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DNP Final Project Report

The Evaluation of Advanced Practice Providers Practice Patterns and Delivery of Care Models in
the Specialty Practice Environment

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University of Kentucky

College of Nursing

Spring, 2018

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EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Dedication

My DNP project is dedicated to Advanced Practice Providers who are devoted to improving the healthcare of patients. On a personal note, I dedicate this work to my family. I want to recognize my husband David for his patience and support of my career and educational quests. This would not have been possible without his understanding and encouragement. I would like to thank my parents for passing on their work ethic which has allowed me to juggle many hats at once. To my mother, my mentor, for sharing her love of nursing with me and remaining true to the nursing profession. To my children Nick, Sophia, and Anna, I dedicate this and I thank you for your understanding during the many hours I have focused on this work. I hope I have shown you that hard work and challenging yourself can add much contentment to life.

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Abstract

Background: Advanced Practice Providers (APPs), specifically Nurse Practitioners (NP) and Physician Assistants (PA), have been utilized in healthcare for decades to improve access to care for patients. Norton Healthcare's largest population of APPs is in specialty practices. The expansion of APPs into the medical group has been rapid and without evaluation of value and role identification.

Purpose: The purpose of this study is to evaluate Advanced Practice Provider (APP) practice patterns and care delivery models within specialty practices in a large medical group. The outcome of the study will help to identify trends in practice and areas where standardization might be achieved.

Methods: The study employed a cross-sectional, correlational design with the outcome to describe characteristics of the advanced practice population. Survey data was utilized to identify delivery of care models based on reported relationship between APP and physician.

Results: Three groups emerged from the survey data based on the practicing relationship between the APP and their physician partners. There was no statistical significance between the groups when comparing patient satisfaction, provider engagement, practice productivity, and practice readmission rates.

Conclusion: This study demonstrates the absence of APP standardization of practice in non-primary care practices. An opportunity to improve utilization of APPs at top of license and areas where standardization could be achieved was identified. In addition, this study reported a volume of work being performed by APPs without a value metric to track their productivity.

The Evaluation of Advanced Practice Providers Practice Patterns and Delivery of Care Models in
the Specialty Practice Environment

Advanced Practice Providers (APP), specifically Nurse Practitioners (NP) and Physician Assistants (PA), have been recognized as essential elements to the healthcare team since the mid 1960's. NP's and PA's were added to the team of providers with the intent of expanding primary care access and services to the public sector (Adams, Gardner, & Yates, 2016). In recent years, there has been an expansion of the APP's role into the private sector and specialty areas of practice. This expansion has provided an opportunity for analysis of this historical role in various delivery of care settings.

In 1965, secondary to expanded health coverage and the loss of primary care physicians to specialty practices, an advanced nursing role was established by a physician and nurse, to meet the healthcare demands of the population (Fairman, 2010). This same year a physician at Duke University began the physician assistant program to increase access to care (AAPA, 2017). NPs and PAs account for the largest percentage of APPs in the United States. In total there are approximately 250,000 NPs and PAs; NPs make up 60% and PA's 40%. Thirty-five percent practice in the hospital setting or specialty areas, 10% in outpatient clinics, and 54% in physicians' offices (US Bureau of statistics, 2016). The statistics represent a changing profile of APPs from the primary care environment to practices that include specialty and acute settings such as oncology, cardiology, and surgery. The utilization of APPs in areas outside of primary care provides an opportunity for analysis and evaluation of current baseline practice patterns and delivery of care models. An in depth review of the role of APPs in specialty practices will help to determine if standardization of practice is achievable. Standardization of practice would allow for a measurement of value of APPs in specialty practices.

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Norton Healthcare has a multispecialty medical group that employs greater than 280 NPs and PAs that practice in outpatient and inpatient settings. The medical group has grown rapidly over the past five years and has implemented the use of APPs to fill gaps in care and strengthen the specialty practice teams. The utilization of APPs in these practices has been ill defined and has no value measurement system in place. Over the past four years there has been an expansion of the DNP population, which has brought to light issues around best utilization of these resources.

Background

A dearth of information was found in the literature that defined standardized practice patterns outside of primary care. The Institute of Medicine (IOM) issued a report that noted the value of the NP in primary care and recognized the need for role expansion and coverage into acute and specialty practice populations (IOM, 2011). An integrated review of literature on APP practice patterns in specialty practices demonstrated minimal literature related to practice outcomes of NPs and PAs in acute care. This may be due to the recent expansion of APPs into non-primary care fields and variability from one specialty to another.

Research related to the APP role in oncology, urology, and sleep medicine was noted. Quallich (2011) performed a survey evaluating the current role of the NP in urology and found that studying the role across urology practices not only identified reoccurring practice patterns but assisted with the revision of the advanced practice certification test provided by the Certification Board of Urologic Nurses and Associates. Quallich (2011) reported that standardization of scope of practice and a clear understanding of practice patterns allows for advancement of the profession. A survey of APPs practicing in sleep medicine defined current roles and educational backgrounds in this specialty. The result of the survey identified practice

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patterns and gaps in education for the APP in sleep medicine (Colvin, Cartwright, Collop, Freeman, McLeon, Weaver, & Rogers, 2014). This review supported the need for assessment of practice patterns and educational levels of APPs in specialty practices in order to ensure competency of the practicing provider, as well as advancing the value of the APP in sleep medicine. Moreover, a study performed by the National Comprehensive Cancer Network acknowledged varied utilization of APPs between institutions. A survey addressing practice patterns and productivity was issued; the results defined characteristics in clinical practice that could assist with productivity benchmarks (Hinkel, Vandergrift, Perkel, Waldinger, Levy, & Stewart, 2010).

Purpose

The purpose of this project is to evaluate current practice patterns and care delivery models within specialty practices. Defining the practice patterns and best care models is of great value to leadership in an effort to standardize practice, improve productivity, and optimize use of the APP in the team environment. The result of this evaluation will direct best practice arenas where the addition of an APP will enhance patient care, outcomes, satisfaction, and overall productivity of the practice. Defining the current state of practice allows for development of employment expectations, performance evaluations, educational opportunities, and alignment of incentive plans with practice. In conclusion, an enhanced understanding of the utilization of APP practice patterns in non-primary care disciplines will allow for Norton Medical Group leadership to measure the value of the APP in a specialty practice and assist with future recruiting and onboarding.

