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Acute Care Optimization

Optimizing Urgent Care with Command Center Oversight

How modern telemedicine and meta-level analytics can drastically increase efficiency, satisfaction, and profitabilty in Urgent Care.

The Urgent Care Market – Opportunities and Challenges

Rapid Growth, Mergers and Acquisitions

Both health systems and the investment community continue to aggressively pursue the rapidly growing urgent care industry. According to a Becker's Hospital Review article, "There was an almost 20 percent growth in existing clinics in the past four years, with the total number of urgent care clinics exceeding 9,000, according to a February 2014 McGuire Woods report. The expansion is expected to continue; IBIS World estimates the sector will produce more than $18 billion in revenue in 2017 at more than 12,000 clinics." [1]

Since 2008, investors have pumped roughly $3 billion into the urgent care industry, according to data in a report from research firm Pitchbook. In a 2014 white paper from McGuireWoods and UCAA, one industry professional predicted the urgent care industry will see a lot of activity through 2019 and beyond, since some large metropolitan areas could support two to three times the number of current urgent care providers. [2]

For health systems, acquisitions and partnerships continue, as the referral bases are mutually beneficial, and healthcare costs are contained, of increasing importance not only for insurance companies but health systems entering value based contracts. Correct treatment, matched to acuity level, can be provided to patients with these partnerships—and urgent cares continue to benefit from the clout of hospital brand names. Both investor-owned and health system-owned urgent care clinics are expected to continue to grow this year. [1]

Merger and acquisition activity has also become prominent in urgent care. With this growth level in what has historically been a fractured market, mid-level market consolidation is expected to be the norm for several years. Urgent care players will continue to form larger enterprises, using the plethora (and majority) of under-three-clinic-locations ownership models to feed them.

One industry expert — Stan Blaylock, CEO of Physicians Immediate Care, a chain of urgent care centers and occupational health services — predicts most urgent care consolidation and transactions will "shake out" in the next three to five years. In 2019 and beyond, there will be fewer key players in the urgent care industry mostly consisting of large regional chains of urgent care centers. [2]

Rapid Growth in Urgent Care
Adds to Shortage in Staffing Nationwide

Growing Urgent Care Market	Urgent Care Staff Shortage
+20%	21,800
Growth in Urgent Care Sites in Past 4 Years	Shortage of Physicians in the U.S.

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Staff Shortages – New Options Needed

Limited access to physicians remains a key issue for patients today. The Association of American Medical Colleges indicates there is a shortage of 21,800 physicians today, and projects the number could grow to 90,400 by 2025. As a result, patients are finding it increasingly difficult to schedule a traditional appointment with a physician. According to Merritt Hawkins' 2014 Survey of Physician Appointment Wait Times, the average cumulative wait time to see a physician is 18.5 days, and increases to 19.5 days when a patient requests a new patient appointment with a family practice physician. According to a 2014 survey of over 20,000 physicians conducted by Merritt Hawkins on behalf of The Physicians Foundation (www.physiciansfoundation.org), 82% of physicians described themselves as at capacity or overextended and unable to take on new duties. [3]

Approximately 20,000 physicians practice urgent care medicine, according to the American Academy of Urgent Care Medicine. Of the physicians that staff urgent care centers, 47.8% are trained in family medicine, 30.1% are emergency medicine physicians and 7.6% are internal medicine practitioners. Urgent care clinics are largely physician-led facilities, with 94% of urgent care clinics employing at least one full-time physician. [4]

However, staffing models can vary depending on the needs of the particular clinic. Smaller urgent care clinics may be able to depend on a single full-time physician, while busier clinics may employ multiple full-time physicians. It is also common for urgent care clinics to employ several part-time physicians to staff their facility. In most cases, these providers have other positions in hospitals or private practices in the area and will "moonlight", or pick up extra shifts, at the clinic.

The urgent care staffing model increasingly includes the regular use of advanced practice providers (APPs), including nurse practitioners (NPs) and physician assistants (PAs). According to VMG Research, 59% of urgent care clinics use either nurse practitioners or physician assistants. Particularly in clinics located in retail outlets, nurse practitioners and physician assistants provide the great majority of care. NPs and PAs find urgent care attractive for several reasons (right).

