Perspectives in Ambulatory Care

Strategies for Creating a Business Case that Leverages the RN Role in Care Coordination and Transition Management

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Equipping nurse leaders in all roles and settings is vital for achieving improved population health. Organizations leveraging the role of the registered nurse in care coordination and transition management must study and disseminate their results to expand the evidence to support future business cases. It is imperative to realize the full economic value of nurses across all settings and the unique contributions nurses, practicing to the full extent of their license, bring to the transformation of health care and achieving the Quadruple Aim in the United States.

The current healthcare delivery system is transforming rapidly, primarily due to a burgeoning, complex, chronically ill, comorbid, vulnerable, and aging population that needs seamless care throughout their lifespan (American Academy of Ambulatory Care Nursing [AAACN], 2017; American Nurses Association [ANA], 2013; Haas et al., 2019; Paschke et al., 2017; Schneider et al., 2017). Patient populations and the settings where care is delivered are changing drastically, with volumes shifting from an inpatient, episode-centered model to an outpatient, continuous, chronic care, and health promotion centered model (AAACN, 2017; American Hospital Association, 2018; Institute of Medicine [IOM], 2011; Paschke et al., 2017).

Nurses' ability to lead through the chaos of the current environment will be empowered by developing a meaningful understanding of their role, combined with an ability to capture information relative to innovative and new interventions. This expansion within nursing knowledge will need to be centered in nontraditional, community settings, and focused on health promotion, care coordination, and the ability to address social needs. Nurses have been given the power to self-regulate their profession, in return for the development of the health of society (ANA, 2010). If any one segment of nursing is not empowered to self-regulate autonomously, then the patients served by those nurses may not receive the highest levels of reciprocal service as outlined in ANA's Social Policy Statement (2010).

The current nature of health care mandates a leadership role from nursing to escalate its knowledge base and meet the expansive and robust needs of the populations it serves (AAACN, 2017; IOM, 2011; Paschke et al., 2017). Leveraging the role of the ambulatory care nurse as healthcare transforms at a dynamic pace may increase the value of health care for patients across the continuum (Start et al., 2018).

The role of nursing in the Patient-Centered Medical Home (PCMH) is highlighted in several studies as essential for emerging primary care delivery models (Ladden et al., 2013; Maeng et al., 2012; Schoen et al., 2007; Stange et al., 2010; Tung et al., 2018). Furthermore, many progressive countries outside of the United States are creating innovative care delivery models in primary care that switch the locus of control of coordinated care from the physician to the nurse (Laurant et al., 2005). Some of these models are piloting telephone and other virtual modalities utilizing the registered nurse (RN) role to assess, intervene with resources, connect to community support, and track for positive outcomes (Young et al., 2014). Much of this literature, however, is conflicted about the absolute necessity of an RN

in care coordination and the PCMH model in primary care (Donelan et al., 2019; Jackson et al., 2013).

Several nurse executives across the country have embraced the AAACN's Care Coordination and Transition Management (CCTM) framework. The framework includes a core curriculum, standards and scope, and specialty certification. The objective is to prepare the RN workforce to function in effective and progressive care models that realize true value-based health care. Literature on CCTM in ambulatory care was first published in 2014 by Haas and Swan. In 2018, a national invitational summit on CCTM was hosted by AAACN to identify continuing trends and opportunities to advance this role and that of the RN in the ambulatory care setting (Haas & Swan, 2019).

One key discussion at the CCTM summit, as well as currently at many national, state, and organizational nursing meetings, is the need for support in the development of successful business proposals. Articulating the return on investment (ROI) for the role of the RN in care coordination, population health, transition management, and other value-based activities is critical (Haas et al., 2019). Summit focus group members expressed the need for metrics to measure outcomes of CCTM RN practice to support business cases for CCTM RN practice across the continuum (Haas et al., 2019).

