Emerging Strategies for the Ambulatory Care Team in Transition

A productive ambulatory care team is paramount to successful ambulatory care delivery. As efforts to reduce the cost of care continue to drive patient care to the ambulatory setting, understanding how these teams will work together in the future is essential to establishing the operational models and facility solutions that will support the organization both now and in the years to come.

Today, consistency across ambulatory care models and care team structures is difficult to find. Many systems are at different points in the process of shifting their care models to be more responsive to the specific needs of patients, while delivering quality care at a lower cost. As a result, the roles and responsibilities of care team members are shifting. Many teams are being asked to adopt new forms of care delivery. No matter what point teams are at in these transitions, they need to be able to function effectively in their everyday work environments. Meeting the needs of ambulatory care teams, based on their existing and future needs, is essential to developing operational and facility solutions that support patient care and promote health and well-being. To strategically and operationally align care delivery goals with the ambulatory care team, providers are faced with the following questions:

- How can teams be structured to effectively manage the growing day-to-day patient population while implementing broader population health strategies?
- How can care processes simultaneously improve quality and caregiver satisfaction while lowering the cost of care delivery?
- What technological and care model innovations should organizations adopt to drive these changes?

Issue

As healthcare systems are in the process of shifting their care models to be more responsive to patient-centered care and to more effectively support population health, ambulatory care teams need to be positioned to operate efficiently and function effectively in their everyday work environments.

Challenges

- Cost reduction efforts are underway for many healthcare systems which can lead to reduction of staff; if not handled carefully this can pose a threat to care quality and staff satisfaction.
- With medical technology and clinical documentation information systems developing and changing at a rapid rate, it can be difficult to determine the impact on an organization's care model in both the immediate and more distant future.
- For many organizations, emerging care delivery models that depend on redefining clinician roles are in conflict with the organization's traditional culture, making change management extremely challenging.

Strategies

- Structuring teams for collaboration and assuring they have operational processes and facility solutions that support these interactions.
- Introducing innovations that allow teams to deliver care efficiently while not compromising care quality or operational flow.

Supporting Team-Based Care Models

Structuring Teams for Collaboration

As a response to healthcare reforms that seek to drive costs down while expanding coverage, anticipated physician and nurse shortages, and the development of patient-centric care models, many ambulatory care teams are developing team-based approaches that reorganize team members to take on different responsibilities. Organizations across the nation are pushing their clinical staff to work at the top of their license. Team-based models allow the physician to work closely with their care team members to more effectively manage and care for a designated group of patients.

Primary Care Solutions

In some of the country's most innovative primary care settings, physician assistants and nurse practitioners are frequently serving as the Primary Care clinician as part of a team charged with caring for a patient panel (FIGURE 1 & FIGURE 2). Physicians are only called in to deal with more serious cases. Additionally, other care team members – such as medical assistants – are being empowered to enhance their role in patient care. A tactic utilized at the primary care practices of Virginia Mason Medical Center employs medical assistants as "flow managers" who help physicians prioritize their tasks and guide them through their day.[1] In a similar vein, registered nurses, who have been less common in primary care clinics over the last several years, are re-entering this setting and taking on more responsibility for patients with chronic and/or multiple conditions. [2, 3]

Specialty Care Solutions

For specialty service lines, such as cardiology, additional team members are becoming part of an integrated care approach (FIGURE 3). Adding nutritionists/dieticians, psychologists, pharmacists, and others to a care coordination team has improved outcomes for several organizations. In this approach, care teams organize to provide comprehensive coordinated care to patients. For example, the Massachusetts General Hospital Heart Center utilizes a program-based, team-based approach for a number of cardiovascular issues (e.g., congenital heart disease, coronary artery disease, arrhythmia). Depending on the specific condition, the team can include team coordinators (administrative), nurses, sonographers, physicians' assistants, individual clinicians, psychiatrists, and pharmacists who function and communicate across inpatient and outpatient settings. Frequently the attending cardiologist will provide continuity between inpatient and outpatient settings. Communication between all team members is critical to the success of these programs.[4]