The goal of this study is to define current state of APP practice in a non-primary care practice environment. The practice patterns of NPs and PAs in specialty practices is ill-defined.

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A secondary outcome of this comparative effectiveness study is to identify care delivery models that utilize APPs at the top of license and provide high quality care.

Specific objectives to be addressed in this study included:

1. Identify current APP practice patterns and care delivery models in non-primary care practices from January 1, 2017-December 31, 2017.
2. Compare the APP care delivery models identified as a result of the survey questions relating to physician and APP billing and documentation in collaboration with practice readmission rates, practice patient satisfaction, practice productivity, and provider engagement from January 1, 2017-December 31, 2017.

Methods

Design

The study employed a cross-sectional, correlational design study with the outcome to describe characteristics of the advanced practice population.

Setting

The study was performed at Norton Medical Group (NMG), a branch of Norton Healthcare (NHC), in Louisville, Kentucky. Norton Healthcare is a healthcare system that is comprised of five hospitals, 14 Norton Immediate Care Centers and 190 physician practice locations. Norton Healthcare is a not-for profit organization that provides care to the people of Kentucky and Southern Indiana. NHC specializes in caring for patients across the lifespan. NHC's mission is to deliver high quality health care, which is rooted in the organization's faith heritage, to the community they serve. The vision of NHC is to be a leader in healthcare delivery for the region. Specifically, the focus of NMG is to provide care to the whole person and develop working partnerships between providers and patients.

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Procedure and Sample

This study employed an online survey of specialty practice providers as well as an analysis of practice-level outcomes data. See Appendix 4 for a copy of the survey instrument. The survey was created by the principal investigator and was reviewed by leadership, Human Resources, three APPs and the clinical mentor to establish face validity. An online survey was sent using REDCap (Research Electronic Data Capture) to all nurse practitioners (NP) and physician assistants (PA) practicing outside of primary care within NMG with a start date on or before September 2017 who were working at least 24 hours per week. Contracted APPs, primary care APPs, and those working in the immediate care centers were not invited to participate. An invitation to participate in the survey was sent to each participant's official NHC email address; REDCap assigned each respondent a unique identifier code to maintain anonymity of responses. Survey data was collected and managed using REDCap electronic data capture tools hosted at the University of Kentucky. REDCap is a secure, web-based application designed to support data capture for research studies, providing 1) an intuitive interface for validated data entry; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for importing data from external sources (Harris, 2009). Practice-level outcomes data were provided by Norton Healthcare Clinical Information Analysis and Decision Support Services. Provider engagement data was obtained from the human resources department of Norton Healthcare using the 2017 Safety and Engagement Survey. Approvals from the University of Kentucky Institutional Review Board (IRB) and Norton Healthcare Office of Research and Administration (NHORA) were obtained prior to the collection of data and survey dissemination.

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Measures

Survey data included demographic characteristics, practice characteristics, and practice pattern items. The participants were asked to identify themselves as either a PA or a NP.

Practice characteristics encompassed questions regarding specialty, certifications obtained, and procedures performed which were open custom response format.

Scope of practice was explored with response options including diagnosis and management of acute conditions, diagnosis and management of chronic conditions, and diagnosis and management of both acute and chronic conditions. Providers were asked to identify their practice setting as ambulatory, inpatient, subacute/long term care, telehealth or other.

Questions regarding relationship with physician partner and care delivery models were asked of the APP. The APP was asked what percentage of time they assist a physician partner with their documentation, with response options ranging in quarter increments from 0-25% to 76-100%. Participants were asked to identify their practice environment with the other providers in their practice as either a collaborative team environment or an individual practice environment.

Practice-level outcomes data and engagement included productivity, patient satisfaction, readmission rate, and percentage of engaged providers. Productivity included both APP and physician combined work related value units (wRVU). The percentage of productivity is the provider's total billed wRVU's compared to the national 60th percentile American Medical Group Association benchmark. The overall rating from the Clinician and Group Consumer Assessment of Healthcare Providers and Systems (CGCAHPS) survey for each practice was used to measure patient satisfaction of the practice. The readmission rate was calculated from the

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group's attributed panel of patients and reported as the percent of patients who returned to the hospital within 30 days of discharge. Provider engagement data was obtained from the human resources department of Norton Healthcare using the 2017 Safety and Engagement Survey. The percentage of engaged was reported for specialty practices as a total percentage of engaged providers, including both physicians and APPs in the practice.

Data Analysis

Descriptive statistics, including frequency distributions, means, and standard deviations were used to describe APP demographic data. Survey responses to the following three questions identifying relationship of APP and physician partner in practice were used to group specialty practices into one of three categories.

1. What percentage of time do you assist a physician partner with their documentation?
2. Do you perform pre-rounding for a physician in your practice?
3. Do you participate with a physician in split-shared billing or incident-to billing?

The three groups which emerged based on the answers to the above questions were;

Group A- less than 50% of the time APP assisted a physician partner with their documentation, less than 50% of the APPs in the specialty performed pre-rounding, and APPs in the specialty did not participate in split-shared or incident-to billing.

Group B- a combination of two of the three questions were answered identifying the group as moderately attached to physician when performing clinical documentation of work completed.

Group C- greater than 50% of the time APP assisted a physician partner with their documentation, more than 50% of the APPs in the specialty performed pre-rounding, and APPs in the specialty participated in both split-shared and incident-to billing.

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The chi-square test of association was used to test for association between groups and each of the three questions identifying relationship of APP and physician partner in practice. This was done as a way to validate the grouping definitions above. Comparative analysis between the three groups and the quality/productivity metrics were performed using one-way Analysis of Variance (ANOVA). The analysis was conducted using SPSS version 22; an [*alpha*] level of 0.05 was used for statistical significance throughout.

