Utilization of Nurse Practitioners and Physician Assistants: Best Practices

Please stand by. The webinar will begin shortly.

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Utilization of Nurse Practitioners and Physician Assistants: Best Practices

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Agenda

- Scope of practice
- Goals of using NPPs
- Benchmarks
- Billing and Documentation
- What works and what doesn't work

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NPPs defined

- Non-Physician Practitioners (NPPs)
  - Physician Assistant (PA)

    Licensed to practice medical care with physician supervision. Emphasis on the biological/ pathologic aspects of health, assessment, diagnosis and treatment. Practice model is a team approach relationship with physicians.

  - Nurse Practitioner (NP)

    Registered nurses with advanced education/training who can perform delegated medical acts with physician supervision. Emphasis on disease adaptation, health promotion, wellness and prevention. Practice model is a collaborative relationship with physicians.

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Scope of Practice

- Training and Licensure
- State Regulations
- Credentialing
- Supervision of NPPs
- Supervision by NPPs

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Training and Licensure*

Physician Assistant

- Training is affiliated with Medical Schools and previous heath care experience is required . First graduation class from Duke in 1967.
- Procedure and skill oriented including surgical skills.
- Requires completion from an accreditation program and national certification exam.
- Licensed by State Medical Board and Medical Practice Act provisions.
- Written guidelines required for prescribing.

Nurse Practitioner

- Originated in Mid 1960's in response to physician shortage.
- Training is affiliated with Nursing Schools, BSN required.
- Training typically does not include surgical settings.
- Master's required for exam, national certification optional.
- Collaborative agreement with physician required to prescribe.
- State Nursing license under the Nurse Practice Act.

** See Appendix*

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State Regulations*

Physician Assistant

- State laws vary on how the scope of PA's practice is determined.
- The majority of states allow the physician-PA team to establish the scope of the PA but some states require a regulatory board to set the scope of practice. Other states utilize a hybrid model.
- Resource for regulations: The American Academy of Physician Assistants www.aapa.org

* See appendix

Nurse Practitioner

- Educational requirements, certification and legal scopes of practice are decided at state level and vary considerably.
- Three levels of practice: Full Practice, Reduced Practice and Restricted Practice
- Resource for regulation: American Association of Nurse Practitioners www.aanp.org

** See appendix*

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Credentialing

- Practices generally do not have specific credentialing policies.
- Hospital policies and/or by-laws may need to be updated to permit NPPs to practice.

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Supervision of NPPs

- Regulations are different in each state *, although most do not require on-site supervision of NPPs by the supervising physician.

* See Appendix

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Supervision by NPPs

Office Setting

- NPPs may serve as the supervising provider for therapeutic services within the scope of practice.
- Must be physically present in the office suite.
- Must be employed by the practice

Hospital Setting

- NPPs may serve as the supervising provider for therapeutic services within the scope of practice.
- Must be immediately available and able to step in and perform the procedure.
- Must be employed by the hospital if off-campus.

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Goals in Hiring NPPs

- Determine Practice Model
- Increase Physician Productivity
  - # 1 Goal is to offload work from the physicians so more new patients can be seen in the practice
- Operational
- Financial

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Practice Models

- Incident-to-Practice Model
  - NPPs see patients independent of the physician; physician is present and available if needed.
  - Alternate every other visit
  - Maximizes productivity and reimbursement
- Shared Visit Model
  - NPPs always see patients in conjunction with physician
- Independent Practice Model
  - NPPs see patients completely independent of physician and the patient is not assigned to an oncologist.

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Physician Productivity

- Determine model, goals and tasks up front
  - Work with entire group of physicians to perform tasks vs. work with one provider to perform multiple tasks
- Off load inpatient duties, i.e.consults (pre-work), rounds, discharges
- Off load procedures, i.e.bone marrow bx, bladder instillations, etc.
- See on treatment patients every other visit
- Off load f/u appointments/Survivorship clinic
- Assist with dictation
- Prepare chemo orders for physician's final review and approval

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Operational Goals

- The larger the practice, the more operational issues will need to be considered
- See same-day acute patients and add-ons
- Supervise therapeutic services especially with extended hours
- Problem solve issues with nurses and pharmacists regarding chemo orders
- Maximize throughput for clinic operations

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Financial Goals

- Maximize productivity and revenue for physician providers
- Determine productivity model for wRVUs – who gets credit for patient interaction
- Not all tasks that NPPs perform are billable, but that does not mean they are not valuable
- Maximize use of NPP's training/licensure – advanced practice
  - Do NOT use as scribe "only"
- NPPs can perform new chemo teaching (billable event if not on treatment day or consult day)

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Benchmarks

- Unfortunately, benchmark data is not readily available to determine when to hire a NPP.
- JOP article(s) mention when a physician gets close to the "Industry standard of 350 new patients per year or 7,000 wRVU per year" another physician or a NPP should be considered. 7,000 wRVU include chemo infusion visits for private practice settings. A 17% reduction in wRVU is appropriate for a physician that does not get credit for chemo.
- ASCO projects a shortfall of oncologists in the next decade with demand increasing 48% by 2020 and supply increasing by only 18%. NPPs will be in higher demand.*

**see appendix*

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Billing NPP Professional Services

Office Setting

- Must be employed by physician/practice.
- Paid at 100% of physician rates when physician is in the suite.
- Paid at 85% when physician is not in the suite.

Hospital Setting

- If hospital-employed
  - Paid at 85% of physician rates.
- If part of hospital-owned physician practice, same as Office Setting rules.

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Documenting NPP Professional Services

Office Setting

- Physician review of the chart notes in order to monitor treatment progress and signature indicating physician is **actively involved** in course of treatment is required.
- Solo practitioners must directly supervise NPP. In group practices, any physician of the group may provide direct supervision.

Hospital Setting

- Supervising/collaborating physician review of the qualified NPP’s chart notes in order to monitor treatment progress is required.
- Supervising/collaborating physician signature indicating the physician is **actively involved** in the patient's course of treatment is required.

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What Works and What Doesn’t

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What Works and What Doesn't

- Non-Physician Practice Models
- Non-Physician Compensation Models
- Physician Compensation Models
- The Perfect Marriage

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Non-Physician Practice Models

- Incident too
- Shared visit
- Independent

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Non-Physician Compensation Models

- Salary only
- Salary plus production
- Production only

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Physician Compensation Models

- Salary only
- Salary plus production bonus
- Salary plus production and other incentives
- Production only
- The less than full time practice ???

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The Perfect Marriage

- Must align the incentives and work paradigms for best outcome
- One-to-one vs One-to-many
- Determine goals before setting rates
  - New patients
  - RVUs
  - Value based

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Questions

- Any questions not addressed here may be emailed to solutions@oncologymgmt.com
- OMC Group will compile questions and answers and distribute to webinar registrants

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Thank You!

- Sincere thanks to all of you for joining us today. We hope that you will keep OMC Group in mind when consulting needs arise in the future.

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- Performance and Financial Benchmarking
- Operational Assessments
- Revenue Cycle Reviews

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COMPARISON OF PHYSICIAN ASSISTANTS AND NURSE PRACTITIONERS

CATEGORY	PHYSICIAN ASSISTANT	NURSE PRACTITIONER
Definition	Health care professionals licensed to practice medical care with physician supervision.	Registered nurses with advanced education and training in a clinical specialty who can perform delegated medical acts with physician supervision.
Philosophy/Model	**Medical/physician model**, disease centered, with emphasis on the biological/pathologic aspects of health, assessment, diagnosis, treatment. **Practice model is a team approach relationship with physicians.**	**Medical/Nursing model**, Biopsychosocial centered, with emphasis on disease adaptation, health promotion, wellness, and prevention. **Practice model is a collaborative relationship with physicians.**
Education	Affiliated with **Medical schools** Previous health care experience required; most programs require B.S. and confer Masters degree. Program curriculum is advanced science based. Approx. 1000 didactic and **over 2000 clinical hours.** All PAs are trained as generalists in the primary care model and some receive post-graduate specialty training. Procedure and skill oriented with emphasis on diagnosis, treatment, surgical skills, and patient education.	Affiliated with **Nursing schools** BSN is prerequisite; curriculum is bio-psychosocial based, based upon behavioral, natural, and humanistic sciences. NPs choose a specialty-training track in adult, acute care, pediatric, women's health or gerontology. Approx. 500 didactic hours and **500-700 clinical hours.** Emphasis on patient education, diagnosis, treatment and prevention. Generally not trained for surgical settings. Master's conferred.
Certification/Licensure **Recertification**	Separate but single accreditation and certification bodies **require** successful completion of an accredited program and NCCPA national certification exam. NCCPA certification is the gold standard and is required to obtain a PA license in Wisconsin. (Chapter Med 8) **Recertification requires 100 hours of CME every 2 years and exam every 6 years**. **Recertification is comparable to family physicians**. All PAs are licensed by their State Medical Board and the Medical Practice Act provisions.	Nursing accreditation and multiple nursing certification agencies. Master's Degree required to sit for exam; national certification is **voluntary.** An optional certificate (APNP) and a written collaborative agreement with a physician are required for prescribing. (Chapter N 8) **Recertification requires 1500 direct patient contact hours and 75 CEUs every 5-6 years**. **No exam is required**. NP's practice under their basic RN license under the Nurse Practice Act