FIGURE 1 **Primary Care Model of Yesterday vs. Tomorrow**

	Primary Care Team of Yesterday	Primary Care Team of Tomorrow
Physician	– Take sole responsibility for a panel of patients.	– Share responsibility for a panel of patients.
Nurse Practitioner/ Physician's Assistant	– Provide care to patients as part of a physician-led team.	– Serve as primary care clinicians or as specialty care disease center coordinators.
Registered Nurse	– Triage patient phone calls and drop-ins. – Perform clinical and administrative duties (that cannot be performed by MAs). – Educate patients.	– Serve as patient navigators assuming responsibility for patient panels with chronic and/or multiple conditions. – Make patient appointments; provide intensive education and support, follow-up phone calls and emails; refill medication using protocols.
Medical Assistant	– Perform routine clinical and administrative duties under physician supervision.	– Obtain special certifications (phlebotomy, nutrition, EKG, etc) that allow expanded scope of practice. – Floor coordinators
Behavioral Health Providers	– See patients referred from other locations.	– Collocated and fully integrated with primary care teams.
Receptionist	– Greet patients and walk them through registration and scheduling procedures.	– N/A: The receptionist role will be obsolete in the future, with tasks being taken over by both technological innovations and the rise of the "patient navigator" role.
Case Manager; Social Worker	– N/A for most clinical practices yesterday	– Focused on managing the needs of the chronically ill and those with social service needs. – Provides care management across all clinical venues.

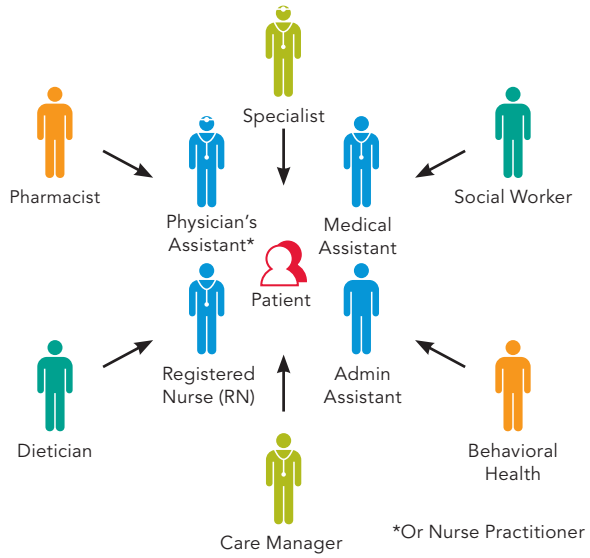

FIGURE 2 **Example Primary Care Model of the Future** In many primary care settings a team consisting of a primary care clinician, medical assistant, registered nurse, and administrative assistant are responsible for a panel of patients - helping to facilitate interactions with other members of an extended care team that may need to be involved.

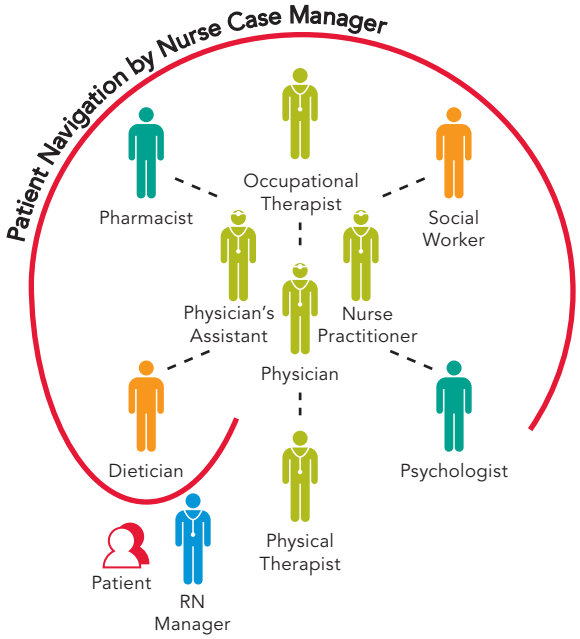

FIGURE 3 **Example Specialty Care Model of the Future** In many speciality care scenarios, patients are treated by an integrated team that is regularly interfacing with each other, with a nurse case manager helping to coordinate care for the patient.

