which resulted in delays in patient care, loss of referrals, and frustrations for patients and providers alike, when managing recurrent stone disease, acute kidney or bladder stones, risk factors and genetic predispositions associated with stone development, and conditions secondary to stone disease.

OBJECTIVE

To increase triaged and accepted new & consult (N&C) (*new*= new patient externally referred, *consult*= new patient internally referred) patients into the Multidisciplinary Stone Clinic by 10%, from 40% triaged and accepted for *new* patients and 80% triaged and accepted for *consult* patients to 50% and 90% respectively, without adversely impacting turnaround time (measured in days) for N&C patients to be seen in the clinic.

INSTITUTIONAL SIGNIFICANCE

- ❖ Improved access to N&C appointments in the department allows for continued entry of new patients and revenue streams
- ❖ Establishment of a triage and prioritization model within the context of a multidisciplinary setting ensures patients see the right provider at the right time to expedite and optimize best-in-class care
- ❖ Improvement is anticipated to positively impact patient experience via highlighted teamwork across a multidisciplinary care team model, notably strengthening coordination of care and decreasing lag time between episodes of care with multidisciplinary specialists
- ❖ Demonstrated volume and revenue growth without incremental FTEs allows for good financial stewardship
- ❖ Complex and multidisciplinary stone disease management exemplifies top-of-pyramid care solutions that increase demand for destination care, meanwhile delivering an unparalleled patient experience
- ❖ The Multidisciplinary Stone Clinic represents an institutional model of team-based care, creating an environment for rapid innovation and translation of team-based science and digital connectivity

MEASURE

IMPROVEMENT MEASURE BASELINE AND SAMPLE SIZE

Improvement Measurement: 247 N&C appointment requests were received in the pre-intervention period of September 2020 – February 2021 with 40% of *consult* requests accepted and scheduled and 80.6% of *new* requests accepted and scheduled.

BALANCING MEASURE BASELINE AND SAMPLE SIZE

Balancing Measurement: The average turnaround time, as measured by days from receipt of appointment request (i.e., order placed) to scheduled date was 22 days.

DATA COLLECTION PLAN FOR IMPROVEMENT AND BALANCING MEASURES

Total patient N&C appointment requests for the Multidisciplinary Stone Clinic (new & consult orders) were monitored via available Office of Access Management dashboards, yielding patient appointment request data from Epic® EMR. Turnaround time was similarly measured through available Epic® reporting.

ANALYZE

POTENTIAL CAUSES

The multidisciplinary team and leadership engaged in a comprehensive review and analysis to determine opportunities to increase accepted N&C patient volume and request coordination. Feedback was noted across 4 common themes:

- ❖ Confusion from referring providers on which patients should be sent to urology vs. nephrology
- ❖ Lack of dedicated triage resulting in inconsistencies in denied and accepted patients
- ❖ Delays in scheduling and turnaround time from appointment request to visit date
- ❖ Lack of coordinated intake with necessary imaging and/or labs prior to visits to expedite and streamline care

In prioritizing interventions available to address these themes, the key intervention selected were dedication of existing staff, including a Medical Administrative Assistant (MAA), Scheduler, and Physician Assistant (PA-C) FTE to focus on coordination of Multidisciplinary Stone Clinic intake, including PA-C triage of all incoming orders for acuity and appropriate timeline to scheduling, protected Scheduler time to schedule patients based on triage decisions, and protected MAA time for coordination of appointment activities such as receipt of outside records, labs, etc.

IMPROVE

INTERVENTIONS SELECTED AND TESTED

Beginning March 1, 2021, focused PA-C, Scheduler, and MAA time was dedicated to coordination of the triage, scheduling, and coordination efforts in lieu of centralized efforts with all department allied health staff supporting the same activities. No incremental staff were hired to support these activities, rather instead of such efforts being spread across many, the activities were focused to specific staff, without adding incremental expense or time (i.e., centralized vs. de-centralized model). All of these coordinated efforts (triage, scheduling, outside record retrieval, etc.) were coordinated and communicated through the Epic® EMR without additional infrastructure or build.

Total volume of received & triaged appointment requests and turnaround time from date of receipt to scheduled date were measured and compared for September 2020 – February 2021 (pre-intervention) and March 2021 – September 2021 (post-intervention).

COMPARISON FOR THE IMPROVEMENT MEASURE

- ❖ Total volume of triaged, accepted, and scheduled N&C patients into the Multidisciplinary Stone Clinic grew from 40% to 97.8% for *new* patients and 80.6% to 95.5% for *consult* patients
- ❖ The sample size included 247 appointment requests in the pre-intervention period and 600 appointment requests in the post-intervention period
- ❖ Similarly, average Multidisciplinary Stone Clinic calendar fill rate (MD and PA-C) improved from an average of 57.7% pre-intervention to 69.3% post-intervention.