CATEGORY	PHYSICIAN ASSISTANT	NURSE PRACTITIONER
Scope of Practice	The supervising physician has relatively broad discretion in delegating medical tasks within his/her scope of practice to the PA in accordance with state regulations. Written guidelines are required for prescriptions. Does not require on-site supervision **Chapter Med 8 in WI Administrative Code**	Nursing care is provided as an independent function. However, protocols or written or verbal orders are required for delegated medical acts - such acts require general MD supervision. **Sec. N6.03(2), WI Administrative Code**
Third Party Coverage and Reimbursement	PAs are eligible for certification as Medicaid and Medicare providers, and generally receive favorable reimbursement from commercial payers.	NP's are eligible for certification as Medicaid and Medicare providers, and generally receive favorable reimbursement from commercial payers.
References	***http://academic.son.wisc.edu/wistrec www.wapa.org, www.aapa.org***	***http://www.nursingworld.org/*** **WI Regulatory Digest**, www.nonpf.com *www.wisconsinnurses.org*

From the American Academy of Physician Assistants

Determining Physician Assistant Scope of Practice: A Summary of State Laws and Regulations

Physician assistants practice medicine with physician supervision. State laws, though, vary somewhat on how the scope of a PA's practice is determined. The majority of states allow the physician-PA team to establish the scope for the PA, while some require that a regulatory board set the scope of practice for PAs. Still others use some combination of these approaches. The following chart provides at-a-glance information on how scope of practice is determined for PAs in each state.

State	Physician - PA Team	Board	Other / Hybrid	Notes
AL		X		The PA is prohibited from performing any medical service, procedure, function or activity which is not specifically listed, in detail, in the job description approved by the board.
AK	X			"Examine, diagnose or treat" listed as general description of scope
AZ			X	List of duties in statute, but rules specify that physician may delegate others
AR	X			
CA	X			PA Committee Information Bulletin states: A physician assistant may only provide those medical services which: (1) he or she is competent to perform, as determined by the supervising physician, (2) are consistent with his/her education, training, and experience, and (3) are delegated in writing by the supervising physician responsible for

				the patients cared for by the PA. In accordance with these criteria and other provisions set forth in the PA law and regulations, and not withstanding any other provision of law, a PA may work in any setting, and may provide any medical service with the exception of certain ophthalmological and dental procedures listed in law.
CO	X			
CT	X			Practice must be implemented in accordance with written protocols established by supervising physician.
DE	X			Physician assistants employed by health care facilities must work under protocols approved by the board.
DC			X	PAs may perform health care tasks that are delegated by their SP(s), and that are within the PA's skills and within the physician's scope of practice. Prior to the PA beginning practice, the PA must file with the Board a written delegation agreement using the form provided by the Board.

State	Physician - PA Team	Board	Other / Hybrid	Notes
FL			X	Physicians generally responsible for determining PA scope, but several procedures listed in rule are disallowed.
GA			X	PA may perform tasks described in job description upon notice of board's approval. Tasks not in job description may be performed under direct supervision and in presence of supervising physician.
HI	X			
ID	X			Scope of practice shall be defined in delegation of services agreement and may include broad range of diagnostic, therapeutic and health promotion and disease prevention services.
IL	X			Physician-PA team shall establish written guidelines that are individual to PA in the practice setting.
IN	X			It is the obligation of each physician-PA team to ensure PA scope is identified, appropriate to the PA's level of competence and within the physician's scope.
IA	X			
KS	X			PA may perform acts which constitute the practice of medicine and surgery when directly ordered, authorized and coordinated by a responsible or designated physician through (a) immediate and physical presence; (b) when directly ordered by supervising physician;(c) when authorized on a form provided to the board by the responsible

				physician; or (d) in an emergency situation.
KY			X	Supervising physician must submit application describing scope of medical services and procedures to be performed by PA to board. PA's scope may not exceed normal scope of practice of supervising physician. Board may impose restrictions.
LA			X	Statutes and regulations allow for physician-PA team to determine scope of practice. Board has issued numerous advisory opinions in response to specific inquiries that apply only to the individuals asking.
ME	X			
MD			X	PA scope of practice limited to medical acts delegated by the supervising physician, appropriate to the PA's education, training and experience, customarily in supervising physician's practice and consistent with delegation agreement submitted to the board.
MA	X			A physician may permit PAs to perform those services which are within the competence of the PA as determined by the physician's assessment of the PA's training or experience and within the scope of services for which the supervising physician can provide adequate supervision to ensure accepted standards of medical practice are followed.
MI	X			PA may provide only those services that are within scope of practice of supervising physician and are delegated by supervising physician.

State	Physician - PA Team	Board	Other / Hybrid	Notes
MN	X			Duties may include those delegated in the physician-PA agreement.
MS			X	PAs shall practice according to a Board-approved protocol which has been mutually agreed upon by the Physician Assistant and the supervising physician.
MO			X	Statute lists permitted duties and includes such other tasks not prohibited by law under the supervision of a licensed physician as the PA has been trained and is proficient to perform.
MT	X			PA may diagnose, examine, and treat human conditions, ailments, diseases, injuries, or infirmities, either physical or mental, by any means, method, device or instrumentality authorized by the supervising physician.
NE	X			Supervising physician and PA must have written scope of practice agreement delineating activities of PA and limits of PA that is kept on file at practice and available for review by department upon request. PA's scope of practice may include only those procedures in which supervising physician is trained.
NV	X			PA may perform such medical services as he is authorized to perform by his supervising physician.
NH	X			
NJ			X	Extensive list of duties in statute and rule, including other procedures established by the employer provided procedures are within training and experience of

				supervising physician and PA; subject to board review.
NM	X			
NY	X			
NC	X			
ND	X			PA may be involved with patients of the physician in any medical setting for which the physician is responsible. Under no circumstances shall the supervising physician designate the PA to take over the physician's duties or cover the practice.
OH			X	PA and supervising physician must have a supervision agreement approved by the board prior to practice. When practicing in a health care facility, the PA shall practice in accordance with the policies of that facility. When practicing outside a facility, the PA shall practice in accordance with the board-approved agreement.
OK			X	Statute and rules provide non-limiting list of duties as well as illustrative guidelines. Also include the statement that PA may provide health care services when services are within PA's skill, form component of physician's scope of practice, and are provided with supervision.
OR			X	PA may perform at the direction of a supervising physician and/or his agent only those medical services that are included in the board-approved practice description.

State	Physician - PA Team	Board	Other / Hybrid	Notes
PA			X	PA may not provide medical service without a written agreement with physician(s) which describes how PA will assist, and which has been approved by the board. PA may provide any medical service as directed by the supervising physician, when the service is included in the written agreement approved by the board.
RI	X			
SC	X			PA must practice pursuant to written scope of practice guidelines signed by supervising physician(s) and PA. Guidelines to be on file at all practice sites. Must include medical conditions for which therapies may be initiated, continued, or modified, treatments that may be initiated, continued, or modified, and situations that require direct evaluation or immediate referral to physician.
SD	X			Statute provides limiting list of PA duties but adds that PA may be permitted to perform other tasks for which adequate training and proficiency can be demonstrated.
TN	X			Range of services provided by PA shall be set forth in a written protocol jointly developed by the supervising physician and the PA. The protocol shall contain discussion of the problems and conditions likely to be encountered by the PA and the appropriate treatment.
TX	X			
UT	X			PA may provide any medical services not specifically prohibited by law or regulations that are within his skills and competence, within the supervising physician's usual

				scope of practice, and provided under physician supervision in accordance with a delegation of services agreement.
VT			X	PAs may perform those duties and responsibilities, including the prescribing and dispensing of drugs and devices, that are delegated by supervising physician. It is obligation of each PA/supervising physician team to insure that written scope of practice submitted to board for approval clearly delineates role of PA in medical practice.
VA			X	Each team of supervising physician and PA shall identify PA's scope of practice and delegated medical duties, PA's relationship with and access to physician, and evaluation of PA's performance. Licensed physician or podiatrist may apply to the board to supervise assistants and delegate certain acts which constitute the practice of medicine to the extent and in the manner authorized by the board.
WA		X		Physician assistant may perform those services as outlined in standardized procedures reference and guidelines established by commission. Requests for approval of newly acquired skills shall be submitted to commission and may be granted by a reviewing commission member or at any commission meeting.
WV			X	Board shall allow PA to perform those procedures and examinations submitted in job description and approved by the board.