This column is the first in a series to demonstrate how CCTM can leverage proactive, transformative health care; improve patient outcomes in diverse populations and settings; add value; and increase the measured contribution of nursing in the interprofessional team. This series will outline strategies from nurse executives and others who have successfully leveraged a business case and achieved positive ROI from the CCTM RN role. Three qualitative descriptive style interviews from successful nurse executives and thematic analysis are described in this first installment. The second installment will explain the findings of a national AAACN/CALNOC (Collaborative Alliance for Nursing Outcomes) sponsored survey. Its 302 respondents validate elements of a successful business case proposal. The third column will detail an exemplar organization that successfully achieves positive outcomes and financial benefits from leveraging the CCTM RN role.

Methods

Nurse executives from three settings were interviewed: Fully Integrated Health System (FIHS), Federally Qualified Health Center (FQHC), and Academic Non-Integrated Health System (ACIHS). These interviews were conducted using the CCTM framework (Haas et al., 2019) to elicit strategies and tactics related to the role of the RN in CCTM, such as activities and the associated programs and interventions that had been supported by successful business cases.

Value-based health care is being adopted throughout the country by healthcare organizations at differing levels (Donelan et al., 2019; Feeley & Mohta, 2018; Salmond & Echevarria, 2017). The FIHS, a fully integrated, risk-sharing system, reflects a robust and thorough adoption of a value-based, comprehensive continuum of care. The FQHC often exists as an exemplar with a balance between extreme efficiency and focus on quality outcomes. Finally, the ACIHS, a setting often functioning in the fee-for-service model, is starting to engage in partial risk sharing with an understanding that its academic resources may be able to impact the surrounding complex populations positively. The nurse executives who participated in these interviews identified many themes and an array of tactics. Findings from these interviews informed the AAACN/CALNOC national survey on strategies for creating successful business case proposals and helped validate creation of a tool to plan for RN CCTM activities across various settings.

Data Collection, Management, and Analysis

All interviews were conducted by the two first authors with simultaneous note-taking. Both interviewers reviewed notes, themes, and conducted a thematic analysis to display trends, similarities, gaps, and strategies. Thematic analysis was validated with interviewees. Semi-structured, informal interviews covered a broad range of topics: risk stratification, advanced practice nurse (APN) and registered nurse (RN) role, care

coordinator role, tele or virtual health activities, staff engagement, staffing models/structure design, strategies and metrics used for achieving ROI, gaps or challenges, plans, and advice. Interviews were supported by current literature on CCTM, care coordination, population health, and transition management. Haas and coauthors (2019) used a strategy whereby questions were created to form the basis of a toolkit that would support nurse executives or other disciplines to construct successful business proposals and achieve ROI for CCTM activities leveraging the RN role in ambulatory care and across the continuum.

Results

Thematic analysis of the interviews is described in Table 1, with the overarching vital strategies described in this section. All questions were asked within the framework of how the respective leaders had successfully proposed either a new or repurposed business plan that would elicit positive patient and financial outcomes. Activities reported and captured in this article reflect practice at the time of interview. The interviewers understood these were ongoing initiatives and presently being practiced at time of publication.

Stratification/Predictive Modeling

All respondents and their respective systems used risk stratification to target populations for RN roles and associated programs. Risk stratification drove delivery of different services, the staffing models that supported them, and the services rendered, as well as the intervention period. Risk stratification differed between the programs with some models more proactive but all integrating some elements of social determinant screening and telephonic or virtual outreach.

APN Role

To address chronic populations, an APN bridge clinic for high or rising-risk patients was described. This program also sent APNs into skilled nursing facilities for high or rising-risk patients. Additionally, this respondent noted that a House Call program, staffed by APNs, was in place to provide followup to patients after discharge from the emergency department (ED) or acute care setting, medication reconciliation, behavioral health, and primary care to patients who were unable to access the clinic promptly.