Creating Space for Both Collaboration & Privacy

The shift in care team structure is coupled with a shift in care delivery. The transition to multi-disciplinary, team-based care models requires groups of physicians, nurses, physician assistants, clinical pharmacists, social workers, and other health professionals to work together in ways that they have never had to before – establishing new lines of collaboration, communication, and cooperation to better serve patient needs.[5] According to a report from the Institute of Medicine, the optimal effectiveness of these teams requires "a culture of trust; shared goals; effective communication; and mutual respect for the distinct skills, contributions, and roles of each member."[6]

The physical environment must change to accommodate this new team-based model of care. Care teams need to work together, have conversations, document notes, and make phone calls within close proximity to the point of care, but also have space for privacy and focus. The space that they work in must provide both teaming areas and "no interruption zones" to avoid risk of errors. Collaborative open-space team environments are frequently implemented as a solution to address these issues. These spaces provide space for team members to meet for quick huddles or complete paperwork before or after meeting with patients. "Quiet areas" to call patients or complete other heads-down tasks can also be provided in these environments.

While these collaborative open-space environments need to be close to the point of care, they also should not interfere with the patient experience. These adjacencies can cause a particular challenge and often require a sophisticated sound-masking solution that utilizes a white noise system. Teaching institutions with learners present, in particular, are at risk for this issue as these are environments prone to frequent team conversations.

Design Considerations for Supporting Team-Based Models

- Collaborative work environments should be designed in a way that prevents patients from overhearing discussions while at the same time allow care providers to be in close proximity to patients.
- Huddling spaces should be provided throughout the care zone to allow staff communication between patients and quick check-ins between care team members.
- Private enclaves need to be provided to allow for activities that require quiet space or focused thinking.

Challenges Facing the Ambulatory Team in Transition

The challenges facing ambulatory care teams during this time of historic change in the healthcare industry are numerous. The following are challenges that seem to touch all teams, no matter how forward-thinking their ambulatory delivery model:

Efficiency vs. Staff and Physician Satisfaction

At a time when physician and nurse shortages are on the horizon and physician alignment is a key imperative, staff and physician retention is paramount. However, if not handled appropriately, efforts to streamline operations can lead to burnout. Organizations must be cognizant of the impact that operational improvement initiatives are having on their staff and physicians and respond accordingly.

Traditional Culture vs. Care Delivery Innovations

For many organizations, emerging care delivery models are in conflict with the organization's traditional culture, making change management extremely challenging. For example, the introduction of nurse practitioners and physicians assistants as the primary care clinician on patient panels, with the physician only coming in when needed, has been met with resistance from some physician groups who have questioned whether these professionals have the appropriate credentials. Organizations must assure that they have buy-in from a critical mass of medical staff and care providers to successfully introduce care delivery innovations.

Cost Reduction vs. Care Quality

For most organizations, cost reduction efforts are underway in response to decreasing payments and other financial challenges brought on by the Affordable Care Act. For many, this means reducing staff and/or streamlining staff utilization. If not handled carefully, this can be in conflict with care quality, which is often perceived as being improved by giving staff more time with patients. Organizations must strategically address this perceived tension to ensure that quality of care is not negatively impacted by cost reduction efforts.

Promises vs. Reality of Technology

With technology developing at a rapid pace, it can be difficult to determine the impact on an organization's care model in both the immediate and more distant future. Understanding how, when, and to what extent to introduce new technologies to care providers and staff is critical to achieving successful results in any care model. More technology sooner is not always better, if that technology does not add appropriate value. For example, some providers are considering how telemedicine will impact their care models as it could potentially impact their information technology infrastructure needs on-site, their patient volumes (if telemedicine visits turn into specialist referrals), and their staffing model (with potentially more nurse practitioners working off-site). Understanding the extent to which these impacts will be felt is important for making appropriate investments.