The Merritt Hawkins 2015 Review also indicates that family physicians, the primary recruiting target of urgent care centers, were Merritt Hawkins most requested search for the ninth year in a row, while internal medicine physicians, also sought by urgent care centers, were second, also for the ninth year in a row. PAs and NPs also are being recruited more aggressively.

Staff in Urgent Care

20K
Physicians Working in Urgent Cares

59%
of UC Clinics Utilize NP's or PA's

94%
of UC Clinics Utilize at least One Full Time Physician

82%
of Physicians Across Urgent Care and All Other Fields of Medicine are at Capacity or Overextended

Elements of Urgent Care that Attract **Nurse Practitioners & Physician Assistants**

- **Large Variety of Illnesses & Conditions**
- **Advanced Practice Leadership**
- **Evidence-Based Practice Environment**
- **Collaboration with Inter-Professional Care Teams**
- **Career Path with Leadership Opportunities**

Neither PAs nor NPs were among Merritt Hawkins top 20 most requested recruiting assignments three years ago. In 2015, combined they represented the fourth most requested assignment. [3]

Given the shortage of physicians but continuing increase in demand, **new models for staffing urgent care clinics are needed.** The use of physician oversight of APPs as a routine model for urgent care has significant potential in this regard.

Cost – Quality Considerations

The average patient-per-hour ratio for urgent care physicians is 4.5 patients per hour, according to the American Academy of Urgent Care Medicine. This will vary on the severity or acuity of the patient's conditions. At centers with efficient EMR templates and protocols in place to improve flow, the patient-per-hour ratio for urgent care physicians can go up to approximately six to eight patients. [5]

> But even with efficient processes, staffing only with physicians means a significant stepped cost function when patient volumes exceed the capacity of the one or more physicians at a given site.

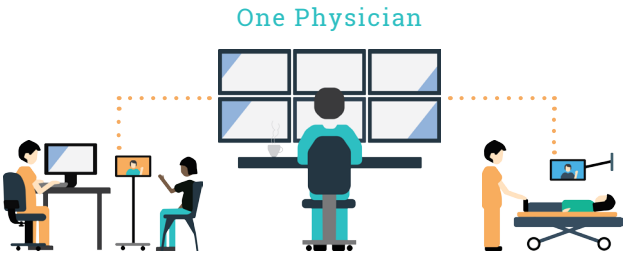
Staff costs are a primary driver of the overall cost structure of urgent care clinics and the use of APP's can significantly improve the cost structure and associated profitability for center operators. Data posted anonymously to the web site Glass Door suggests annual salaries of $95,000 for PA's versus $200,000 for physicians.[6] PhysicianAssistantEDU.org reports annual salaries for PA's in urgent care at $99,050 with some variability across different regions of the country.[7] So replacing one physician shift every day with an APP instead of a doctor can yield about $350,000 improvement in annual operating costs.

While APPs in urgent care settings may be supervised by physicians, there is little research on the specific circumstances when real time physician involvement with cases is beneficial. Urgent care physician leaders indicate they believe APP's should obtain physician consults in cases involving complex past medical history, and those with certain high risk chief complaints or significantly abnormal vital signs. Also all cases where transfer to an emergency department for further care is being contemplated would be candidates for physician consult.

The New Age of Urgent Care

Introduction to Command Center Medicine

Routine use of command centers is a relatively new concept for most areas of medicine, even as other industries, ranging from airlines to manufacturing to the military, have seen significant benefits with their operations centers and command center approaches. Urgent care and other acute care settings are just beginning to explore the applicability to their domains.



In healthcare, prehospital emergency medicine systems (EMS) have used command centers for dispatch and coordinating communications for many years. And hospital incident command centers have been designed for response to disasters or other special situations, but are generally not thought of as a set of tools for routine use in providing clinical care. Command center medicine approaches have also shown significant benefit in the specialties of critical care medicine and radiology, mitigating the limitations associated with staff shortages commonly seen in some geographic locations.