RN Role

Primary care RNs in the FIHS conducted transitional care focusing their efforts on populations and chronic health. All respondents discussed avoiding duplication of activities between the role of the primary RN in the office or clinic and that of the care coordinator or care navigator RN. In some cases, this duplication was reduced by following risk-stratification algorithms. Primary care RNs in the FIHS conduct transitional care, triage, anticoagulation, wellness visits, and some chronic disease management. Population-based RN care coordinators (RNCCs) focus their efforts on populations where the system has risk-sharing agreements. In the FQHC, RNs bill for their services as well as serve to increase the volume added by physicians. In the ACIHS, primary nurses work within their pod and physician panel, seeing patients, increasing access, triaging patient calls, and collaborating with care managers who are imbedded in some key groups. In addition to RN care navigators (RNCNs), many primary care clinics also have an embedded pharmacist, dietitian, and social worker. Organizational structural redesign has been vital in this system to establish RN-to-RN practice oversight, engagement, and performance improvement.

Care Coordinator Role

In the FIHS, predictive modeling and risk stratification in a contracted population drive the RNCC role. There were different types of RNCCs in this setting: embedded in all primary care clinics for high-risk patients, centralized telephonic care management staff for rising-risk patients, and care transition nurses for individuals at high risk for admission. One of the FIHS respondents noted, “Where you can make an impact from a nursing perspective…is in self-management, which is best in an ambulatory setting…the program is not intended to hold on to patients forever, but to become a cornerstone

Table 1.
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
Risk Stratification/ Predictive Modeling	Highest risk patients are followed by RNCC CCTM-certified nurse; 24% less ED visits and 40% less inpatient admissions compared to control.	We identify at-risk individuals if high risk. If they call in for any reason, we escalate those calls to the nurse for a proactive conversation with that patient.	LACE scores (predictor of readmission and mortality) generated in Epic after inpatient admission to drive follow-up on high-risk and rising-risk patients Utilizing Epic General Risk Score to identify complex patients who may meet criteria for enrollment in the LCM program with the ambulatory care RNCN
	High-risk transition patients followed 30 days post discharge LACE scores greater than 10, in-person introduction to program, 30-day follow-up inpatient readmissions 38% less than control, high-risk transition in care program patients identified through predictive modeling	We identify high risk for ourselves: hypertension, diabetes, asthma, or three other conditions plus behavioral, substance abuse, administered within last year admission	Highest-risk patients followed by the RNCN for 30 days post discharge. During this time the recent discharge patient may be enrolled in the LCM program for 6 months. Patient will be re-evaluated at that time for discharge from the program or may be re-enrolled.
	Use predictive modeling to guide interventions.	80% are triaged into what risk they are; centralized care management, high-risk patients, recent discharge, recent ED touch	Starting to focus on rising risk and patients with chronic disease. LCM is a proactive RNCN program following patients with a consistent call cadence of weekly calls minimally x 4 weeks, followed by bi-weekly calls x 4 weeks, then monthly calls until the 6-month point. RNCN collaborates with PCP, dietitian, pharmacist, social worker as needed.
	Rising risk patients followed by RNCN for less than 3 months 54% less ED visits and 52% less inpatient admissions compared to control	Centers for Medicare & Medicaid Services tool for SDOH; we implemented without the health incident command center screening; we wanted something that wasn't too long. All teams get prep for screening, training folks on phone questions could be asked by anyone; push the survey out to the portal	Developing care maps to standardize tracking and mapping, with different touch points, for high-risk populations Our desired focus: Be able to go anywhere in the continuum and have standard care for condition Implemented Diabetes Care Pathway in Primary Care clinics with identified "lead" care manager to follow patient via face-to-face and phone visits. Patients see the RNCN in clinic for enrollment and will alternate visits with PCP until patient goals achieved. Saw a significant decrease in HbA1c results for patients enrolled in pathway compared to those not enrolled.