Delivering Quality Care Efficiently

Embracing Care Delivery Innovations

Although team-based models are anticipated to be an improvement over the historically isolated staffing models, early stages of the team-based care model have generated confusion among the public, policymakers, physicians, and other health disciplines as to how they should go about organizing teams to improve patient experience and outcomes.[5] However, there are organizations who have implemented operational innovations with great success. In 2013, the ABIM Foundation funded a study that included site visits to 23 high-performing primary care practices to identify the innovations that were creating a better quality of life for physicians, and in turn, improving patient-centered care.[7] Organizations were successful in implementing the following types of innovations:

- Utilizing pre-planned visits and pre-clinic huddles to reduce the total volume of work, save time, and improve care.
- Using in-visit scribing (conducted by RNs and MAs) to efficiently prepare after-visit summaries and reinforce the patient plan, helping to increase proper coding and charge capture.
- Allocating time for small team huddles that can help improve processes and strengthen trust and relationships on the team.
- Implementing system-wide operational improvements through lean process improvement tools such as workflow mapping that drive waste and redundancy out of the system.

The shared medical appointment is another outpatient patient care strategy that is growing in application and changing the way care teams work together. Shared medical appointments typically include 10-15 patients sharing an appointment to ask questions to a care provider and share concerns and experiences with each other. In some models, physicians see one patient at a time in a nearby exam room. These exams can be significantly shorter, as patient education and questions can be addressed in the group setting. However, while research has indicated that group care visits may decrease wait times[8] and improve outcomes,[9] little research has been published on their ability to reduce the number of individual exams.

While there is a lot of promise for these types of innovations, the time and resources that it takes to set up these teams for success should not be underestimated. Initial reports from organizations transitioning to new care models, such as a patient-centered medical home, indicate that significant time is needed to make this transition – often more than the one or two years that is frequently allocated.[10]

Collaborative Work Environment
Fortius Athlete Development Centre | Burnaby, BC

Exam Room
UW Cancer Center at Johnson Creek | Johnson Creek, WI

Identifying the Right Mix of Patient Care Settings

The nature of patient encounters in the ambulatory care environment has changed significantly over the past several years. While exam rooms have typically been the prominent patient care setting in outpatient clinics, additional types of patient care settings are being used more frequently. With the incorporation of behavioral health, social workers, nutritionists, and other specialists into ambulatory settings, consultation rooms are often required for discussions and consultations. In some cases, exam rooms are being transformed to accommodate these types of interaction. In specialty care scenarios where several members of an integrated care team may be seeing the patient on the same time, interconnecting rooms can provide space to bring the care professionals to the patients as opposed to requiring the patient to travel long distances within one or multiple buildings to receive required care (FIGURE 4). Additionally, as more complex procedures make their way to the ambulatory setting, more procedure rooms are required. Shared medical appointments require Group Care Rooms that provide a comfortable setting for 10-15 patients to gather, ask questions to a care provider, and share concerns and experiences with each other. Space may also be required for e-visits. Understanding to what extent organizations and individual departments and service lines are prepared to effectively utilize these types of spaces is critical to understanding the appropriate numbers and per patient ratio for these rooms.

Institutions must consider ambulatory space as a resource that needs to meet certain minimum utilization criteria. Long gone are the days when a clinic can be fully occupied a couple half days a week, and sit completely empty others. Exam / Consult rooms should be seeing an average of 6 to 8 patients a day – every day. Institutions must maximize the use of their physical assets so they can minimize capital expenditure to make a margin in the new healthcare economy. To address this, many forward-thinking organizations are using flexible, adaptable design strategies that utilize clinic modules that can be easily reconfigured to support changing needs.