Expanded use of command center medicine approaches across the spectrum of acute care holds significant potential. Clinicians in command centers connected simultaneously to multiple facilities can provide meta-level oversight through a combination of analytics and dashboards, identifying bottlenecks in busy facilities, and using predictive algorithms to intelligently assess resources. Tools can be provided to dynamically adjust urgent care and emergency department staffing patterns, ensure availability of other staff, facilities and equipment, and to assist with smooth transfers and load balancing of patients across care units.

Given the pervasive staffing shortages in acute care, command center physicians can efficiently provide expert oversight to multiple facilities simultaneously, allowing APPs the opportunity to fill local roles, while still ensuring they have adequate back up when complex situations occur. Command center physician oversight of APPs thereby provides a cost effective staffing option for urgent care facilities.

The Role of Telemedicine

The global market for telemedicine technologies is expected to expand at a compound annual growth rate of 18.4 percent from the $17.8 billion spent on hardware, software and services through 2020, according to a new report from RNCOS. The report cites a shortage of physicians in rural and remote areas, the high prevalence of chronic diseases, growing elderly populations, increasing numbers of smartphone users and the need for improved quality services as factors fueling the growth of telemedicine. [8]

+18.4%

Annual growth in expenditure on telemedicine hardware, software, and services

The report notes dermatology and gynecology hold the highest market share among telemedicine applications, followed by cardiology, neurology, orthopedics and emergency care. The early years of telemedicine use have focused on occasional consults with specialists, or specialty consults provided to patients in rural environments. Although the current Medicare payment rules may be revised, they currently call for reimbursement for telemedicine visits only when provided to rural environments.

In order for telemedicine to thrive, it makes sense to pursue use cases that are more frequent, and part of routine care transactions. Moreover, these use cases should fit scenarios that cannot be accomplished with local staff, or are at least difficult to accomplish because of staff shortages or cost barriers. If patient volumes suggest 1.5 FTEs would be the best match for optimizing staff productivity and desirable patient service levels, or if patient volumes suddenly surge beyond the capacity of existing personnel, there is no way to accomplish this when limited to local staffing.

So with regard to acute care settings, the combination of meta-level oversight and routine telemedicine interventions by command center clinicians holds significant promise when implemented properly. Results can include improved quality of care delivered for complex cases, and improved ability to respond to intermediate patient volumes and surges in patient encounters.

Core Benefits for Command Center-based Urgent Care Settings

With expanding services comes the need to connect in more ways. Growth of command center oversight and telemedicine in combination with urgent care, will be an interesting partnership to watch. Urgent care clinics have yet to fully embrace telemedicine, but as introduced above the technology will likely be shown to be very helpful with multiple steps in the urgent care patient care process, including initial evaluation, assistance with diagnosis, providing standardized discharge instructions, and arranging disposition or follow-up treatment.

Meta-Level Oversight

Many urgent care facilities have put in place a series of protocols for care of common conditions, while others rely purely on the training and judgement of the local clinician. As urgent care facilities increasingly utilize APPs as their primary clinical staff it makes sense to implement protocols that identify when care and oversight by physicians is required. One approach that can make sense is ongoing meta-level oversight by command center clinicians augmented by telemedicine consultations with individual patients that meet specified criteria. These criteria can include items such as significantly abnormal vital signs, complex past medical history, or presenting complaints that could represent serious conditions. This approach allows experienced APP the independence to care directly for many cases that are straightforward but adds the improved quality expected from physician oversight in special situations.

Surge Response

An obvious important part of the appeal of urgent care clinics for patients is the idea that they can be seen for acute conditions without pre-scheduling an appointment. Invariably this results in unpredictable times when surges in patient volume exceed the capacity of local staff to provide care and still meet expectations for a high level of clinical quality. Long waits are certain to contribute to patient dissatisfaction. On the other hand, staffing at excessive levels only creates economic disadvantages for the urgent care operator. Use of command center clinicians for assistance during times of surge can be of great value in these situations, providing initial triage style evaluation, ordering tests and treatments, and otherwise helping with patient flow. And because the remote clinicians can spread their efforts across multiple facilities simultaneously, this type of “partial FTE” support to busy facilities can be offered with a high degree of economic efficiency.