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Table 1. (continued)
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
APN Role	APNs in skilled nursing facilities for risk patients to reduce readmissions and LOS	APNs are full PCPs and manage complex panels of patients similar to physicians and PAs.	APN bridge clinic for high or rising-risk patients and APNs into skilled nursing facilities. House Calls: APNs provide primary care and care management in the home. Home safety evaluation, medication reconciliation, and care coordination are components of the home visit. The APN also conducts home transitions of care visits after hospitalization for patients who cannot access the clinic in a timely manner. The APN works in collaboration with interdisciplinary team in providing/managing care for the patient.
RN Role	RNCC in primary care managing highest-risk patients	When we initially began to look at data, we had providers with higher hypertension control rates and one of the factors of their performance improvement was seeing a nurse for standing order nursing visits to work toward hypertension control.	"All nurses report to nurses." Key to advancing RN role. RNCN provides face-to-face visits, in addition to telephone visits, often provided before or after a provider visit. RN case manager implemented to support the medication-assisted therapy (substance abuse) program with telephonic, face-to-face, and video visits.
	RNCCs: following patients for 30 days post discharge	Nurses being able to bill has been important and they are working at top of scope performing population health, care coordination, individual visits.	Nurses doing care coordination, setting self-management goals with patients, tele-triage, in-basket work and RN visits. Central RNCN conducting transitions of care calls for patients discharged from the hospital. Clinic RNs contact patients following ED visits and those discharged from skilled nursing facilities.
	Nurse navigator works with rising-risk patients coaching for behavior change, over less than 3 months	Annual wellness visits: nurses can do on their own in most sectors; in FQHCs they do the majority of the visit, but the provider must be a part of the visit for billing. Provider time is minimized through well-developed nursing protocols for this visit.	Primary Care RN After-Hours program established for adult, pediatric, and geriatric patients
	RN in primary care performs transitional care, triage, anticoagulation, wellness visit, chronic disease management for populations in panels, health coaching		

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Table 1. (continued)
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
Care Coordinator Role	RNCC role: We use predictive model and do not take referrals into this program. We do not have to review to determine if they met criteria because of the predictive model. This reduces the need for additional FTEs.	Most nursing visits have templates.	RNs in practices performing care coordination for patients on their panel. Central Guest Assistance Program staffed by bachelor's degree-prepared social workers to connect patients with financial need to tangible resources
	We focus on where we can make an impact from a nursing perspective. What can we do relative to self-management that will have the biggest impact; potentially avoidable admissions or ED visits; best cared for in ambulatory setting?	Patient engagement is key: using patient activation measurement, goal setting, self-management	Use stratification to identify high-risk and rising-risk patients. Panel managers within primary care clinics outreach to patients to ensure they are up-to-date on well visits and other preventive services. For example, panel managers outreach to diabetic patients without a recent HbA1c or asthmatic patients without an asthma action plan.
	Nurse will set goals and track progress.	We want consent from patient for care coordination; we want partnership within context of coordination	
	"Not intended to hold on to patients forever… but do become a cornerstone of support so if there is an issue, more likely to get ahold of the RN rather than to pop into an ED"		
Tele/Virtual Activities	We had our RNCC and navigators trained on motivational interviewing; peers can listen to calls to hear if techniques were taken or not.	Use to escalate care if they call and are high risk	CCTM RN, when calling high-risk patients, often focus on polypharmacy issues and initiate intervention from a pharmacist
	Patient engagement; looked at telemarketing strategies; changed from our standard process which was call, leave message, wait, send letter, to call in rapid succession three times; people usually pick up and once on the phone, we could engage		Mostly have RNs doing telephone triage now. RNCN reaches out to high-risk and rising-risk patients via telephone and follow-up via telephone after annual face-to-face visit and those patients actively managed in the LCM program.
	Use phone intervention for moderate-risk members; if not in control, get them on phone, set goals, evaluate data and outcomes		We do an after-hours nurse triage, added FTEs to cover; only limited to primary care at this time
			Provide service for geriatric population; recovering calls from 5:00-8:00 p.m. M-F and 24 hours weekends and holidays; marketing this now. Physicians appreciative for service.
			E-consults visits: developing workflow. Generate $25/visit. RNs can be there for decision support and protocol and E-visits conducted by APN.