Results

APP Characteristics

Of the 187 APPs who were invited to participate 123 APPs (28 PAs and 94 NPs) completed the survey (66% participation rate). The majority of the respondents were female (89%; see Table 1), Caucasian (97%) and Master's prepared (89%). The most frequently reported age group was 26-49 (46%). Sixty-one percent of respondents had less than 10 years of experience. The top four reported specialties were Oncology (21%; see Table 2), Orthopedics (14%), Hospitalist (14%), and Cardiology (13%). The respondents reported sixty different committee memberships (see Appendix 1), ten different board certifications, and eighteen professional certifications (see Appendix 2).

APP Practice Patterns

The most frequently reported primary scope of practice was diagnosis and management of acute and chronic conditions (86%; see Table 1). Over half of the respondents described their practice setting as being ambulatory (62%) or inpatient (53%) and they reported spending more than 7 hours of their day providing direct patient care (70%). Almost half (48%) reported taking call: pager call (52%), surgical call (9%). Weekend coverage in addition to weekday hours was reported by a little over half (55%) of the respondents. The majority reported collaborating

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physician on site greater than 50% of the time (62%) and had a collaborative team environment (88%). The group reported 76 different types of inpatient and outpatient procedures performed (see Appendix 3).

Care Delivery Models

Group A- encompassed specialty practices where the APPs reported assisting physician partners with documentation less than 50% of the time and less than 50% in this group performed pre-rounding. APPs in this group did not did not participate in split-shared or incident-to billing. The following specialty practices exhibiting these specific characteristics were placed into Group A:

Mental/Behavioral Health

Cardiothoracic Surgery

Neurology

Group B- encompassed specialty practices where the APPs varied their responses regarding time assisting physician partner with documentation reporting either more or less than 50% of the time. Also, greater or fewer than 50% in each practice reported engaging in pre-rounding. APPs in these practices participated in both split-shared and incident-to billing. The following specialty practices exhibiting these characteristics were placed into Group B:

Obstetrics and Gynecology (OB/GYN)

General Surgery

Orthopedics

Cardiology

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Group C- encompassed specialty practices where the APPs reported assisting a physician partner with their documentation more than 50% of the time and greater than 50% reported performing pre-rounding. More than 50% of the APPs in the specialty participated in both split-shared and incident-to billing. The following practices were defined exhibited these characteristics and were placed into Group C:

Gastroenterology

Hospitalist

Oncology

Neonatology

Neurosurgery

Women's Health

A chi square test of association validated the grouping (see Table 6).

Quality/Productivity/Engagement

Patient satisfaction, provider engagement, practice productivity, and practice readmission rates were compared between Group A, Group B, and Group C (see Table 7). There was no statistical significance noted between the groups. There is practical significance in the years of practice experience and the lack of standardized practice patterns.

Discussion

APP Characteristics

The review of the demographic characteristics of the specialty practice APPs has allowed for a better understanding of the population of providers and opportunities for strategic planning around onboarding, development of competencies, continuing education, growth, and mentorship. The average age of the study group was 39. The AANP (2017) reports the average

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age of the national NP population as being 48. This identifies the population at Norton Healthcare as young. Of those in the study 40% have practiced five years or less. With a young provider group an opportunity emerges for the development of continuing education programs to strengthen the knowledge of the advancing provider. A mentorship program would also benefit the new provider as he/she moves from novice to expert. A study performed by Doerksen (2011) recommended a mentorship program that continues throughout one's career and changes focus as needs change.

A robust list of board certifications and professional certifications identifies a group of advanced practice who have enhanced their knowledge through continued education. The strength of this group of providers is evidenced by the procedures they perform and the certifications they have obtained. The procedure and certification lists highlight areas of additional training that could be incorporated within an onboarding program. The list of reported procedures will help to build a competency component to an onboarding program as well as catalogue procedures being performed for credentialing purposes.

APP Practice Patterns

The evaluation of the practice patterns of the APPs in specialty practice included extended hours coverage, call coverage, weekend coverage, in both the ambulatory and inpatient environments. Understanding the work being performed after hours will assist with efforts to align compensation with volume of work performed. The majority listed their scope of practice as diagnosing and managing both acute and chronic conditions in a team environment. The utilization of advanced practice in management of chronic and acute conditions in a team environment has been shown to improve outcomes and patient satisfaction (Litaker et al., 2003).

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The advanced practice professional is educated and trained to manage patients in the specialty environment as a part of the interprofessional team.

APP Care Delivery Models

Three models emerged regarding relationship between physician and APP in the practice environment. The three models grouped level of attachment to physician through documentation and billing. The variability between the groups was noted. This identified an absence of standardization of practice. The study identified redundancy of work around documentation. This may be by design for efficiency of the medical practice, but in return complicates the ability to track work performed by the APP. Use of an APP to document or pre-round for another provider is not an example of utilizing the APP at the top of license.

Quality/Productivity/Engagement

It can be difficult to measure quality and productivity of an APP who practices as a part of an interprofessional team in a specialty environment. Participation in an interprofessional team as opposed to having a primary panel of patients presents difficulty when analyzing quality and productivity of an APPs practice. The quality and productivity of the work is attributed to the billing physician. This adds complexity when trying to measure the value of an APP. A culture that supports top of license practice ensures maximum utilization of an APP despite not having a value metric for non-revenue generating work. In addition to top of license practice, the development of an attribution code for the APP that participates in a visit that is billed under the physician would help measure value.

Limitations

Although the research accomplished the objectives described, several limitations were identified. The response rate of the survey was 123 (66% response rate). The data was collected

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from only one system which may limit the impact of the study due to the unique utilization of APPs in this system. The survey tool used was not validated. Responder bias is another potential limitation of a voluntary self-reported survey. Patient satisfaction was tied to the physician not the APP; thus this did not represent the true patient satisfaction of the total care delivered. This study included all non-primary care practices which was broad. Comparing surgical practices to ambulatory practices limited the ability to identify practice pattern trends.

In addition, the study participants were all practicing in the state of Kentucky and state regulatory bodies determine scope of practice which affects practice patterns. An additional limitation regarding the sample group was that advanced practice included both PAs and NPs. Not only does training differ between these two groups but state scope of practice varies.

