**Redesigning Clinic Access for New Efficiencies: Multi-Disciplinary Stone Clinic**

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**Background & Objectives:** “The needs of the patient come first.” are not only the words found on clinic walls but the guiding principle of Mayo Clinic and its never-ending commitment to providing elite patient care, education and groundbreaking research. In today’s fast-paced culture, timely access plays a major role in how patients choose their health care provider. Stone Disease impacts approximately 1 in 11 Americans and can be a complex disease to effectively manage. The Departments of Urology and Nephrology at Mayo Clinic in Arizona diagnose and treat patients for Stone Disease independently, generating numerous appointments and often a duplication of work- a significant source of patient and employee dissatisfaction. Enhancing clinical access, increasing clinical efficiency, employee engagement and improving patient and learner experience are all essential factors to successfully provide world class care and maintain a competitive edge.

**Planning/ Research Methods:** Multiple stakeholders were consulted including Urology Physicians, Urology Administrative Leadership, Urology Allied Health Staff, Nephrology Physicians, Nephrology Administrative Leadership and Nutritional Services Leadership. A multidisciplinary project team was assembled with champions from each area that would be impacted by future change with a project manager and regular meetings. Other established multidisciplinary clinic models were reviewed as a baseline. A priority was to implement this clinic in a cost neutral manner and department approvals were sought and granted to implement.

**Implementation Methods:** In 2016, a Multidisciplinary Stone Clinic was formed so patients could be evaluated by experts from three different medical specialties including Urology, Nephrology and Dietary Services in one place during one patient appointment. The initial clinic’s development included dedicating 0.1 FTE of three providers to a twice-monthly, half day of clinic, and utilizing a shared clinic space to increase the revenue per square foot. Two generic appointment calendars were used to schedule patients over a half day of clinic; one for surgical patients and the second for medical patients. Patient’s charts were reviewed at the bi-weekly Kidney Stone Conference to triage appropriate patients to the appropriate calendars. Due to the overwhelming response in appointment requests for this clinic, a patient experience survey was conducted. The survey (N=101) addressed numerous questions including: patient access, clinical efficiencies, provider interactions, and satisfaction with care and education received. Given the results of the survey and the overwhelming appointment requests generated, the clinic was then expanded from a half day clinic to a full day of clinic with the three providers.

**Results:** The Multidisciplinary Stone Clinic has been tremendously successful. Within 18 months of the clinic launch, more than 400 appointments were generated, of which, more than 300 were unique new patients. Productivity and patient access increased by 100% as the Multidisciplinary Stone Clinic transitioned from a half day clinic to a full clinic day. Patient satisfaction surveys indicated 92.1% of patients felt they left their visit with a plan of care for their Stone disease. 71.6% of patients surveyed were likely to recommend the Stone Clinic to others. Patient feedback has been positive in regards to the educational benefit of having multiple providers review the reason for kidney stone formation and prevention. The efficient use of clinical time, real time team based care and communication is the paramount benefit of the Multidisciplinary Stone Clinic from the clinical provider perspective. The physicians stated that the efficient use of time via the pre-clinic conference allowed them to focus on current stone episodes in clinic; this increased provider efficiency and satisfaction due to the decreased clerical burden of providers no longer needing to place further orders for follow-up. Additionally, clinicians have increased their engagement through attendance of dedicated Kidney Stone Education Conference as well as the development of 8 ongoing research trials and improvement in stone-specific residency testing scores. The stone clinic recognizes the value of patients’ time by efficiently getting them to the correct resources every time, provides a unique service, increases educational opportunities and has made research more concentrated and impactful.

**Next Steps:**

- Continue to add additional capacity to the stone clinic and the individual physicians, leveraging the use of Advanced Practice Practitioners, residents and the morning and afternoon clinic conferences.
- Develop a robust pre-visit and intake process for patients that will ensure labs, metabolic urine and other key items to support clinical decision making are completed prior to patient visits.
- Utilize the stone clinic to further expand the unique educational experience it provides for learners and the outcomes of their future patients.
- Use AI and algorithms to analyze patient behaviors and create lifestyle recommendations to lower the frequency of stone episodes.
- Share successes and best practices with other specialties that can benefit from a similar multidisciplinary approach to patient access.

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