WI			X	PA may not exceed scope of patient services as set forth in regulations, may not exceed scope of supervising physician's practice or own training and experience.
WY	X			The PA may perform those duties and responsibilities delegated to him by the supervising physician when the duties and responsibilities are provided under the supervision of board-approved physician, within the scope of the physician's practice and expertise and within the skills of the PA. The board does not recognize or bestow any level of competency upon a physician assistant to carry out a specific task. Such recognition of skill is the responsibility of the supervising physician. However, a physician assistant is expected to perform with similar skill and competency and to be evaluated by the same standards as the physician in the performance of assigned duties.

AANP | American Association of NURSE PRACTITIONERS

2014 Nurse Practitioner State Practice Environment

DC

Full Practice
State practice and licensure laws provide for nurse practitioners to evaluate patients, diagnose, order and interpret diagnostic tests, initiate and manage treatments—including prescribe medications—under the exclusive licensure authority of the of the state board of nursing. This is the model recommended by the Institute of Medicine and National Council of State Boards of Nursing.

Reduced Practice
State practice and licensure law reduce the ability of nurse practitioners to engage in at least one element of NP practice. State requires a regulated collaborative agreement with an outside health discipline in order for the NP to provide patient care.

Restricted Practice
State practice and licensure law restricts the ability of a nurse practitioner to engage in at least one element of NP practice. State requires supervision, delegation or team-management by an outside health discipline in order for the NP to provide patient care.

Source: State Nurse State Practice Acts
And Administration Rules, 2012
©American Association of Nurse Practitioners, 2014

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Chart Overview of Nurse Practitioner Scopes of Practice in the United States

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Center for the Health Professions
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2007

Chart Overview of Nurse Practitioner Scopes of Practice in the United States

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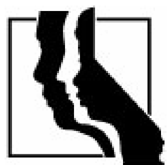

This project is supported by grant from the California HealthCare Foundation. Celebrating its tenth year, the California HealthCare Foundation (CHCF), based in Oakland, is an independent philanthropy committed to improving California's health care delivery and financing systems.

Notes: The following Chart provides summary information regarding legal scopes of practice for nurse practitioners. For additional discussion about the Chart, please see *Overview of Nurse Practitioner Scopes of Practice in the United States – Discussion* (2007) available at http://futurehealth.ucsf.edu. The information contained in this chart is intended to be informative for professionals and policy makers. Efforts have been made to ensure accuracy at the time of publication. However, laws, regulations and interpretations of such often change and may no longer be current. In addition, nothing in this document should be interpreted as legal advice.

Chart Overview of Nurse Practitioner Scopes of Practice in the United States (the "Chart")[1]
UCSF Center for the Health Professions, Fall 2007

	Oversight Requirements				Practice Authorities[2]			Prescriptive Authorities				Nat'l Certif. Req'd	Joint BoN[3]/ BoM[4] Authority
	No MD Involvement Req'd	MD Supervision Req'd	MD Collaboration Req'd	Written Practice Protocol Req'd	Explicit Authority to Diagnose	Explicit Authority to Order Tests	Explicit Authority to Refer	Authority to Prescribe w/o MD Involvement	Authority to Prescribe w/ MD Collaboration	Written Protocol Req'd to Prescribe[5]	Authority to Prescribe Controlled Substances		
Alabama[6]			x	x	x	x	x		x	x		x	x
Alaska[7]	x				x			x			x[8]	x	
Arizona[9]	x				x	x	x	x			x	x	
Arkansas[10]			x[11]		x	x			x[12]	x	x	x	
California[13]			x[14]	x					x[15]	x	x		
Colorado[16]					x		x		x	x	x		
Connecticut[17]			x		x		x		x	x	x	x	
Delaware[18]			x		x[19]	x	x[20]		x		x	x	x
District of Columbia[21]	x				x		x	x			x	x	
Florida[22]		x		x	x	x			x	x		x	x
Georgia[23]			x[24]	x	x				x	x	x	x	x[25]
Hawaii[26]					x	x	x		x	x	x[27]		x[28]
Idaho[29]	x				x		x	x			x	x	x[30]
Illinois[31]			x	x	x	x			x	x	x	x	
Indiana[32]			x		x	x	x		x	x	x		x[33]
Iowa[34]	x				x	x	x	x[35]			x	x	
Kansas[36]					x[37]		x		x	x	x		
Kentucky[38]					x[39]	x	x		x	x	x[40]	x	
Louisiana[41]			x	x[42]	x[43]		x		x	x	x[44]	x	
Maine[45]	x[46]				x[47]	x	x	x			x	x	
Maryland[48]			x	x	x	x	x		x		x	x	
Massachusetts[49]		x	x	x	x				x	x	x	x	x
Michigan[50]									x[51]	x	x[52]	x	
Minnesota[53]			x		x		x		x	x	x	x	x[54]
Mississippi[55]			x	x	x		x		x	x	x	x	x
Missouri[56]			x	x	x[57]				x	x		x	
Montana[58]	x[59]				x	x	x	x			x	x	
Nebraska[60]		x[61]	x	x	x	x	x		x	x	x	x	
Nevada[62]			x	x	x		x		x	x	x		
New Hampshire[63]	x				x	x	x	x			x	x	
New Jersey[64]					x	x	x		x	x	x	x	x[65]
New Mexico[66]	x							x			x	x	
New York[67]			x	x	x[68]		x		x	x	x		
North Carolina[69]		x	x	x	x	x	x		x	x	x	x	x
North Dakota[70]					x[71]		x		x	x	x	x	
Ohio[72]			x	x			x		x		x		
Oklahoma[73]		x[74]			x		x		x		x	x	x[75]
Oregon[76]	x				x	x	x	x			x		

	Oversight Requirements				Practice Authorities[2]			Prescriptive Authorities					
	No MD Involvement Req'd	MD Supervision Req'd	MD Collaboration Req'd	Written Practice Protocol Req'd	Explicit Authority to Diagnose	Explicit Authority to Order Tests	Explicit Authority to Refer	Authority to Prescribe w/o MD Involvement	Authority to Prescribe w/ MD Collaboration	Written Protocol Req'd to Prescribe[5]	Authority to Prescribe Controlled Substances	Nat'l Certif. Req'd	Joint BoN[3]/ BoM[4] Authority
Pennsylvania[77]		x	x		x				x	x	x[78]	x	
Rhode Island[79]									x		x	x	
South Carolina[80]		x	x	x	x				x	x	x	x	x
South Dakota[81]			x		x		x		x		x[82]	x	x
Tennessee[83]									x	x	x	x	x
Texas[84]		x	x	x	x				x	x	x	x	
Utah[85]					x		x		x	x	x	x	
Vermont[86]			x	x	x		x		x	x	x	x	
Virginia[87]		x	x	x					x	x	x	x	x
Washington[88]	x				x	x	x	x			x	x	
West Virginia[89]			x	x	x				x	x	x	x	
Wisconsin[90]		x			x	x	x		x	x	x	x	
Wyoming[91]			x	x	x				x	x	x	x	
TOTALS	**11**	**10**	**27**	**21**	**44**	**20**	**33**	**11**	**40**	**34**	**48**	**42**	**17**

[1] References: 1) Linda Pearson, "The Pearson Report," The American Journal for Nurse Practitioners (February 2007), http://www.webnp.net/images/ajnp_feb07.pdf; 2) Carolyn Buppert, Nurse Practitioner's Business Practice and Legal Guide (Third Edition; Jones and Bartlett 2008); "Joint Regulation of Advanced Nursing Practice," U.S. Federal Trade Commission (2007), http://www.ftc.gov/os/comments/healthcarecomments2/carsondoc1.pdf. Data updated by UCSF Center for the Health Professions in September 2007.
[2] **Important:** The Chart is designed to be referenced from left to right. Thus, if the Chart indicates that physician supervision or collaboration is required, then NPs may not diagnose, order tests or refer patients without physician supervision or collaboration.
[3] Board of Nursing.
[4] Board of Medicine.
[5] Absent explicit statutory or regulatory language requiring a separate written agreement, the Chart does not indicate that a written prescriptive protocol is required in states that already require NPs to establish written practice protocols with physicians. *See*, for example, Maryland, Massachusetts and Ohio.
[6] Ala. Code §§34-21-80, 34-21-81, 34-21-86, http://www.abn.state.al.us/main/nurse-practice-act/ARTICLE-5.pdf; Ala. Admin. Code r. 610-X-2-.05, http://www.abn.state.al.us/main/downloads/admin-code/Chapter%20610-X-2.pdf; Ala. Admin. Code r. 610-X-5, http://www.abn.state.al.us/main/downloads/admin-code/Chapter%20610-X-5.pdf.
[7] Alaska Stat. §08.68.410(1), 12 Alaska Admin. Code tit. 12 §§44.430, 44.440, 44.445, http://www.commerce.state.ak.us/occ/pub/NursingStatutes.pdf.
[8] In Alaska, ANPs (advanced nurse practitioners) must have five years of experience in prescribing before they may apply for authority to prescribe controlled substances. 12 Alaska Admin. Code tit. 12 §44.445.
[9] Ariz. Rev. Stat. §32-1601.15, http://www.azleg.state.az.us/FormatDocument.asp?inDoc=/ars/32/01601.htm&Title=32&DocType=ARS;
Ariz. Admin. Code §§R4-19-402, R4-19-508, R4-19-511, R4-19-512, http://www.azbn.gov/documents/npa/LINKED-RULES_JUNE%202_2007_WEB.pdf.
[10] Arkansas law distinguishes between RNPs and ANPs. The Chart delineates the ANP's scope of practice. Ark. Code Ann. §§17-87-102, 17-87-302, 17-87-310, http://www.arsbn.org/pdfs/practice_act/NURSEPRACTICEACT_2007__5.pdf; Position Statement: Scopes of Practice, http://www.arsbn.org/possition_st/95_1.pdf; Difference between Advanced Nurse Practitioners and Registered Nurse Practitioners, http://www.arsbn.org/pdfs/anp&rnbroch.pdf; Advanced Nurse Practitioner, http://www.arsbn.org/pdfs/anpbroch.pdf; Four Categories of Advanced Practice Licensure, http://www.arsbn.org/pdfs/4categories.pdf.
[11] In Arkansas, RNPs must practice "in collaboration with and under the direction of a licensed physician or under the direction of protocols developed with a physician." ANPs with prescriptive authority must have a collaborative practice agreement with a physician. Ark. Code Ann. §17-87-310.
[12] In Arkansas, RNPs may not prescribe medications.