Recommendation for Future Studies

Following an assessment of current state, future studies should focus on detailed analysis within the specialties. A comparison of PA and NP practice could provide useful data regarding variation in practice patterns between the two groups. As the DNP population grows there is opportunity to study the impact of the doctorate prepared NP compared to the master's prepared NP. A comparison of APP utilization in specific surgical practices could identify the impact of APPs on quality, efficiency, and practice productivity. The practice productivity data identified several disease specific NP only practices. A value analysis of independent NP clinics may identify an opportunity to replicate such practice models. Evaluation of interprofessional models between groups, as well as, the cultural acceptance of APPs in specialty practices would help to further identify the role of the APP in specialty practices and perhaps provide opportunity for further role enhancement and expansion.

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Conclusion

The opportunity to evaluate current state of specialty practice APPs in a medical group helped to identify current characteristics, practice patterns, and relationship with physician partners in practice. The specialty APPs are a diverse group that perform procedures, are board certified, have continued their education through additional certifications, and provide after-hours care in various settings. The opportunity for onboarding and mentorship programs was identified which would strengthen the performance of the APP at all stages of his/her career. Three groups emerged related to relationship of APP to physician partner as it pertained to billing, documentation, and pre-rounding. There was no difference between the three groups in terms of provider outcomes: quality, productivity, provider engagement and patient satisfaction. The opportunity to standardize practice and to develop a tracking method for work performed by the APP during a shared visit was noted. The literature supports the utilization of APPs in specialty practices to strengthen the interprofessional team and expand access. The development of a value metric for APP practice is essential to the specialty practice model. A value metric for shared visits or non-revenue generating work would allow for tracking of productivity, alignment of incentive plans, and data guided provider ratios.

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References

- American Association of Nurse Practitioners (AANP). NP Fact Sheet. Retrieved from <https://www.aanp.org/all-about-nps/np-fact-sheet>. Accessed April 7, 2018.
- Adams, M., Garner, G., & Yates, P. (2016). Investigation nurse practitioners in the private sector: a theoretically informed research protocol. *Journal of Clinical Nursing*, 26, 1608-1620.
- American Academy of Physician Assistants. (2017). <https://www.aapa.org/about/history/>. Accessed June 27, 2017.
- Bureau of Labor Statistics, United States Department of Labor. Occupational Employment Statistics. (2016). <https://www.bls.gov/oes/current/oes291171.htm>. Accessed July 1, 2017.
- Colvin, L., Cartwright, A., Collop, N., Freeman, N., McLeon, D., Weaver, T., & Rogers, A., (2014). Advanced Practice Registered Nurses and Physician Assistants in Sleep Centers and Clinics: A survey of Current Roles and Educational Background. *Journal of Clinical Sleep Medicine*, 10(5), 581-587.
- Doerksen, K. (2011). What are the professional development and mentorship needs of advanced practice nurses? *Journal of Professional Nursing*, 26(3), 141-151.
- Fairman, J. A., (2010). *The Evolution and Future of Advanced Practice*. 5th ed. New York: Springer, 3-14.
- Harris, P., Taylor, R., Payne, J., Gonzalez, N., Conde, J. (2009). Research electronic data capture (REDCap)- A metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform*, 2:377-81.

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Hinkel, J.M., Vandergrift, J.L., Perkel, S.J., Waldinger, M.B., Levy, W., & Stewart, M., (2010).

Practice and Productivity of Physician Assistants and Nurse Practitioners in Outpatient Oncology Clinics at National Comprehensive Cancer Network Institutions. *Journal of Oncology Practice*, 6(5), 182-187.

Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*.

Washington, DC; The National Academies Press. Retrieved from

<http://www.thefutureofnursing.org/IOM-Report>.

Litaker, D., Mion, L., Planavsky, L., Kippes, C., Mehta, N., & Frolkis, J. (2003). Physician-nurse practitioner teams in chronic disease management: the impact on costs, clinical effectiveness, and patients' perception of care. *Journal of Interprofessional Care*, 17(3), 223-237.

MGMA, (2014). NPP utilization in the future of US healthcare. An MGMA Research and Analysis Report.

<https://www.mgma.com/Libraries/Assets/Practice%20Resources/NPPsFutureHealthcare-final.pdf>. Accessed June 20, 2017.

O'Hare, S. (2010). Mid-Level providers in a changing healthcare workforce. August 17, 2010.

<http://www.beckershospitalreview.com/compensation-issues/mid-level-providers-in-a-changing-healthcare-workforce.html>. Accessed June 27, 2017.

Quallich, S. A. (2011). A Survey Evaluating the Current Role of the Nurse Practitioner in Urology. *Urologic Nursing*, 31(6), 328-336.

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Sangster-Gormley, E., Martn-Misner, R. , Downe-Wamboldt, B., & DiCenso, A. (2011). Factors affecting nurse practitioner *role* implementation in Canadian practice settings: an integrative review. *Journal of Advanced Nursing*. 67(6), 1178-1190.

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Table 1. *APP Characteristics* (n=123)

Gender	
Female	110 (89.4%)
Male	12 (9.8%)
Transgender	1 (0.8%)
Age	
No response	18 (5.6%)
26-39	57 (46.3%)
40-49	29 (23.5%)
50-59	15 (12.1%)
60-64	4 (3.2%)
Race	
Asian	2 (1.6%)
Black or African American	2 (1.6%)
White or Caucasian	111 (91%)
Hispanic	3 (2.5%)
Native Hawaiian or Pacific Islander	1 (0.8%)
More than one race	3 (2.5%)
Highest Level of Education	
Bachelors	3 (2.4%)
Masters	110 (89.4%)
Doctorate	10 (8.1%)
Provider type:	
PA	28 (22.8%)
APRN	94 (76.4%)
Other	1 (0.8%)
Primary Scope of Practice	
Diagnosis and Management of Acute Conditions	12 (10.7%)
Diagnosis and Management of Chronic Conditions	4 (3.3%)
Diagnosis and Management of Acute/Chronic Conditions	105 (86.1%)
Practice Setting	
Ambulatory	76 (62.3%)
Inpatient	64 (52.5%)
Subacute/long term care facility	3 (2.5%)
Telehealth	1 (0.8%)
Other	16 (13.1%)
Number of years as provider	
Missing	10 (8.1%)
1-5 years	49 (39.8%)
6-10 years	27 (21.9%)
11-15 years	16 (13%)
16-20 years	11 (8.9%)
21-25 years	5 (4.1%)
26-30 years	2 (1.6%)
Specialty	
Missing	12 (9.7%)