COMPARISON FOR THE BALANCING MEASURE

- ❖ Average turnaround time, as measured by days from receipt of appointment request (i.e., order placed) to scheduled date decreased from 22 days to 8 days for *new* patients with no change noted for *consult* patients

IMPROVE- APPOINTMENTS REQUESTS SCHEDULED & TURNAROUND TIME (TAT)

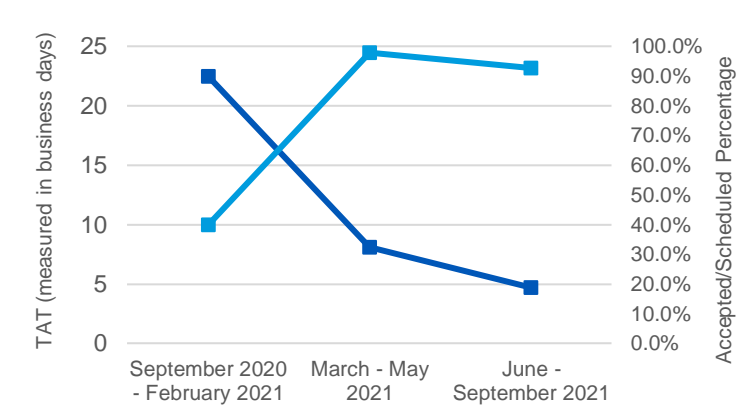
Consult (new, internally referred patient)			
		Avg. Turnaround Time (Business Days)	Accepted/Scheduled Percentage
Pre- Intervention	September 2020 - February 2021	22	40.0%
Post 1: March-May	March - May 2021	8	97.8%
Post 2: June-September	June - September 2021	5	92.6%
New (new, externally referred patient)			
		Avg. Turnaround Time (Business Days)	Accepted/Scheduled Percentage
Pre- Intervention	September 2020 - February 2021	7	80.6%
Post 1: March-May	March - May 2021	8	95.5%
Post 2: June-September	June - September 2021	7	91.4%

CONCLUSIONS

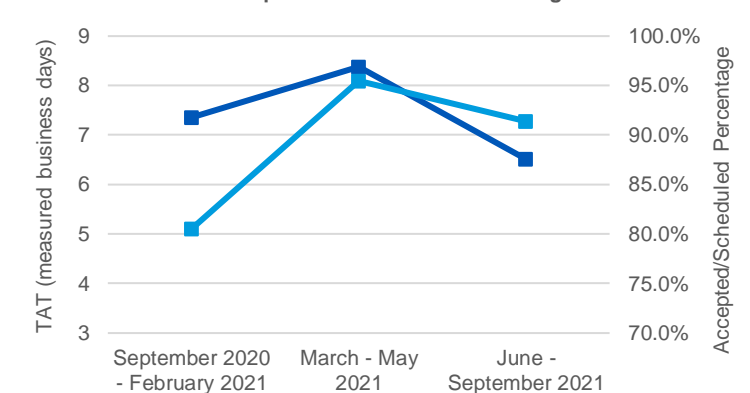
- ❖ These results highlight the success of a focused triage model, whereby allied health staff can succinctly triage incoming new appointment requests for acuity, schedule, and coordinate care in an effective and efficient manner, providing significant benefit to patients and providers alike.
- ❖ While this study was based in the context of a Multidisciplinary Stone Clinic, it demonstrates the impact of a centralized vs. decentralized patient access model, and remains highly translatable to other medical and/or surgical departments and divisions seeking to implement multidisciplinary care models.

IMPROVE- APPOINTMENTS & TAT

Consult- Accepted/Scheduled % vs. Average TAT



New- Accepted/Scheduled % vs. Average TAT



CONTROL

LESSONS LEARNED

Multidisciplinary teams allow for improved communication, break down silos, and enable better organization of work effort to allow for best patient care. Dedicated triage by a provider with subspecialty expertise within these teams ensures clinical expertise is matched to patient needs, allowing for streamlined patient access and care coordination, ultimately improving the patient and team experience.

HAND-OFF AND PLAN

Department leadership continues to monitor appointment request volume, accepted/scheduled percentages, and average turnaround time across the Multidisciplinary Stone Clinic. This project and model of focused triage and scheduling has proven so successful that it has been modeled in other areas within the Department of Urology (i.e., urologic oncology, endourology, etc.) with additional care teams.