[13] Cal. Code of Regs. tit. 16 §§1480(a), 1485, http://www.rn.ca.gov/regulations/title16.shtml; Cal. Bus. & Prof. Code §§2725, 2725.1, 2836.1, http://www.rn.ca.gov/regulations/bpc.shtml.

[14] In California, the standardized procedure (SP) is the legal mechanism for APRNs and NPs to perform functions that would otherwise be considered the practice of medicine. SPs must be developed collaboratively by the nursing, medicine and administrative departments of the healthcare system where they will be used. Once an SP has been signed by the nurse, physician and facility, the practice is considered independent. SPs basically cover diagnoses, referrals, prescriptions and procedures that involve penetration of tissue functions. Pearson, *supra*, note 1.

[15] In California, NPs may "furnish" or "order" drugs. However, they may not "prescribe" drugs. Cal. Bus. & Prof. Code §2836.1.

[16] Col. Rev. Stat. §§12-38-103, 12-38-111.5, 12-38-111.6, http://www.dora.state.co.us/NURSING/statutes/NursePracticeAct.pdf.

[17] Conn. Gen. Stat. §§20-87a, 20-94a, http://www.cga.ct.gov/2007/pub/Chap378.htm;
Advanced Practice Registered Nurse Licensure, http://www.ct.gov/dph/cwp/view.asp?a=3121&q=389400.

[18] Del. Code Ann. tit. 24 §1902, http://delcode.delaware.gov/title24/c019/index.shtml;
Del. Register of Regs. tit. 24 §§8.0-8.18, http://regulations.delaware.gov/AdminCode/title24/1900%20Board%20of%20Nursing.shtml#TopOfPage.

[19] Delaware law distinguishes between "medical diagnoses" and "nursing diagnoses." Del. Code Ann. tit. 24 §1902.

[20] In Delaware, an NP may only refer patients to other providers if authorized under a written collaborative agreement with a physician. Del. Register of Regs. tit. 24 §8.6.2.14.

[21] D.C. Mun. Regs. tit. 17, Ch. 59, http://hpla.doh.dc.gov/hpla/frames.asp?doc=/hpla/lib/hpla/prof_license/services/pdffile/nursing/nurse_practitioner__chap_59_regs_8-10-05.pdf; D.C. Code Ann. §§3-1201.02, 3-1206.01, 3-1206.03, 3-1206.04, 3-1206.08.

[22] Fla. Stat. §§464.003, 464.012, Fla. Admin. Code Ann. 64B9, http://www.doh.state.fl.us/mqa/nursing/info_PracticeAct.pdf; Frequently Asked Questions, http://www.doh.state.fl.us/mqa/nursing/nur_faq.html#ARNP; 2006 Legislative Changes for Nursing, http://www.doh.state.fl.us/mqa/nursing/info_legisummeries.pdf.

[23] Ga. Comp. R. & Regs. §410-12-.03, http://sos.georgia.gov/acrobat/PLB/Rules/chapt410.pdf; Ga. Code Ann. §§43-26-3, 43-34-26.1, 43-34-26.3, http://www.lexis-nexis.com/hottopics/gacode/default.asp.

[24] In Georgia, a physician may delegate the authority to perform certain medical acts under a nurse protocol agreement. Ga. Code Ann. §43-34-26.3.

[25] In Georgia, the Board of Medical Examiners promulgates the rules and regulations for the nurse protocol agreement. Ga. Code Ann. §43-34-26.1(c).

[26] Haw. Rev. Stat. §§457-8.5, 457-8.6, http://www.hawaii.gov/dcca/areas/pvl/main/hrs/; Haw. Admin. R. §§16-89, 16-89C, http://www.hawaii.gov/dcca/areas/pvl/main/har/.

[27] The rules to implement NP authority to prescribe controlled substances are currently being drafted. *See*, www.hawaii.gov/dcca/areas/pvl/main/press_releases/nursing_announcements/pvl_ia_exc_aprn.pdf; www.hawaii.gov/dcca/areas/pvl/main/reports/pvl_legislature_reports/JFAC_2004_Legislature_Report.pdf.

[28] In Hawaii, the Board of Medical Examiners has joint rule-making authority with the Board of Nursing over prescriptive matters only. Haw. Rev. Stat. §§457-8.6.

[29] Idaho Code §54-1402(1)(c), http://www3.state.id.us/cgi-bin/newidst?sctid=540140002.K;
Idaho Admin. Proc. Act §§23.01.01.271, 23.01.01.280, 23.01.01.315, http://www.adm.idaho.gov/adminrules/rules/idapa23/0101.pdf.

[30] In Idaho, an Advisory Committee to the Board of Nursing addresses issues related to the practice of NPs and other APPNs. The Committee consists of two APPNs appointed by the Board of Nursing, two physicians nominated by the Board of Medicine and appointed by the Board of Nursing and one pharmacist nominated by the Board of Pharmacy. The Board of Nursing cannot expand the scope of practice or prescriptive authority of an APPN beyond that recommended by the Committee. Idaho Code §54-1417, http://www3.state.id.us/cgi-bin/newidst?sctid=540140017.K.

[31] 225 Ill. Comp. Stat. 65/15-5, 65/15-10, 65/15-15, 65/15-20,
http://ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1312&ChapAct=225%26nbsp%3BILCS%26nbsp%3B65%2F&ChapterID=24&ChapterName=PROFESSIONS+AND+OCCUPATIONS&ActName=Nursing+and+Advanced+Practice+Nursing+Act%2E;
Ill. Admin. Code tit. 68 §§1305.30, 1305.35, 1305.40, http://www.ilga.gov/commission/jcar/admincode/068/06801305sections.html.

[32] Ind. Code §§25-23-1-19.4 to 25-23-1-19.6; 848 Ind. Admin. Code §§ 4-1-3, 4-1-4, 4-2-1, 5-1-1, http://www.in.gov/pla/bandc/isbn/nursing_compilation.pdf.

[33] In Indiana, Board of Nursing decisions regarding requirements for initial and renewed prescriptive authority must be approved by the Board of Medicine. Pearson, *supra*, note 1 (citing Ind. Code §§25-23-1-7(B), 25-23-1-7(C)).

[34] Iowa Admin. Code §655-7.1(152), http://www.legis.state.ia.us/Rules/Current/iac/655/6557/6557.pdf;
Iowa Code §147.107, http://nxtsearch.legis.state.ia.us/nxt/gateway.dll?f=templates&fn=default.htm; Iowa Board of Nursing, http://www.state.ia.us/nursing/nursing_practice/arnp.html.

[35] In Iowa, ARNPs may prescribe independently. NPs, however, may not prescribe medications. Pearson, *supra*, note 1 (citing Iowa Admin. Code §655-7.1(152)).

[36] Kan. Stat. Ann. §§ 65-1113 to 65-1134, Kan. Admin. Regs. §§60-3-101; 60-11-101 to 60-11-119, http://www.ksbn.org/npa/npa.pdf.