Maximizing the Impact of "Telemedicine"

As terms like "tele-health", "telemedicine," and "e-visits" flood discussions of evolving care models, it is important to understand the implications of new technologies on how ambulatory care teams deliver quality care. In 2007

GroupHealth, a for-profit health system in Washington, implemented a technology enhanced patient-centered medical home (PCMH) in one of their primary care clinics. As part of this new model, an increased emphasis was put on both email and telephone encounters as a complement or alternative to in-person visits. A follow-up study found that adult patients attending the PCMH clinic experienced 6% fewer in-person primary care visits compared to patients in other clinics, but 94% more secure e-mail message exchanges and 12% more telephone calls with their care teams.[11] While this example demonstrates that there is potential for telemedicine to decrease the demand for in-person one-on-one exams, much of the initial research on these trends suggests that this shift in demand has yet to transpire. Mayo Clinic recently released a study that found using patient portal messaging did not change the frequency of their in-person visits.[12]

Regardless, this trend is anticipated to continue, especially as the industry works to figure out a mechanism to effectively pay for it.[13] While few organizations have robust platforms for both scheduled (synchronous) and unscheduled/on-demand (asynchronous) telemedicine integrated into their care models today, many organizations will require the capacity and strategy to integrate these functions into their patient care settings in the future.[14]

Conclusion

Tomorrow's ambulatory environment is a team-based sport, with each member needing to work at the top of their license and capabilities. Team structure, operational models, technology, and the physical environment must be carefully orchestrated to enhance the team's ability to be productive and viable in a new healthcare economy.

Design Considerations for Delivering Quality Care Efficiently

- Every Exam Room needs the ability to have a direct eye-to-eye conversation between providers and patients/families while looking at a screen for reviewing diagnostic images, treatment goals, etc.
- When appropriate, non-clinical space adjacent to an Exam Room should be provided for multi-disciplinary appointments. This allows for the patient to meet with numerous combinations of providers in an appropriate environment. Creating a suite of adjacent Consult, Exam and Procedure Rooms gives the best patient experience as patients can stay in one suite, and providers can deliver care in the most appropriate setting. This also allows maximum room utilization rates.
- The exam room of the future will need to accommodate everything from traditional exam, to family consultation to e-consultation to procedure activities.
- Dual entry exam rooms where staff enter from one side and patients the other, can successfully separate patient and provider flows. However, they often require more square footage and introduce acoustical challenges.

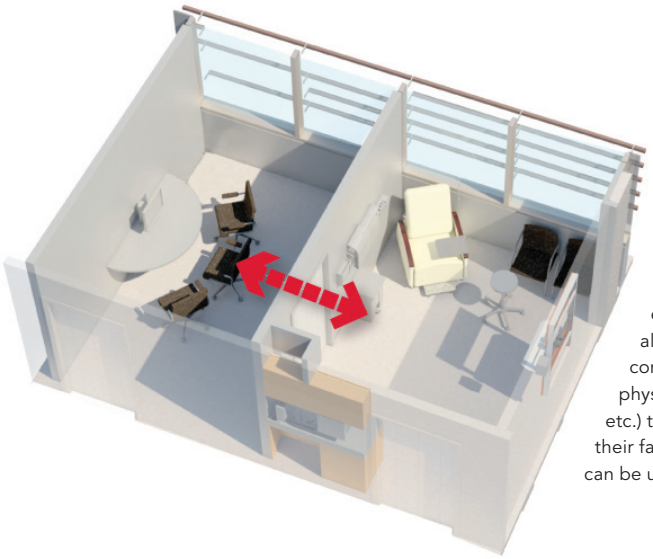

FIGURE 4 **Combination Consultation/Exam Room** In this example, an oncology clinic provides this "Multi-D Day Suite" allowing patients who have an examination and one or more consultations with members of a multidisciplinary team (e.g, physician, navigator, social worker, nutritionists, financial counsellors, etc.) to stay in the same space for these appointments with room for their families to join them. When not used for a Multi-D Day visit, rooms can be used separately to perform exam and consultation functions.