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Cardiology	14 (12.6%)
Cardiothoracic Surgery	3 (2.7%)
General Surgery	5 (4.5%)
Gastroenterology	3 (2.7%)
Hospitalist	15 (13.5%)
Neonatology	5 (4.5%)
Neurology	6 (5.4%)
Neurosurgery	7 (6.3%)
OB/GYN	5 (4.5%)
Oncology	23 (20.7%)
Orthopedics	16 (14.4%)
Mental/Behavioral Health	4 (3.6%)
Women's Health	5 (4.5%)
Hours per day direct patient care	
0-3	3 (2.5%)
4-6	33 (27.0%)
7-8	57 (46.7%)
9-10	17 (13.9%)
>11	12 (9.8%)
Hours per day on administrative task (computer)	
0-2	52 (42.3%)
3-4	43 (35%)
5-6	15 (12.2%)
7-8	5 (4.1%)
>8	8 (6.5%)
Average Call (n=59)	
Pager Call	64 (52%)
Surgery Call	5 (8.5%)
Weekend Coverage in addition to M-F (n=118)	
No	53 (44.9%)
Yes	65 (55%)
Collaborating Physician on site (n=122)	
<25%	35 (28.7%)
26-50%	12 (9.8%)
51%-75%	23 (18.9%)
>76%	52 (42.6%)
Working Environment (n= 121)	
Collaborative Team Environment	106 (87.6%)
Individual Environment	15 (12.4%)
APP Included in Group Meeting (n=120)	
Yes	60 (50%)
No	60 (50%)

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Table 2. *Specialty Practices Identified*

Specialty	Frequency	%
Cardiology	14	12.6
Cardiothoracic Surgery	3	2.7
General Surgery	5	4.5
Gastroenterology	3	2.7
Hospitalist	15	13.5
Neonatology	5	4.5
Neurology	6	5.4
Neurosurgery	7	6.3
OB/GYN	5	4.5
Oncology	23	20.7
Orthopedics	16	14.4
Mental/Behavioral	4	3.6
Women's Health	5	4.5

Table 3. *Physician Documentation*

What percentage of the time do you assist a MD partner with their documentation?				
Specialty	0%	1%-25%	51%-75%	76%-100%
Cardiology	35%	50%	7%	7%
Cardiothoracic Surgery	67%	33%	0%	0%
General Surgery	40%	40%	0%	20%
Gastroenterology	0%	0%	0%	100%
Hospitalist	7%	36%	36%	21%
Neonatology	20%	60%	0	20%
Neurology	100%	0	0	0
Neurosurgery	0	14%	43%	43%
OB/GYN	80%	0	0	20%
Oncology	9	64%	14%	14%
Orthopedics	31%	44%	25%	0
Mental/Behavioral	100%	0	0	0
Women's Health	50%	25%	25%	0

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Table 4. *Pre-rounding*

Do you perform pre-rounding for a physician in your practice?		
Specialty	No	Yes
Cardiology	9 (64%)	5 (35%)
Cardiothoracic Surgery	9 (67%)	1 (33%)
General surgery	0	5 (100%)
Gastroenterology	-	-
Hospitalist	4 (29%)	10 (71%)
Neonatology	2 (40%)	3 (60%)
Neurology	6 (100%)	0
Neurosurgery	1 (14%)	6 (86%)
OB/GYN	0	5 (100%)
Oncology	10 (43%)	13 (57%)
Orthopedics	13 (81%)	3 (19%)
Mental/Behavioral Health	4 (100%)	0
Women's Health	0	5 (100%)

Table 5. *Split-shared/Incident-to Billing*

Do you participate with a physician in split-shared or incident-to type visits?		
Specialty	No	Yes
Cardiology		X
Cardiothoracic Surgery	X	
General surgery	X	
Gastroenterology		X
Hospitalist		X
Neonatology		X
Neurology	X	
Neurosurgery		X
OB/GYN	X	
Oncology		X
Orthopedics	X	
Mental/Behavioral Health	X	
Women's Health		X

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Table 6. *Chi Square Test between groups*

	Group 1 % yes	Group 2 % yes	Group 3 % yes	p
Assist with Documentation	0	20.00	45.45	.001
Rounding	7.69	45.00	60.70	.002
Split Billing	53.8	60.00	82.76	.017

Table 7. *APP Group Comparison and Quality/Productivity*

Comparison Between Groups	Group A (n=6 practices) Mean (SD)	Group B (n=12 practices) Mean (SD)	Group C (n=20 practices) Mean (SD)	F (p)
Productivity	41.44 (28.59)	29.96 (37.19)	37.74 (70.45)	.170 (.845)
Readmission rate	10.5 (3.31)	5.73 (4.61)	9.45 (5.97)	2.66 (.086)
Patient satisfaction	74.05 (36.33)	86.97 (.937)	77.15 (26.78)	1.36 (.296)
Engagement	26.7	49.02 (21.06)	37.42 (6.54)	1.03 (.403)

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Appendix 1. *Committee and Meeting Representation*