[37] Kansas law distinguishes between "medical diagnoses" and "nursing diagnoses." Kan. Stat. Ann. §65-1113(b).
[38] Ky. Rev. Stat. Ann. §314.011, http://162.114.4.13/KRS/314-00/011.PDF; Ky. Rev. Stat. Ann. §314.042, http://www.lrc.ky.gov/KRS/314-00/042.PDF;
201 Ky. Admin. Regs. §20:056, http://www.lrc.state.ky.us/kar/201/020/056.htm; 201 Ky. Admin. Regs. §20:057, http://www.lrc.state.ky.us/kar/201/020/057.htm; 201 Ky. Admin. Regs. §20:059, http://www.lrc.state.ky.us/kar/201/020/059.htm; Scope of Practice Determination Guidelines, http://kbn.ky.gov/NR/rdonlyres/74A5FF75-543D-4E12-8839-720B7623DA87/0/pracdtrm.pdf.
[39] Kentucky law distinguishes between "medical diagnoses" and "nursing diagnoses." Ky. Rev. Stat. Ann. §314.011(4)(a).
[40] In Kentucky, ARNPs must be registered to practice for at least one year before entering into a written collaborative practice agreement with a physician to prescribe controlled substances. Ky. Rev. Stat. Ann. §314.042.
[41] La. Admin. Code §46:XLVII, Ch. 45, http://www.lsbn.state.la.us/documents/rules/fullrules.pdf;
La. Stat. Ann. §37:913(3), La. Admin. Code §46:XLVII, Ch. 45 §4513, http://www.lsbn.state.la.us/Documents/scope/apscope.pdf.
[42] In Louisiana, APRNs who "engage in medical diagnosis and management shall have a collaborative practice agreement." APRNs practicing solely in their nursing scope of practice, on the other hand, are not required to have a collaborative practice agreement. Pearson, *supra*, note 1 (citing La. Admin. Code §46:XLVII, Ch. 45 §4513).
[43] In Louisiana, APRNs may diagnose only if they are authorized under a collaborative practice agreement. La. Admin. Code §46:XLVII, Ch. 45 §4513.
[44] In Louisiana, APRNs must have experience prescribing medications in collaboration with a physician for 500 hours before applying for authority to prescribe controlled substances. La. Admin. Code §46:XLVII Ch. 45, §4513.
[45] Code Me. R. tit. 32 §2102, http://janus.state.me.us/legis/statutes/32/title32sec2102.pdf; Code Me. R. tit. 32 §2201-A, http://janus.state.me.us/legis/statutes/32/title32sec2201-A.pdf; Code Me. R. tit. 32 §2205-B, http://janus.state.me.us/legis/statutes/32/title32sec2205-B.pdf; Code Me. R. tit. 32 §2102, http://janus.state.me.us/legis/statutes/32/title32sec2102.pdf; 02-373 Me. ADC, Ch. 3, http://www.maine.gov/sos/cec/rules/02/373/373c003.doc; 02-380 Me. ADC, Ch. 8, ftp://ftp.state.me.us/pub/sos/cec/rcn/apa/02/380/380c008.doc.
[46] In Maine, physician supervision is required for at least the first two years of NP practice, after which independent practice is authorized. Code Me. R. tit. 32 §2102, 2-A.
[47] Maine law distinguishes between "medical diagnoses" and "nursing diagnoses." Code Me. R. tit. 32 §2102(2)(A)(1).
[48] Md. Code Ann. §§10.27.07.00 to 10.27.07.08, http://www.dsd.state.md.us/comar/10/10.27.07.01.htm; http://www.dsd.state.md.us/comar/10/10.27.07.02.htm;
http://www.dsd.state.md.us/comar/10/10.27.07.03.htm; http://www.dsd.state.md.us/comar/10/10.27.07.05.htm; http://www.dsd.state.md.us/comar/10/10.27.07.08.htm.
[49] 244 Code Mass. Regs. §§4.05, 4.22, 4.26(2), http://www.mass.gov/Eeohhs2/docs/dph/regs/244cmr004.pdf;
Mass. Gen. Laws, Ch. 112 §80B, http://www.mass.gov/legis/laws/mgl/112-80b.htm; Mass. Gen. Laws, Ch. 112 §80E, http://www.mass.gov/legis/laws/mgl/112-80e.htm.
[50] Mich. Comp. Laws §333.16215, http://www.legislature.mi.gov/(S(zizokq55mxusoo55jghfcvjb))/mileg.aspx?page=getobject&objectname=mcl-333-16215;
Mich. Comp. Laws §333.17212, http://www.legislature.mi.gov/(S(kzhfca2uuiyvfdewnerousi1))/documents/mcl/pdf/mcl-333-17212.pdf;
Mich. Admin. Code R 338.10404, http://www.state.mi.us/orr/emi/admincode.asp?AdminCode=Single&Admin_Num=33810101&Dpt=CH&RngHigh=;
Board of Nursing, http://www.michigancenterfornursing.org/mimages/bofnursing.pdf; http://www.michigan.gov/mdch/0,1607,7-132-27417_27529_27542-59003--,00.html.
[51] In Michigan, physicians may delegate the authority to prescribe medications under protocols. Mich. Comp. Laws §333.17212.
[52] In Michigan, NPs must prescribe controlled substances under a "Delegation of Prescriptive Authority Agreement" signed by their supervising physician. Pearson, *supra*, note 1.
[53] Minnesota Nurse Practice Act, http://www.state.mn.us/portal/mn/jsp/content.do?rc_layout=bottom&subchannel=null&programid=536898782&sc3=null&sc2=null&id=-536882405&agency=NursingBoard; Minn. Stat. §148.171, http://www.revisor.leg.state.mn.us/bin/getpub.php?type=s&year=current&num=148.171;
Minn. Stat. §148.235, http://www.revisor.leg.state.mn.us/bin/getpub.php?pubtype=STAT_CHAP_SEC&year=2006§ion=148.235;
Minn. Stat. §148.284, http://www.revisor.leg.state.mn.us/bin/getpub.php?type=s&year=current&num=148.284;
Advanced Practice Registered Nursing Information, http://www.state.mn.us/portal/mn/jsp/content.do?rc_layout=bottom&subchannel=-536882458&programid=536898474&sc3=null&sc2=null&id=-536882404&agency=NursingBoard.
[54] In Minnesota, NPs may only prescribe medications under a written agreement with a physician based on standards jointly established by the Minnesota Nurses Association and the Minnesota Medical Association. Minn. Stat. §148.235.
[55] Miss. Code Ann., Ch. IV, VII, http://www.msbn.state.ms.us/pdf/nursingpracticelaw2007.pdf; Miss. Board of Nursing Rules & Regs. §73-15, http://www.msbn.state.ms.us/pdf/rulesandregulations2007.pdf.
[56] Mo. Rev. Stat. §335.016, http://www.moga.mo.gov/statutes/C300-399/3350000016.HTM; Mo. Rev. Stat. §334.104.2, http://www.moga.mo.gov/statutes/c300-399/3340000104.htm; Mo. Code Reg. Ann. §2200-4, http://www.sos.mo.gov/adrules/csr/current/20csr/20c2200-4.pdf; Nursing & Collaborative Practice, http://pr.mo.gov/nursing-advanced-practice-nursing-collaborative.asp.

[57] Missouri law distinguishes between "medical diagnoses" and "nursing diagnoses." Mo. Rev. Stat. §335.016(10)(b).

[58] Admin. R. Mont. §24.159.1401, http://arm.sos.mt.gov/24/24-16651.htm; Admin. R. Mont. §24.159.1470, http://arm.sos.mt.gov/24/24-16692.htm; Admin. R. Mont. §24.159.1461, http://arm.sos.mt.gov/24/24-16685.htm; Admin. R. Mont. §§24.159.1465, 24.159.1466, http://arm.sos.mt.gov/24/24-16689.htm; Mont. Code Ann. §37-8-102, http://data.opi.state.mt.us/bills/mca/37/8/37-8-102.htm; Mont. Code Ann. §37-8-409, http://data.opi.state.mt.us/bills/mca/37/8/37-8-409.htm; Admin. R. Mont. §24.159.1463, http://arm.sos.mt.gov/24/24-16687.htm; Admin. R. Mont. §24.159.1464, http://arm.sos.mt.gov/24/24-16688.htm.

[59] In Montana, physicians must review a percentage of each NP's chart as part of a quality assurance plan. Admin. R. Mont. §24.159.1466.

[60] Neb. Rev. Stat. §§71-1704 to 71-1726.02, http://www.hhss.ne.gov/crl/statutes/nurspractitioneractstat.pdf; 172 Neb. Admin. Code, Ch. 100 §001 (not publicly available online).

[61] In Nebraska, NPs must first complete 2000 hours of practice under physician supervision. Neb. Rev. Stat. §71-1723.02.

[62] Nev. Rev. Stat. §632, http://www.leg.state.nv.us/NRS/NRS-632.html; Nev. Admin. Code §632, http://www.leg.state.nv.us/NAC/NAC-632.html.

[63] N.H. Rev. Stat. Ann. §§326-B:9, 326-B:11, 326-B:18, http://www.gencourt.state.nh.us/rsa/html/NHTOC/NHTOC-XXX-326-B.htm.

[64] N.J. Stat. Ann. §§45:11-47, 45:11-49, http://www.state.nj.us/lps/ca/laws/nursinglaws.pdf; N.J. Admin. Code §§13:37-6:3, 13:37-7.1, 13:37-7.7, http://www.njconsumeraffairs.gov/laws/nursingregs.pdf.