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Table 1. (continued)
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
Staff Engagement	RNCCs all took CCTM standards and obtained certification. Framework for practice built on CCTM domains.	100 Project ECHO; complex care management; primary care nurse competencies and added to the content for CCTM; created a yearlong didactic curriculum 2x/month for 90 minutes; over lunch, nurses submit cases of complex patients implemented since September 2015.	First step was to strengthen nursing structure; added nursing supervisors and utilized triad model. Every nurse now reports to a nurse. RNCN trained in Screening, Brief Intervention and Referral to Treatment (SBIRT). Motivational interviewing techniques to enhance skills/ knowledge in developing individualized patient-centered care plans for complex patients with mental health conditions. Case presentations by RNCN in monthly meetings Best Practice Committee implemented for RNCN group. Development of comprehensive orientation and onboarding including competency review. Creation of standard documentation templates. Developed intervention checklist in electronic medical record (EMR) to tie interventions to patient outcomes.
	"Nurses, if given wide latitude, will do a lot of preparation; found this supported in evidence - based practice literature also" This is why you need productivity standards including caseload goals.	We look at what are our nurses lacking; what knowledge gaps they are identifying they need to be primary care nurses but also want to identify what patients are the best for a nurses; I firmly believe that care coordination is a process	Burnout from clinical director group was high; we now also have supervisors that go between clinics to support care needs.
		Nurse assist visits; challenge, there is an increased burden to the provider; if it improves provider retention, retention is a big thing. Every provider lost costs $350,000. We can never replace them fast enough and onboarding is expensive. When we did a provider retention group, one reason for leaving was the support team. Organization helped me keep my vacancy rate low.	Triad Model from C suite down to clinic level helped along with service lines to engage folks who were not previously included when organized only by geography and ensure standard work across primary care
			Pay attention to employee satisfaction data; make sure they feel supported and they have a voice. RN employee rounding implemented by nursing leader Nursing dashboard developed and implemented with review at staff meetings and leadership meetings

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Table 1. (continued)
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
Staffing Models/ Structure Design	"You must have the scale and capacity to contribute."	Each RNCC has a panel of 200-400 eligible patients based on the risk criteria; 30-70 enrolled at any given time.	Nurse works with their pod-MD panel of 1,600-1,900 patients Diabetic care model: navigators work with 15-25 diabetic patients RN care managers imbedded in some groups; separate from RN RNCN is part of interprofessional care management team that includes RNCN, pharmacist, dietitian, masters-prepared social worker, and panel manager. RNCN may be lead care manager depending on patients' needs.
	RNCN: set productivity goals, also number of phone calls made per day 60-70 memberships of coaching persons; not coaching for more than 3 months at a time	Interprofessional care coordination needs to be better understood to ensure resources are allocated appropriately. We need to be better about interprofessional education collaboration to demonstrate the value of the nurse.	Pay attention to scope; APNs should be prescribing; RNs should not be doing Family Medical Leave Act paperwork. RNCN manages 40-45 complex patients in LCM model.
	We reduce duplication. If the primary RN in an office has the patient on their list to do outreach to, then they are removed from the RNCC list.	If you were able to replace with a medical assistant then you are not using the RN at top of scope; counseling, chronic disease management	
	When we first started, RNCC role was decentralized. Each clinic decided how they were going to use the nurse; caseloads were very low; centralization high-risk patients get about 60 patients on caseload per time; looking for great time turnover at 6-9 months; better to centralize so that role can be most effective and not remove RN from clinic role. "We want the RNCC having a caseload."	One nurse FTE centralized in population health; fills out forms, covers overhead by doing forms, assists in organizing some of the value-based care at the site level; with centralized person reviews charts	