Reported Committee /Meeting Representation	
Bravehearts-Norton Children's Foundation	System orthopedic steering committee
Norton Heart Specialists Group Meetings	Fracture fragility committee
APP Quarterly Practice Meeting	Neuroradiology conference
Afib Meeting	Clinical Leadership Council
Afib Marketing	System Medical Executive Committee
NCI APP Meeting	Advanced Practice Provider Leadership Council
Integrated Medicine Committee	EPIC Optimization Committee-Norton
Hematology Meetings	Medical Group
Coding	Medication Management Committee Norton
Norton Neuroscience Institute Case Presentation and M&M Conference	Medical Group
Norton Cancer Institute Central Nervous System (CNS) Oncology Research Subgroup committee member	Provider Governance Board-Norton
University of Kentucky and Norton Healthcare Physician Assistant Advisory Committee Member	Medical Group
Norton Inpatient Care, Stroke M&M	Norton Medical Group Clinical Administration Committee
Fetal Boards MFM Provider Meeting	Primary Care Leadership Council-Norton
Norton Inpatient Care Specialists	Medical Group
TOC (take over care) Meetings Maternal Boards	Norton Medical Group Analytics Team
Norton Advanced Professional Practice Committee	Advanced Practice Professionals Committee
Norton Children's Hospital Advanced Professional Practice Committee	Product, Privileging, and Procedure Committee-Norton Medical Group
Norton Children's Hospital Patent Safety Committee	Cardiology Advanced Practice Committee
Norton Children's Neonatology/University of Louisville Joint Venture Committee	Opioid Task Force
NNI Friday morning conference	Lung Cancer Screening/CT Screening Committee
NNI monthly stroke meetings	Lung Cancer Alliance Advisory Board
Refractory epilepsy conference	Bellarmino University, Lansing School of Nursing Advisory Board
Patient care VAT	Norton Healthcare Critical Care Committee
Neuroscience Case presentations	Advanced Practice and Credentialing Committee
Tumor Conference	Fetal Board
	Pelvic health Committee
	Spine conference
	Total joint committee at NWC
	NWC ERAS committee

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Appendix 2. *APP Reported Certifications*

Board Certifications	Professional Certifications
Acute and Primary Care Nurse Practitioner-Dual Certified Adult Nurse Practitioner-Board Certified Adult Gerontology Acute Care Nurse Practitioner-Board Certified Family Nurse Practitioner-Board Certified Neonatal Nurse Practitioner-Board Certified Women’s Health Nurse Practitioner-Board Certified Advanced Oncology Nurse Practitioner-Board Certified Advanced Oncology Certified Nurse Specialist-Board Certified National Commission on Certification of Physician Assistants-Board Certified Psychiatric Mental Health Nurse Practitioner-Board Certified	Basic Life Support Advanced Cardiac Life Support Certified Neuroscience Registered Nurse Stroke Certified Registered Nurse STABLE Neonatal Resuscitation Program Certification Registered Nurse First Assist Emergency Neurological Life Support Wound Care Certified Ostomy Management Specialist Certification Department of Transportation Medical Examination Certification Chemotherapy and Biotherapy Certification Collaborative Institutional Training Initiative (CITI) certified NovoTTF-100A System (Novocure) Certified Lactation Consultant Society of Clinical Research Associates Certification CAQ Orthopedic Surgery

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Appendix 3. *APP Procedures Performed*

Reported Procedures Performed	
Intubation	Umbilical Line Placement
Central Line Placement	Paracentesis
Arterial Line Placement	PICC Line Placement
Thoracentesis	Frenotomy
Pacemaker Programming	Exchange Transfusion
ICD Programming	Intraosseous Insertion
Chest tube Insertion	Suprapubic bladder aspiration
Chemical Cardioversion	Ventricular Reservoir Tap
Pace Termination	Ligation of extra digits
Botox Injections	Pericardiocentesis
Occipital Nerve Blocks	Pericardial tap
SPG Nerve Blocks	UAC/UVC Placement
Pericranial Nerve Blocks	PAL Placement
Bone Marrow Biopsy	Trigger Point Injections
Intrathecal Chemotherapy	External Ventricular Drain Placement
Orthopedic Mobilization	Lumbar Puncture Shunt Taps
Laceration Repair	Shunt patency test
SUH Drainage	IUD insertion
Irrigation and Debridement	IUD removal
Wound Vac management	Nexplanon Insertion
Application of placental matrix	Vulvar/Vaginal Biopsy
Callous Paring	Endometrial Biopsy
Wound Closure	EMB
Nail Removal	Colposcopy
Nailbed Repair	Ommaya-IT chemotherapy
Placement of Nexplanon	Intra-articular joint injections
Circumcision	Intra-articular joint aspirations
Lumbar Puncture	Carpal Tunnel Injections
Cast Application	Tendon Sheath Injections
Splinting	CMC Injections
EVD, subdural, lumbar drain maintenance	Ganglion cyst excisions
VAD-tap	Fracture/Dislocation Reduction
Pin Removal	Endo Vein Harvesting
Clubfoot Ponseti Casting	IABP-placement/removal
Bladder Instillation	Emergent Sternotomy (reopen)
Neurostimulator Interrogation	Saline Infused Sonohysterogram

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

Appendix 4. APP Specialty Practice Survey Codebook

Variable / Field Name	Field Label <i>Field Note</i>	Field Attributes (Field Type, Validation, Choices, Calculations, etc.)									
Instrument: APP Specialty Practice Survey (app_specialty_practice_survey)											
1	record_id	Record ID text									
2	gender	Define your gender: <i>Select the response that best fits</i> radio <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>1</td><td>Female</td></tr> <tr><td>2</td><td>Male</td></tr> <tr><td>3</td><td>Transgender</td></tr> </table> Custom alignment: LV	1	Female	2	Male	3	Transgender			
1	Female										
2	Male										
3	Transgender										
3	age	Document your age: text Custom alignment: LV									
4	race	Which of the following best describes your race: <i>Select the response that best fits</i> radio <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>American Indian or Alaskan Native</td></tr> <tr><td>Asian</td></tr> <tr><td>Black or African American</td></tr> <tr><td>Hispanic/Latino</td></tr> <tr><td>Not Hispanic/Latino</td></tr> <tr><td>Native Hawaiian or other Pacific Islander</td></tr> <tr><td>White or Caucasian</td></tr> <tr><td>More than one race</td></tr> <tr><td>Prefer not to answer</td></tr> </table> Custom alignment: LV	American Indian or Alaskan Native	Asian	Black or African American	Hispanic/Latino	Not Hispanic/Latino	Native Hawaiian or other Pacific Islander	White or Caucasian	More than one race	Prefer not to answer
American Indian or Alaskan Native											
Asian											
Black or African American											
Hispanic/Latino											
Not Hispanic/Latino											
Native Hawaiian or other Pacific Islander											
White or Caucasian											
More than one race											
Prefer not to answer											
5	educ	Highest level of education obtained: <i>Select the response that best fits</i> radio <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>1</td><td>Associate</td></tr> <tr><td>2</td><td>Bachelors</td></tr> <tr><td>3</td><td>Masters</td></tr> <tr><td>4</td><td>Doctorate</td></tr> </table> Custom alignment: LV	1	Associate	2	Bachelors	3	Masters	4	Doctorate	
1	Associate										
2	Bachelors										
3	Masters										
4	Doctorate										
6	aprn_pa_status	Are you: dropdown <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>1</td><td>PA</td></tr> <tr><td>2</td><td>APRN</td></tr> <tr><td>3</td><td>Not an APRN</td></tr> </table> Custom alignment: LV	1	PA	2	APRN	3	Not an APRN			
1	PA										
2	APRN										
3	Not an APRN										
7	years_as_provider	List number of years as a provider: text Custom alignment: LV									
8	rn_years	If an APRN, enter the number of years as a practicing RN prior to becoming an APRN (if less than one year enter 0): text Custom alignment: LV									