[65] In New Jersey, joint protocols on prescriptive authority must conform to standards developed by the Board of Nursing and the Board of Medicine. N.J. Stat. Ann. §45:11-47.

[66] N.M. Stat. Ann. §61-3-23.2, N.M. Admin. Code §16.12.2, http://www.conwaygreene.com/nmsu/lpext.dll?f=templates&fn=main-h.htm&2.0.

[67] N.Y. Edu. Law tit. VIII, Art. 139, §§6900-6910, http://www.op.nysed.gov/article139.htm; N.Y. Comp. Codes R. & Regs. tit. 8 §§64.4-64.6, http://www.op.nysed.gov/part64.htm.

[68] New York law distinguishes between "medical diagnoses" and "nursing diagnoses." N.Y. Edu. Law tit. VIII, Art. 139, §6901(1).

[69] N.C. Gen. Stat. §§90-18.2, 90-18.3, http://www.ncmedboard.org/Clients/NCBOM/Public/PhysicianExtenders/npmpa.pdf; 21 N.C. Admin. Code §36, http://www.ncbon.com/content.aspx?id=654&linkidentifier=id&itemid=654.

[70] N.D. Admin. Code §54-05-03.1, http://www.legis.nd.gov/information/acdata/pdf/54-05-03.1.pdf; N.D. Cent. Code §43-12.1, http://www.legis.nd.gov/cencode/t43c121.pdf.

[71] North Dakota law distinguishes between "medical diagnoses" and "nursing diagnoses." N.D. Cent. Code §43-12.10-02(5)(b).

[72] Ohio Rev. Code Ann. §§4723.43(C), 4723.431, 4723.50, 4723.10, 4723.481, http://www.nursing.ohio.gov/PDFS/NewLawRules/CH4723Andersons0207.pdf; Ohio Admin. Code §4723-8, http://codes.ohio.gov/oac/4723-8.

[73] Okla. Stat. tit. 59 §§567.3a, 567.4a, http://www.lsb.state.ok.us/OKStatutes/CompleteTitles/os59.rtf; Okla. Admin. Code §§485:10-15-6(c), 485:10-16-3, http://www.oar.state.ok.us/oar/codedoc02.nsf/frmMain?OpenFrameSet&Frame=Main&Src=_75tnm2shfcdnm8pb4dthj0chedppmcbq8dtmmak31ctijujrgcln50ob7ckj42tbkdt374obdcli00_.

[74] In Oklahoma, physician supervision is required only for prescribing ARNPs.

[75] In Oklahoma, the Formulary Advisory Council, partially composed of physicians appointed by the Oklahoma State Medical Association, has power to select drugs for the formulary. The Board of Nursing may accept or reject the Council's recommendations. However, the Board of Nursing may not amend the formulary without the approval of the Council. Pearson, *supra*, note 1 (citing Okla. Stat. tit. 59 §567.4a).

[76] Or. Rev. Stat. §851-050, http://www.oregon.gov/OSBN/pdfs/npa/Div50.pdf; Or. Rev. Stat. §851-056, http://www.oregon.gov/OSBN/pdfs/npa/Div56.pdf.

[77] 49 Pa. Code §§21.251; 21.283 to 21.287; 21.291 to 21.294; 21.311, http://www.pacode.com/secure/data/049/chapter21/049_0021.pdf; Pa. Prof. Nursing Law §2(13), http://www.dos.state.pa.us/bpoa/lib/bpoa/20/nurs_board/nurseact.pdf.

[78] In Pennsylvania, Schedule II prescriptions by CRNPs are limited to 72-hour supplies. Schedules III-IV prescriptions are limited 30-day supplies. Pearson, *supra*, note 1 (citing 49 Pa. Code §21.284).

[79] R.I. Gen. Laws §5-34-3, http://www.rilin.state.ri.us/Statutes/TITLE5/5-34/5-34-3.HTM; R.I. Gen. Laws §5-34-39, http://www.rilin.state.ri.us/Statutes/TITLE5/5-34/5-34-39.HTM; R.I. Gen. Laws §5-34-35, http://www.rilin.state.ri.us/Statutes/TITLE5/5-34/5-34-35.HTM; Rules & Regs. for the Licensing of Nurses and Standards for the Approval of Basic Nursing Edu. Programs R5-34-NUR/ED 1.9; 9.0 – 9.3.1, http://www2.sec.state.ri.us/dar/regdocs/released/pdf/DOH/4666.pdf.

[80] S.C. Code Ann. §40-33, http://www.scstatehouse.net/code/t40c033.htm.

[81] S.D. Codified Laws §§36-9A-4, 36-9A-5, 36-9A-12, 36-9A-13.1, 36-9A-15, 36-9A-17, 36-9A-17.1, http://legis.state.sd.us/statutes/DisplayStatute.aspx?Statute=36-9A&Type=Statute; S.D. Admin. R. §20:62:02:04, http://legis.state.sd.us/rules/DisplayRule.aspx?Rule=20:62:02:04; S.D. Admin. R. §§20:62:03:03, 20:62:03:04, http://legis.state.sd.us/rules/DisplayRule.aspx?Rule=20:62:03.

[82] In South Dakota, NPs may prescribe Schedule II controlled substances for a period of not more than 30 days. S.D. Codified Laws §36-9A-12.

[83] Tenn. Code Ann. §§63-7-103, 63-7-126, 63-7-123, http://michie.lexisnexis.com/tennessee/lpext.dll?f=templates&fn=main-h.htm&cp=; Rules of Tenn. Board of Nursing 1000-4, http://www.state.tn.us/sos/rules/1000/1000-04.pdf.

[84] 22 Tex. Admin. Code §§221, 222, ftp://www.bne.state.tx.us/bne-rr-0607.pdf.
[85] Utah Code Ann. §58-31b, http://dopl.utah.gov/laws/58-31b.pdf; Utah Admin. Code R156-31b-702, http://dopl.utah.gov/laws/R156-31b.pdf; Utah Code Ann. §58-31d, http://dopl.utah.gov/laws/58-31d.pdf.
[86] 26 Vt. Stat. Ann. §1572, http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=26&Chapter=028&Section=01572; Code Vt. R., Ch. 4, Subch. 8, http://vtprofessionals.org/opr1/nurses/forms/nursingrules.pdf.
[87] Code of Va. §§54.1-2957, 54.1-2957.01, http://www.dhp.state.va.us/nursing/leg/MedicalPracticeAct_Nursing.doc; 18 Va. Admin. Code §90-30-10 et. seq., http://www.dhp.virginia.gov/nursing/leg/Nurse%20practitioners%2011-29-07.doc; 18 Va. Admin. Code §90-40-10 et. seq., http://www.dhp.virginia.gov/nursing/leg/Nurse%20prac%20pres%20auth%203-21-07.doc.
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State of Oncology Practice

Results of the ASCO Study of Collaborative Practice Arrangements

By Elaine L. Towle, CMPE, Thomas R. Barr, MBA, Amy Hanley, Michael Kosty, MD, Stephanie Williams, MD, and Michael A. Goldstein, MD

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Abstract

Purpose: ASCO projects a shortfall of oncologists in the next decade. The study was designed to address the workforce shortage by exploring collaborative oncology practice models that include nonphysician practitioners (NPPs).

Methods: ASCO contracted with Oncology Metrics, a division of Altos Solutions, to conduct a national survey of NPP integration and identify collaborative practice models and services provided by NPPs, as the first phase of the ASCO Study of Collaborative Practice Arrangements. Results of the national survey were used to identify practices for the next phase, in which selected practices participated in a more detailed data survey and satisfaction surveys. Focus groups or interviews were conducted with NPPs to collect additional subjective information to inform the project.

Results: The incident-to practice model was the predominant model. Satisfaction was universally high for patients and generally high for physicians and NPPs. In virtually all cases (98%), patients recognized they were seeing an NPP rather than a physician. Practices in which the NPP worked with all practice physicians showed significantly higher productivity than those practices in which the NPP worked exclusively with a specific physician or group of physicians.

Conclusion: The use of NPPs in oncology practices increases productivity for the practice and provides high physician and NPP satisfaction. Patients were aware when care was provided by an NPP and were very satisfied with all aspects of the collaborative care that they received. The integration of nonphysician practitioners into oncology practice offers a reliable means to address increased demand for oncology services without adding physicians.

Introduction

ASCO projects a shortfall of oncologists in the next decade, with the demand for oncologists outpacing the supply of new oncologists going into clinical practice. Demand for visits to oncologists is expected to increase 48% by 2020, whereas supply will rise by only 14%. The doubling of the number of Americans 65 years and older and an 81% increase in people living with, or surviving, cancer will drive this demand.[1]

ASCO's Workforce Advisory Group has suggested that expanded use of nonphysician practitioners (NPP)—generally nurse practitioners and physician assistants in the oncology practice setting—has the potential to extend the supply of oncologist services, particularly in the context of ongoing care and care for the growing number of cancer survivors. Better integration of NPPs also could improve practice quality and efficiency and, by better balancing workload and skills, may increase professional satisfaction for providers.