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Table 1. (continued)
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
Staffing Models/ Structure Design (continued)	Centralize pharmacists	52 FTE of nurses, 1 centralized population health, 5-6 FTE triage nurses, 2 vacancies 96,000 patients per year. Staff nurses: 1 RN to every 2 medical provider panels (RN empaneled to patients, not providers)	
	Behavioral health navigators: help with navigation of the behavioral health system; help them get in when it's hard to usually get in; let me help you with that resource; licensed counselors, not NPs or psychiatrists	Health Resources and Services Administration team-based care; empanelment is so important; you need to connect all clinicians to their panels.	
	80 nurses across the system doing a variety of roles, majority in RNCC role; most of our risk contracts, Medicare 44 of them, high-risk transition nurses	Each provider panel of 1,200-1,500 patients; 1 RN supports 2 providers 400-800 patients; RN at panel level is population health and centralized telehealth; mainly do transitions or triage or first touch point	
Strategies/Metrics Used for Achieving ROI	Measure all outcomes with dollars.	In Connecticut, we can bill 99211 code for a variety of nursing visits for immunization, screening/counseling, health promotion, chronic illness care and care management, contraceptive support and family planning, recurring medication administration, anticoagulation, nursing visits for standing or delegated orders (30,266 yearly).	Standardizing work Optimizing in-basket processes Making a difference with readmissions Disease-specific outcomes, such as HbA1c <8% Process metrics: number of visits, 14-day follow-up post discharge
	Consider metrics such as "How much does it cost for someone over 9 Hgb A1C?"	Substance abuse disorder: enhances provider access, via an x waiver; see providers at first visit then are stabilized on buprenorphine and see RN from there on in-between provider visits.	
	Chronic disease management; decreased ED visits by 54%; inpatient admissions down 52%; must calculate PMPM cost; you will lose revenue on other side; must calculate entire continuum cost benefit; must track across entire system This was $8.39 PMPM.	No shows are important to reduce, to get in as many patients/volume as possible.	
	For RNCCs: 24% decreased ED visits, 40% decreased inpatient admission $0.51 PMPM assuming average commercial ED and inpatient costs	Chronic pain: functional screening, other modalities	

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Table 1. (continued)
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
Strategies/Metrics Used for Achieving ROI (continued)	In employed in physician model, track continuum loss of revenue for inpatient/emergency	Hepatitis C: provider starts, then nurse continues, want treatment to be successful	Focus on decreasing readmissions and ED utilization. LCM program metrics: number of patients per RNCN, number of touches per RNCN and per patients, number of interventions per patient. RNCN schedule utilization, utilization per patient (inpatient, ED, observation).
		If we can get a quality award "star award" then it is similar to value-based contract with earnings.	
		Annual wellness visit: RNs do the majority on their own with small provider contact at the end of the visit.	
		Book both a provider and nurse visit; put a code by it so that you can count the work of the nurse.	
		Lengthen the nurse visit so providers can see more in their schedules.	
		Rolling out a standing order for hypertension gives the nurse the ability to proactively schedule a nursing visit, coordinate with a pharmacist.	
		We pursue Joint Commission Patient-Centered Medical Home Health Qualified Center tier 3 which requires self-management goal for every patient	
		Defending adding nurses as long as they can demonstrate they add revenue from visits; want to know what populations they would support.	
		Clinical scorecards to understand their impact. Immunizations: go to nurses not providers; dashboards helpful.	
		Medicaid program: we must get all discharged patients within 7 days	
		There is a lot of duplication in documentation for FQHC payment; value-based is hard when we are filling out duplicate forms; it's inefficient.	

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Table 1. (continued)
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
Gaps/Challenges Barriers	Have not done as much in Medicare. The majority of our patient population is Medicare.	Need money for research; need data analyst; funding to disseminate and expand nursing service	Case management focused on inpatient; opportunities to focus on continuum Opportunities to create hand-offs between inpatient and ambulatory care management teams Opportunities for increased collaboration with other disciplines, such as pharmacists, dietitians, and social workers Coordination with community resources to address SDOH
	Differences in geographic regions spanned creates challenges in standardization and use of services.		Huge access problem. With uptick in ED admissions, we have increased referrals to admissions, discharge, and transfer unit or for E-visits. Starting E-visits for earaches and flu symptoms, for example.
			Not enough doctors to go around; they are burnt out; need to broaden their thinking to capitalize on resources
			Helping MD group see value in optimizing APN as provider with independent practice
Future Plans	We have explored integrated behavioral health model: consulting psychiatrist, nurse, social worker, psychologist. The model is evolving with need to define referral criteria and model the costs compared to clinical and financial improvements.	"Only place where good transitions happen is… integrated health systems"	APNs doing independent visits, not shared, takes a burden off MD. RN-led Medicare annual wellness visits Expansion of Diabetes Care Model with care navigator group; tracking outcomes Reaching out to patients who had Hgb A1c over 8 at visit; education, partnership with pharmacist, social work or dietitian; over 3-6 months Now tracking patients with elevated Hgb A1C more than 90 days ago with no future appointment Create remote patient monitoring strategy Expansion of House Calls program to move to video visits for ER follow up RNCN to conduct video visits