Standardized Discharge Process

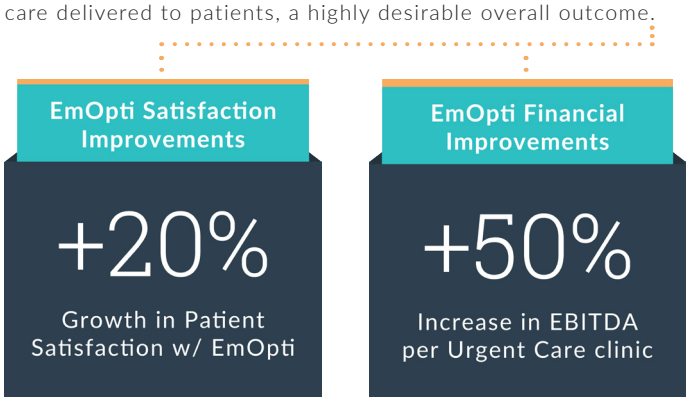
The discharge process is also an area for potential performance improvement in acute care. Particularly when facilities become busy due to high patient volume, discharge teaching and information sharing is an area that is often cut short. Yet this process is highly correlated with both successful clinical outcomes and patient satisfaction. Command center clinicians can easily provide standardized instructions for common problems, answering questions and helping arrange proper follow up care, thereby freeing local staff to care for other patients during busy times. Standardized videos can be pre-recorded for many conditions, and their use can ensure complete and consistent instructions are provided.

Transitions of Care – Transfer Management

Connecting command center clinicians and support staff simultaneously to multiple facilities means the vision of a truly integrated delivery system can be realized. Management of patient care transitions can be optimized, helping patients decide where to go when they seek care, and assisting clinicians and local staff by coordinating transfers from one care location to another when it makes sense.

Summary

The growing urgent care industry presents significant opportunities for investors, clinicians and patients. In order to realize this promise and overcome near term challenges, new care models augmented by new technology are needed. This paper reviews the potential benefit of command center medicine, including meta-level oversight and telemedicine based interventions. This new approach holds significant promise for improving return to investors, improving productivity and the work environment for clinicians, and improving the quality of care delivered to patients, a highly desirable overall outcome.



References

1.) Barnet, S. 20 Things to Know About Urgent Care 2015. Beckers Hospital Review. June 23, 2015. Available at http://www.beckershospitalreview.com/lists/20-things-to-know-about-urgent-care-2015.html

2.) McGuireWoods and UCAA. 2019 and Beyond: Perspectives of 15 Urgent Care Leaders. March 20, 2014. Available at https://www.mcquirewoods.com/news-resources/publications/health_care/Perspectives-15-UC-Leaders.pdf

3.) Merritt Hawkins. Convenient Care: Growth and Staffing Trends in Urgent Care and Retail Medicine. Dallas, Texas; 2015. Available at https://www.ihaconnect.org/About-IHA/Documents/Merritt%20Hawkins/mhawhitepaperconvenientcarePDF.pdf

4.) Urgent Care Association of America. 2012 Urgent Care Benchmarking Survey Results. Available at: http://c.ymcdn.com/sites/www.ucaoa.org/resource/resmgr/Benchmarking/Summary.pdf

5.) American Academy of Urgent Care Medicine. The Future of Urgent Care. 2015. Available at: http://aaucm.org/about/future/default.aspx

6.) GlassDoor. August, 2016. Available at https://www.glassdoor.com/Salary/MedExpress-Urgent-Care-Salaries-E333368.htm

7.) Physician Assistant Education Organization. Physician Assistant Salaries. Accessed August, 2016. Available at www.physicianassistantedu.org/salaries/

8.) Research and Markets: Global Telemedicine Market Outlook 2020. May 2015. Available at http://www.researchandmarkets.com/research/qn3csn/global

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