The ASCO Study of Collaborative Practice Arrangements (SCPA) was designed to address the workforce shortage by exploring collaborative practice models between oncologists and NPPs. The goals of the SCPA were to inventory and describe model practices for collaboration between oncologists and NPPs; document the impact of collaborative practice models on practice productivity and efficiency; and document the impact of collaborative practice models on patient, oncologist, and NPP satisfaction. ASCO contracted with Oncology Metrics, a division of Altos Solutions (Los Altos, CA), to conduct this study.

Methods

The SCPA was launched in March 2009 with a national survey of oncology practices. This brief survey identified practices that have integrated NPPs across a range of practice types (eg, physician-owned private practice, hospital-owned practice, academic) and identified the collaborative practice model and services provided by the NPPs in each of the responding practices. A total of 226 practices participated in the survey ("survey group").

Results of the national survey were used to identify practices for the next phase of the SCPA, a more in-depth study of practices. The primary goal of practice selection was diversity. In an attempt to increase the number of hospital-owned practices in the study, we reached out to the Association of Cancer Executives, a national organization whose members are primarily cancer program administrators in institution-based programs, and with their assistance added several practices to the survey group. Practice size, geographic location, and collaborative practice model were evaluated, and selected practices were then invited to participate in the study. Thirty-three practices were initially chosen for participation ("study group"). Study

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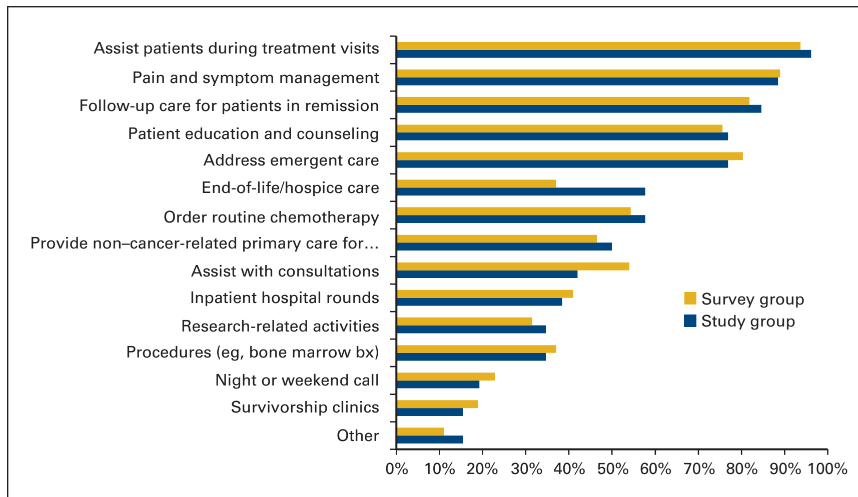

Figure 1. Services provided by nonphysician practitioners. bx, biopsy.

requirements included submission of practice data such as staffing information, visit volumes, and practice expense data; completion of physician and NPP satisfaction surveys; and distribution of patient satisfaction surveys. The SCPA was granted an exemption from review by the New England Institutional Review Board in Cambridge, MA.

A second survey was administered to the study group to further refine the practice information and begin analysis of practice efficiency measures. Data were collected for a discrete 6-month period. Objective data elements collected in this survey included units of service provided, total practice expense, and total drug expense.

Satisfaction with the collaborative practice model in each practice was measured through surveys of physicians, NPPs, and patients. Physicians and NPPs were invited to participate in a brief online satisfaction survey. Several follow-up contacts were made to the practitioners to increase participation. Patient satisfaction was measured by using an anonymous paper-based survey instrument that was provided to each practice in the study group for distribution. Practices were instructed to have NPPs distribute the surveys to all patients being seen by the NPP on a given day. This ensured that the patients participating in the study were indeed receiving care in a collaborative practice model. Patients were instructed to complete the survey at home and return it in a stamped, self-addressed envelope. Patient surveys were mailed to an independent third-party survey organization for data aggregation. At the completion of the data collection phase of the study, focus groups and individual interviews were completed with NPPs from the study group practices to collect qualitative information to further inform the project.

Results and Discussion

Demographics

The survey group included respondents from 226 practices in 43 states. The majority (73%) of the respondents were from physician-owned private practices; academic practices (8%), hospital-owned practices (12%) and other types (7%) were also represented. As a first step in identifying practices appropriate for the study group, respondents were asked whether they employ NPPs in their medical oncology practice; 58% of the survey group respondents said yes.

Although not a primary goal of the project, respondents who did not use NPPs were asked to indicate their primary reason for not doing so. The most prevalent responses included “physicians are not interested in working with NPPs,” “we do not have the patient volume to support an NPP,” and “we have worked with NPPs in the past and it didn’t work out.”

Practices in the study group were selected from the survey group. The primary goal of practice selection was to achieve variety in practice size, structure, and geographic distribution. Thirty-three practice sites in 24 states agreed to participate. Approximately 40% of the study group practices were from the midwest, 30% from the east coast, 20% from the west, and 10% from the south. Two sites withdrew very early in the study, one small practice because their only NPP left the practice, the second because of reluctance to share data required for the study. Of the 31 remaining practice sites, 27 provided complete data for the study.

Similar to the survey group, the majority (84%) of the study group practices were physician-owned private practices; 16% were hospital-owned practices. Academic practices were excluded from the study group at the direction of the Workforce Advisory Group.

Practices were instructed to indicate the services routinely provided by NPPs from a list of 15 options. Figure 1 shows the percentage of respondents providing services in each of the listed categories for both the survey group and the study group. As can be observed here, results for the two groups are remarkably consistent, particularly for the services most frequently provided. Figure 2 shows the training model used by both the survey and study groups, and once again the results are remarkably consistent between the two. Other data in the study showed these same similarities. Although the study group data set is small, we believe the study group is representative of the larger survey group.

Practice Models

Buswell et al[2] reported results from a single-institution academic practice study of provider practice models in July 2009.

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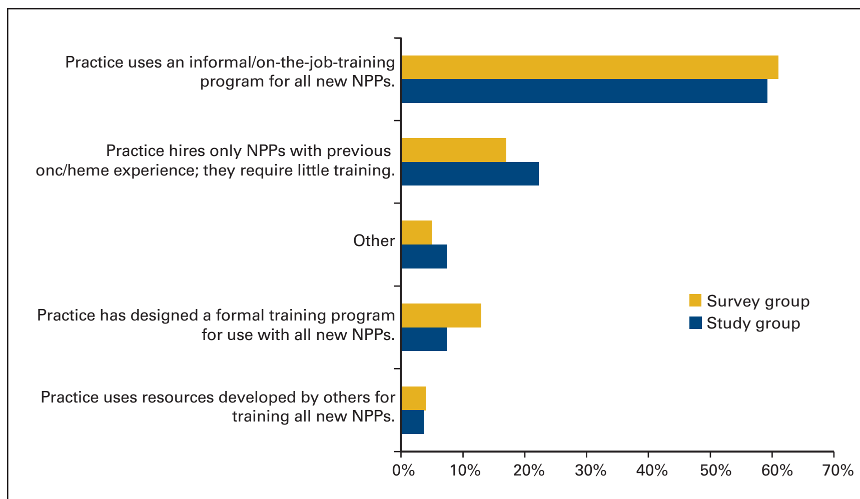

Figure 2. Training for new nonphysician practitioners (NPPs).

In that article, the authors defined three practice models: the independent visit model, the shared visit model, and the mixed visit model. We revised these models to apply more closely to practice style in the physician office and hospital settings. Survey respondents were asked to identify their practice model from three descriptive options; responses were then categorized into one of three collaborative practice models.

- In the incident-to practice model (ITPM), NPPs routinely see patients independent of the physician. The physician is generally present in the office suite but does not routinely see patients with the NPP.
- In the shared practice model, NPPs always see patients in conjunction with the physician.
- In the independent practice model, NPPs see patients completely independent of the physician. Patients are assigned to the NPP and not assigned to an oncologist.

The ITPM is the prevalent model in both the survey group and the study group (Appendix Table A1, online only). This is clearly a response to the increasingly challenging economic environment for oncology practices today. In the ITPM, NPPs see patients independent of the physician but with a physician present and available in the office if needed. The NPPs follow a care plan developed by the physician and consult with the physician as necessary. In many practices that use this model, patients alternate visits between the NPP and the physician on a predetermined schedule. This allows both the NPP and physician to maximize their patient schedules. Importantly, in the private practice setting, the ITPM allows practices to bill Medicare for NPP services as though they were rendered by the physician and to receive reimbursement at the full physician fee schedule rate, rather than at 85% of the physician fee schedule as would be required if the services were billed under the NPP's own provider number. The ITPM not only provides access to both the NPP and physician at alternating visits, but also maximizes reimbursement, an important consideration for today's oncology practice.