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Table 1. (continued)
CCTM Analysis

	Fully Integrated Health System	Federally Qualified Health Center (FQHC)	Academic Non-Integrated Health System
Future Plans (continued)			Pilot-Hospital Care at Home Program for patients with congestive heart failure who present to the ER. Patients who meet criteria for the program will be managed by an APN and RN in the home setting with future plans to include other conditions/diagnoses. After-Hours Program to expand to offering medication refills. Also to partner with Michigan visiting nurses and University of Michigan student health center to provide after-hours coverage for patient symptom management calls.
Advice	"Nursing-sensitive functions across clinics; focused clinical nursing leadership is part of sauce; they get that reinforcement and training; infrastructure"	Keep the RN at top of scope and teach care coordination as a process, not just as a role that one person plays.	Get the right people at the table to make changes. "Ask what would utopia look like – create it!" Keep socializing ideas with your team. Engage MD partners differently; start with small pilots. Know your data, know what you need to transform. Don't be territorial with the successes. "Over 4 years a lot of change… population health department collapsed; we are reworking our structure." "Don't be afraid to try new models." Performing gap analysis on all elements currently.

APN = advanced practice nurse; CCTM = care coordination and transition management; ED = emergency department; FTE = full-time equivalent; FQHC = Federally Qualified Health Center; LACE = length of stay, acuity of admissions, comorbidities, emergency department admissions; Hgb = hemoglobin; LACE = length of stay, acuity of admissions, comorbidities, emergency department admissions; LCM = longitudinal care management; LOS = length of stay; NP = nurse practitioner; PA = physician assistants; PCP = primary care physician; PMPM = per member per month; RN = registered nurse; RNCC = registered nurse care coordinator; RNCN = registered nurse care navigator; ROI = return on investment; SDOH = social determinants of health

of support, so if there is an issue, they are more likely to get ahold of the RN rather than to pop into an ED." In the FQHC, most nurse visits are driven by templates, patient engagement, and community partnerships. In the ACIHS, high risk, rising risk, and physician referral drive use of the care coordinator role.

Tele/Virtual Health Activities

There was widespread use of telehealth or virtual health activities. Also driven by risk stratification, the associated RN CCTM or RNCCs were trained in motivational interviewing or patient engagement and activation techniques to be effective. Tele interactions were guided by checklists and documentation templates for each call. In the ACIHS, RNCNs initiated their interventions via telephone calls, which included addressing polypharmacy issues post discharge and may result in referral to a pharmacist. Triage was ongoing and, in the ACIHS, was leveraged in the primary care setting after hours and with the geriatric population, which also gained physician support.

Staff Engagement

Each of the three sites' nursing staffs were actively involved in education, structural empowerment, and support for practice accountability. Professional governance was noted to be an essential element within all three settings. CCTM modules, curricula, certification, and standards were leveraged for education, policies, and program guidance. Burnout was a risk for staff with the emergence of new roles and responsibilities, and support mechanisms were mentioned as important. Organizational redesign to ensure nursing had clinical support from the executive level was essential to support ongoing role development. One leader stated, "We look at what our nurses are lacking…what knowledge gaps they are identifying they need to be a primary care nurse…but I also want to identify what patients are the best for a nurse…I firmly believe that care coordination is a process." Another leader stated, "Pay attention to employee satisfaction data. Make sure they feel supported and that they have a voice."