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

9	collaborating_yrs	List number of years in practice with collaborating or supervising MD:	text Custom alignment: LV							
10	certifications_obtained	List any certifications obtained	notes Custom alignment: LV							
11	specialty_practice	List current specialty of practice:	text Custom alignment: LV							
12	subspecialty	List current subspecialty of practice:	text Custom alignment: LV							
13	scope_of_practice	Primary scope of practice: <i>Select the response that best fits</i>	radio							
			gnosis and management of acute conditions							
			gnosis and management of chronic conditions							
			gnosis and management of both acute and chronic conditions							
			Custom alignment: LV							
14	practice_setting	What describes your practice setting: <i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i>	checkbox							
			ctice_setting__1 Ambulatory							
			ctice_setting__2 Inpatient							
			ctice_setting__3 Subacute/long term							
			ctice_setting__4 Telehealth							
			ctice_setting__5 Other							
			Custom alignment: LV							
15	prac_set_other	If practice setting is other please note:	text Custom alignment: LV							
16	clinical_practice_hours	How many hours per day do you spend in clinical practice providing direct patient care: <i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i>	radio							
			<table border="1"> <tr><td>1</td><td>0-3</td></tr> <tr><td>2</td><td>4-6</td></tr> <tr><td>3</td><td>7-8</td></tr> <tr><td>4</td><td>9-10</td></tr> <tr><td>5</td><td>>11</td></tr> </table>	1	0-3	2	4-6	3	7-8	4
1	0-3									
2	4-6									
3	7-8									
4	9-10									
5	>11									
			Custom alignment: LV							
17	admin_hrs	How many hours per day do you spend on administrative tasks using a computer: <i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i>	radio							
			<table border="1"> <tr><td>1</td><td>0-2</td></tr> <tr><td>2</td><td>3-4</td></tr> <tr><td>3</td><td>5-6</td></tr> <tr><td>4</td><td>7-8</td></tr> <tr><td>5</td><td>>8</td></tr> </table>	1	0-2	2	3-4	3	5-6	4
1	0-2									
2	3-4									
3	5-6									
4	7-8									
5	>8									
			Custom alignment: LV							
18	avg_pts_day	On average, how many patients do you see per day:	text Custom alignment: LV							

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

		<i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i>									
19	avg_comorbid	<p>Average number of comorbidities in your patient panel:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>radio</p> <table border="1"> <tr><td>1</td><td>0-2</td></tr> <tr><td>2</td><td>3-5</td></tr> <tr><td>3</td><td>>5</td></tr> </table> <p>Custom alignment: LV</p>	1	0-2	2	3-5	3	>5		
1	0-2										
2	3-5										
3	>5										
20	avg_call_days	<p>Average call responsibility on a monthly basis (list the average number of days):</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>text</p> <p>Custom alignment: LV</p>								
21	call_responsibility	<p>Call responsibility:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>radio</p> <table border="1"> <tr><td>1</td><td>Pager call</td></tr> <tr><td>2</td><td>Surgery call</td></tr> </table> <p>Custom alignment: LV</p>	1	Pager call	2	Surgery call				
1	Pager call										
2	Surgery call										
22	after_hours_days	<p>Average days per month working after hours:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>text</p> <p>Custom alignment: LV</p>								
23	weekend_coverage_days	<p>Average weekend coverage responsibility on a monthly basis (days):</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>text</p> <p>Custom alignment: LV</p>								
24	weekend_hours	<p>Average hours per day on site during weekend:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>radio</p> <table border="1"> <tr><td>1</td><td>0-4</td></tr> <tr><td>2</td><td>5-8</td></tr> <tr><td>3</td><td>9-12</td></tr> <tr><td>4</td><td>>12</td></tr> </table> <p>Custom alignment: LV</p>	1	0-4	2	5-8	3	9-12	4	>12
1	0-4										
2	5-8										
3	9-12										
4	>12										
25	time_collab_onsite	<p>On average, how much time per day is your collaborating or supervising physician on site:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>radio</p> <table border="1"> <tr><td>1</td><td>< 25%</td></tr> <tr><td>2</td><td>26%-50%</td></tr> <tr><td>3</td><td>51%-75%</td></tr> <tr><td>4</td><td>>76%</td></tr> </table> <p>Custom alignment: LV</p>	1	< 25%	2	26%-50%	3	51%-75%	4	>76%
1	< 25%										
2	26%-50%										
3	51%-75%										
4	>76%										
26	prac_team_mem	<p>Practice location includes the following team members (check all that apply):</p>	<p>checkbox</p> <table border="1"> <tr><td>prac_team_mem__1</td><td>Receptionist</td></tr> <tr><td>prac_team_mem__2</td><td>MA</td></tr> <tr><td>prac_team_mem__3</td><td>LPN</td></tr> <tr><td>prac_team_mem__4</td><td>RN</td></tr> </table>	prac_team_mem__1	Receptionist	prac_team_mem__2	MA	prac_team_mem__3	LPN	prac_team_mem__4	RN
prac_team_mem__1	Receptionist										
prac_team_mem__2	MA										
prac_team_mem__3	LPN										
prac_team_mem__4	RN										