References

1. Shipman, S. A., & Sinsky, C. A. (2013). Expanding primary care capacity by reducing waste and improving the efficiency of care. *Health Affairs, 32*(11), 1990-1997.
2. Ladden, M., Bodenheimer, T., Fishman, N, Flinter, M., Hsu, C., Parchman, M., & Wagner, E. (2013). The emerging primary care workforce: Preliminary observations from the primary care team: Learning from effective ambulatory practices project. *Academic Medicine, 88*(12). 1830-1834.
3. Laughlin, C. B., & Beisel, M. (2009). Evolution of the chronic care role of the registered nurse in primary care. *Nursing Economics, 28*(6), 409-414.
4. Fletcher, G. F., Berra, K., Fletcher, B. J., Gilstrap, L., & Wood, M. J. (2012). The integrated team approach to the care of the patient with cardiovascular disease. *Current Problems in Cardiology, 37*(9), 369-397.
5. Doherty, R. B., & Crowley, R. A. (2013). Principles supporting dynamic clinical care teams: an American College of Physicians position paper. *Annals of Internal Medicine, 159*(9), 620-626.
6. Mitchell, P., Wynia, M., Golden, R., McNellis, B., Okun, S., Webb, C. E., Rohrbach, V., & Von Kohorn, I. (2012). Core principles & values of effective team-based health care. Washington, DC: Institute of Medicine.
7. Sinsky, C.A., Willard, R., Schetzbank, A. M., Sinsky, T. A., Margolius, D., & Bodeheimer, T. (2013). In search of joy in practice: A site-visit analysis of twenty-three highly functional primary care practices. Philadelphia, PA: ABIM Foundation. Retrieved from: http://www.abimfoundation.org/Initiatives/~/media/Files/Primary%20Care/070913_Finding%20Joy%20in%20Practice%20FULL%20WHITE%20PAPER.ashx
8. Davies, S., Quintner, J., Parsons, R., Parkitny, L., Knight, P., Forrester, E., ... & Schug, S. A. (2011). Preclinic group education sessions reduce waiting times and costs at public pain medicine units. *Pain Medicine, 12*(1), 59-71.
9. Housden, L., Wong, S. T., & Dawes, M. (2013). Effectiveness of group medical visits for improving diabetes care: a systematic review and meta-analysis. *Canadian Medical Association Journal, 185*(13), E635-E644.
10. Nutting, P. A., Miller, W. L., Crabtree, B. F., Jaen, C. R., Stewart, E. E., & Stange, K. C. (2009). Initial lessons from the first national demonstration project on practice transformation to a patient-centered medical home. *Annals of Family Medicine, 7*(3), 254-260.
11. Reid, R. J., Fishman, P. A., Yu, O., Ross, T. R., Tufano, J. T., Soman, M. P., & Larson, E. B. (2009). Patient-centered medical home demonstration: a prospective, quasi-experimental, before and after evaluation. *The American Journal of Managed Care, 15*(9), e71-87.
12. North, F., Crane, S. J., Chaudhry, R., Ebbert, J. O., Ytterberg, K., Tulledge-Scheitel, S. M., & Stroebel, R. J. (2013). Impact of patient portal secure messages and electronic visits on adult primary care office visits. *Telemedicine and e-Health. 20*(3). Retrieved from: http://online.liebertpub.com/doi/pdfplus/10.1089/tmj.2013.0097
13. Gregg, H. (2014, January 23). 4 New state bills aim to foster use of telemedicine. Becker's Health IT. Retrieved from: http://www.beckershospitalreview.com/healthcare-information-technology/4-new-state-bills-aim-to-foster-use-of-telemedicine.html
14. Heidenreich & Peterson. (2013, March 19). Health system strategy: Remaining relevant by building primary care delivery beyond physician engagement. Becker's Hospital Review. Retrieved from: http://www.beckershospitalreview.com/hospital-physician-relationships/health-system-strategy-remaining-relevant-by-building-primary-care-delivery-beyond-physician-employment.html#_ftnref5

Photo Credit

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