Staffing Models/Structure Design

Panel sizes and RN-to-patient ratios were driven by the acuity or complexity of the population, which was often guided by risk stratification models for high risk, rising risk, or specific diagnostic or transitional care risks. One nurse leader stated, "You must have the scale and capacity to contribute." Attention to practice that reflects the full extent of their license was mentioned by all leaders as well as an eye for duplication of service to maximize efficiency. One nurse leader noted, "If you are able to replace the RN with an MA, then your RN was not being used to top of scope to begin with." Centralization of the nurse's care coordinator role was vital in one organization so that the primary clinic nurse role was not duplicated. Centralization of other functions also occurred in these models, specifically that of pharmacy and behavioral health. There was also discussion of RN utilization to increase physician volume and associated revenue.

ROI Measurement

Program dashboards were used in each site for key metrics. One nurse leader said what others described, "Measure all outcomes with dollars." In the FIHS, clinical and economic outcomes were matched to groups at each level of risk. These included measures of health and chronic disease, resource utilization, total cost of care, appropriate level of care (right care, right place, right time), productivity, and reduced waste. In the ACIHS, interventions were tracked related to chronic disease populations, resource utilization, appropriate level of care, and increased volume production. In the FIHS, the overall cost per patient, per continuum use of services were tracked. In the FQHC, RN billing was imperative for continued service delivery with added volumes. In the FIHS, per member/per month cost was used to show that investment in RNCC resources was more than offset by reduced utilization of ED, hospitalizations, and readmissions, resulting in a positive ROI. In the ACIHS, readmission rates, care management visits, appropriate level of care, and reduction of inappropriate ED and inpatient use were essential metrics.

Challenges

State regulations vary greatly and influence possible care models, RN scope of practice, and payment models, including RN billing. One health system spans multiple states, creating variation in risk contracting, physician structures (employed or aligned), and deference to physician care coordination referral preferences versus system-defined population. One state had wide latitude for nurse billing and visits, whereas in the other two systems, that was not possible. Duplication of services and roles was a challenge in all three settings which could lead to inefficiency. The FQHC noted the need for resources for data management and dissemination of best practices. While in the ACIHS, siloed services were a challenge, with case management traditionally focused on the acute setting and not across the continuum. An additional barrier is access to community resources to address and coordinate social determinants of health. Creating an agile workforce was a challenge for all three sites. All nurse executives reported they were working on acceptance by other disciplines for expanded RN roles. In systems with the historical medical model focused on fee for service and relative value units, appreciating the value of the RN role to increase access, improve outcomes, and expand practice volumes was being pursued.

Future Plans and Advice for Other Nurse Leaders

All leaders spoke of ongoing program development and continuing to advance the role of the RN in practice. Examples included expanding integration of an interprofessional behavioral health model with a team comprised of a psychiatrist, nurse, social worker, or psychologist; Medicare annual wellness visits; and longitudinal disease-specific care models in ambulatory care settings.

Each nurse leader had advice for other leaders aspiring to advance the role of the nurse in the ambulatory care setting or CCTM activities. The FIHS leader said, "Nursing-sensitive functions across clinics are important…leadership plays a key role in building infrastructure, defining measurement and ensuring evidence-based training…It's the secret sauce." The FQHC leader stated, "The only place where good transitions happen is in the integrated health system," and "care coordination is a process, not a person." The ACIHS leader noted, "Get the right people at the table and ask them, 'what would utopia look like?'…keep socializing ideas with your team, engage physician partners differently, start with small pilots, know your data, know where you need to transform, and don't be territorial with the successes." With each leader, there was a sense of optimism and a perception that this was a unique moment in time for the nursing profession across the continuum.

Conclusion

Equipping nurse leaders in all roles and settings is key for achieving improved health for a plethora of populations. Organizations leveraging the role of the RN in CCTM activities must study and disseminate their results to expand the evidence to support future business cases. It is imperative to realize the full economic value of nurses across all settings and the unique contributions the nursing discipline, practicing to the full extent of their license, brings to the transformation of health care and achieving the Quadruple Aim in the United States. $

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NOTE: The "Perspectives in Ambulatory Care" column makes sense of today's changing ambulatory care market. It is written by members of the American Academy of Ambulatory Care Nursing (AAACN) and edited by Kitty Shulman, MSN, RN-BC. For more information about AAACN, please visit www.aaacn.org; email aaacn@aaacn.org; or call (800) AMB-NURS.

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