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

		<i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i>	<table border="1"> <tr><td>5</td><td>prac_team_mem__5</td><td>Triage RN</td></tr> <tr><td>6</td><td>prac_team_mem__6</td><td>Diabetes Educator</td></tr> <tr><td>7</td><td>prac_team_mem__7</td><td>Nurse Navigator</td></tr> <tr><td>8</td><td>prac_team_mem__8</td><td>Social Worker</td></tr> <tr><td>9</td><td>prac_team_mem__9</td><td>Pharmacist</td></tr> <tr><td>10</td><td>prac_team_mem__10</td><td>Scheduler</td></tr> <tr><td>11</td><td>prac_team_mem__11</td><td>Not Applicable</td></tr> </table>	5	prac_team_mem__5	Triage RN	6	prac_team_mem__6	Diabetes Educator	7	prac_team_mem__7	Nurse Navigator	8	prac_team_mem__8	Social Worker	9	prac_team_mem__9	Pharmacist	10	prac_team_mem__10	Scheduler	11	prac_team_mem__11	Not Applicable
5	prac_team_mem__5	Triage RN																						
6	prac_team_mem__6	Diabetes Educator																						
7	prac_team_mem__7	Nurse Navigator																						
8	prac_team_mem__8	Social Worker																						
9	prac_team_mem__9	Pharmacist																						
10	prac_team_mem__10	Scheduler																						
11	prac_team_mem__11	Not Applicable																						
			Custom alignment: LV																					
27	support_staff	<p>Support staff that are assigned to you (check all that apply):</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	checkbox <table border="1"> <tr><td>support_staff__1</td><td>MA</td></tr> <tr><td>support_staff__2</td><td>RN</td></tr> <tr><td>support_staff__3</td><td>Triage RN</td></tr> <tr><td>support_staff__4</td><td>Nurse Navigator</td></tr> <tr><td>support_staff__5</td><td>Not Applicable</td></tr> </table>	support_staff__1	MA	support_staff__2	RN	support_staff__3	Triage RN	support_staff__4	Nurse Navigator	support_staff__5	Not Applicable											
support_staff__1	MA																							
support_staff__2	RN																							
support_staff__3	Triage RN																							
support_staff__4	Nurse Navigator																							
support_staff__5	Not Applicable																							
			Custom alignment: LV																					
28	presc_priv	Do you have prescriptive privileges:	yesno <table border="1"> <tr><td>1</td><td>Yes</td></tr> <tr><td>0</td><td>No</td></tr> </table>	1	Yes	0	No																	
1	Yes																							
0	No																							
			Custom alignment: LV																					
29	presc_priv_schedule	Do you have prescriptive privileges for scheduled drugs:	yesno <table border="1"> <tr><td>1</td><td>Yes</td></tr> <tr><td>0</td><td>No</td></tr> </table>	1	Yes	0	No																	
1	Yes																							
0	No																							
			Custom alignment: LV																					
30	assist_md_with_doc	<p>What percentage of time do you assist a physician partner with their documentation:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	radio <table border="1"> <tr><td>1</td><td>0%</td></tr> <tr><td>2</td><td>1%-25%</td></tr> <tr><td>3</td><td>51%-75%</td></tr> <tr><td>4</td><td>76%-100%</td></tr> </table>	1	0%	2	1%-25%	3	51%-75%	4	76%-100%													
1	0%																							
2	1%-25%																							
3	51%-75%																							
4	76%-100%																							
			Custom alignment: LV																					
31	work_enviro	<p>Would you describe your working environment with other providers in your practice as:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	radio <table border="1"> <tr><td>1</td><td>A collaborative team environment</td></tr> <tr><td>2</td><td>An individual environment</td></tr> </table>	1	A collaborative team environment	2	An individual environment																	
1	A collaborative team environment																							
2	An individual environment																							
			Custom alignment: LV																					
32	pre_rounding	<p>Do you perform pre-rounding for a physician in your practice:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	yesno <table border="1"> <tr><td>1</td><td>Yes</td></tr> <tr><td>0</td><td>No</td></tr> </table>	1	Yes	0	No																	
1	Yes																							
0	No																							
			Custom alignment: LV																					

EVALUATION OF APP SPECIALTY PRACTICE PATTERNS

33	split_incident	<p>Do you participate with a physician in:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	checkbox						
			<table border="1"> <tr> <td>split_incident__1</td> <td>Split shared visi</td> </tr> <tr> <td>split_incident__2</td> <td>Incident to billi</td> </tr> </table>	split_incident__1	Split shared visi	split_incident__2	Incident to billi		
split_incident__1	Split shared visi								
split_incident__2	Incident to billi								
			Custom alignment: LV						
34	num_of_phys	<p>How many physicians do you directly work with on a daily basis:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>text</p> <p>Custom alignment: LV</p>						
35	surgery	<p>Do you assist in surgery:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>yesno</p> <table border="1"> <tr> <td>1</td> <td>Yes</td> </tr> <tr> <td>0</td> <td>No</td> </tr> </table> <p>Custom alignment: LV</p>	1	Yes	0	No		
1	Yes								
0	No								
36	procedures	<p>List any procedures you perform: (Do not include procedures performed in the operating room)</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>notes</p> <p>Custom alignment: LV</p>						
37	committees	<p>List any Norton Healthcare committees/meetings you regularly attend:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>notes</p> <p>Custom alignment: LV</p>						
38	prac_meet	<p>Are you included in the regular practice meetings with the physicians in your practice:</p> <p><i>Please respond based upon your primary role in the previous 12 months at Norton Healthcare</i></p>	<p>yesno</p> <table border="1"> <tr> <td>1</td> <td>Yes</td> </tr> <tr> <td>0</td> <td>No</td> </tr> </table> <p>Custom alignment: LV</p>	1	Yes	0	No		
1	Yes								
0	No								
39	special_interest	<p>Please add any areas of special interest or need regarding your practice that you would like to communicate:</p>	<p>notes</p> <p>Custom alignment: LV</p>						
40	app_specialty_practice_survey_complete	<p>Section Header: <i>Form Status</i></p> <p>Complete?</p>	<p>dropdown</p> <table border="1"> <tr> <td>0</td> <td>Incomplete</td> </tr> <tr> <td>1</td> <td>Unverified</td> </tr> <tr> <td>2</td> <td>Complete</td> </tr> </table>	0	Incomplete	1	Unverified	2	Complete
0	Incomplete								
1	Unverified								
2	Complete								