In addition to the collaborative practice model, respondents were also asked to report on their collaborative style. Collaborative styles were characterized as "all" when the NPPs work with all practice physicians and see a wide variety of patients (approximately 60% of the study group practices), or "exclusive" when the NPPs work exclusively with a specific physician (or physicians) and see only their patients (35% of study group practices). The remaining 5% indicated that their NPPs generally work with specific physicians but there is not exclusivity.

Satisfaction

As previously stated, one goal of the SCPA was to document the impact of collaborative practice models on patient, oncologist, and NPP satisfaction. Patient satisfaction was measured through the use of an anonymous paper-based survey instrument that was distributed to patients by NPPs in the study group practices during patient visits. Surveys were completed and returned by 1,538 patients in the original 33 practice sites; data are presented for 1,237 patients in the 27 sites that provided complete data for the study.

Patients were first surveyed to assess the level of their awareness that an NPP was providing clinical service to them. The average of patient awareness for the study group was 98%. The data reveal that in every study site the overwhelming majority of the patients who responded to this question were aware that they received treatment from an NPP.

Eight dimensions of patient satisfaction with their care in a collaborative practice model were measured in the survey. Each response was assigned a numerical value ranging from +2 for "highly satisfied, " "excellent," or "highly likely to recommend" to −2 for "highly dissatisfied, " "poor," or "highly unlikely to recommend." For each of these questions, adding the ratings of each respondent from the practice to each question and then dividing the sum by the total number of respondents generated a weighted satisfaction score. Because +2 would indicate that every respondent rated at the highest possible level of satisfaction, a score of 16 represents perfect satisfaction on every dimension. The average overall satisfaction score for patients in all study sites

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was 14.8 or 92.5%; patients were extremely satisfied with the service that they received at every study site.

Six dimensions of physician satisfaction with their collaborative practice model were measured by using an online satisfaction survey tool. As with the patient satisfaction survey, each response was assigned a numerical value for analysis. Responses for four questions ranged from +2 to −2, with the same rating descriptors used for patient satisfaction; two questions had a three-point range, with +1 as the highest possible score and −1 the lowest. The physician score for each question was added to calculate a total for all physicians at each study site. That sum was then divided by the number of physicians to get the average for the responding physicians at the site. A score of 10 represents perfect satisfaction. Although patient satisfaction was universally high in every dimension at every study site, physician satisfaction varied from site to site. The average overall physician satisfaction score for the study group was 7.98, or 79.8%.

Five dimensions of NPP satisfaction with the collaborative practice model were measured. As with the patient and physician satisfaction scores, the NPP score for each question was added to calculate a total for all NPPs at each study site. That sum was then divided by the number of NPPs to get the average for the responding NPPs at the site. For each of the five questions, 10 represents perfect satisfaction on every dimension measured. As was observed with the measurement of physician satisfaction, there is some variation in NPP satisfaction; the average overall NPP satisfaction score was 7.82, or 78.2%. There is no correlation (coefficient of correlation = 0.16) between the physician and NPP satisfaction scores.

Perception of Workload

In addition to measuring satisfaction, we also asked physicians and NPPs in the study group to indicate their perception of their own workload (Figure 3). The majority (58%) of physicians responded that their workload was too busy. Conversely, slightly more than 50% of NPPs said that their workload was about right, and another 33% felt they were not busy enough and could see more patients.

Productivity

Another goal of the SCPA was to document the impact of collaborative practice models on practice productivity and efficiency. Study group practices reported the number of patient encounters for selected evaluation and management codes for a 6-month reporting period. The total number of patient encounters was divided by the total number of full-time equivalent (FTE) providers, defined as physicians and NPPs. Productivity was reported at the provider level for each practice. We then looked at the correlation between perception of workload and productivity as measured by the number of patient encounters per FTE provider (Figure 4).

As shown in Figure 4, there is no correlation between the subjective perception and objective measurement of workload. Larger gold circles, indicating higher productivity per FTE provider, appear in the upper right quadrant (could be busier); smaller red circles, indicating lower productivity, appear in the

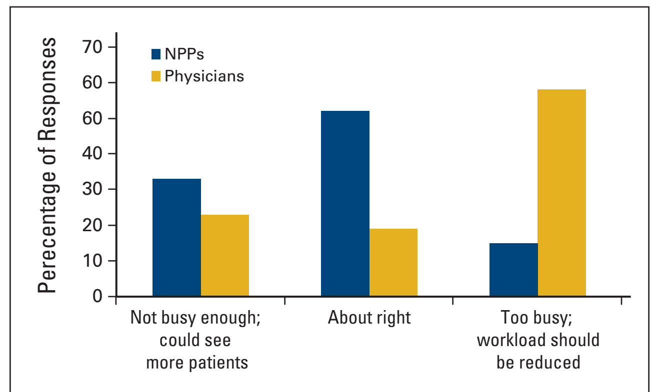

Figure 3. Perception of workload among physicians and nonphysician practitioners (NPPs).

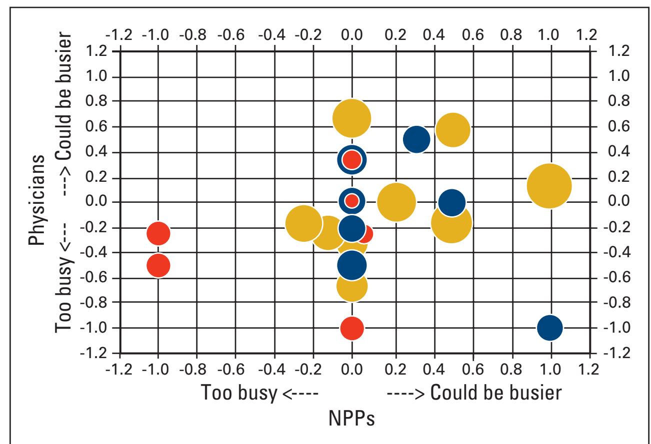

Figure 4. Perception of workload and patient encounters per full-time equivalent (FTE) provider. Each circle represents a practice; their size and color indicate practice productivity based on the number of patient encounters per FTE provider in the reporting period. The smaller red circles indicate below average productivity; blue is average; and the larger gold circles indicate greater than average productivity. The horizontal axis reflects the nonphysician provider (NPP) perception of workload and the vertical axis the physician perception. Circles in the upper right quadrant represent sites where both physicians and NPPs think they could see more patients. Circles in the lower left quadrant represent sites where both the physicians and the NPPs think they are seeing too many patients.

lower left quadrant (too busy). It appears that being busy reinforces the idea that more patients could be seen; five of the nine practices that produced higher than average patient encounters per FTE provider felt they could be even busier. Conversely, being less busy is associated with the subjective perception of being able to see fewer patients, as demonstrated by three of the eight practices with lower than average productivity.

Collaborative Style and Productivity

We also analyzed the correlation between collaborative style and productivity. The average number of patient encounters per FTE provider for the group in which the collaborative style was "exclusive" (NPPs work exclusively with specific physician(s) and see only their patients) was 897 ± 146 in the 6-month observation period, with 95% confidence. The aver-

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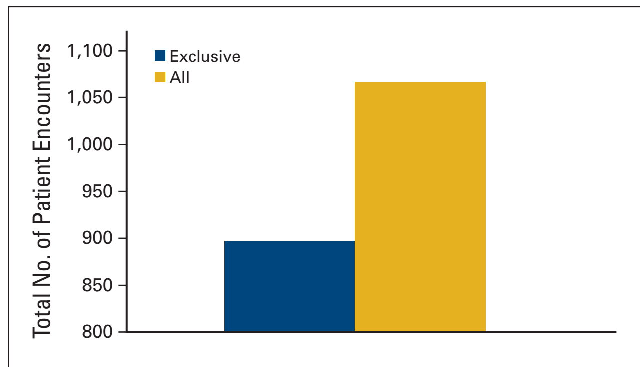

Figure 5. Collaborative style and total patient encounters per full-time equivalent provider.

age number of patient encounters per FTE provider for the group in which the collaborative style was "all" (NPPs work with all practice physicians and see a wide variety of patients) was 1,066 ± 146 in the observation period, with 95% confidence. The difference represents a productivity increase of 19% in favor of the sites where NPPs work with all physicians (Figure 5).

Conclusion

Although there are many interesting observations to be made from the data collected in this study, there are five important conclusions. First, oncology patients are aware when care is provided by an NPP and are very satisfied with the care they receive in a collaborative practice model. This is evidence that such collaborative practice arrangements are well accepted by patients, and we believe there should be no lingering concerns that patients will react negatively to oncology care provided by nonphysician practitioners in a collaborative practice model.

Second, practices in which the NPPs work with all practice physicians and see a wide variety of patients demonstrate a 19% increase in productivity as measured by patient encounters per FTE provider compared with practices in which NPPs work exclusively with one or more physicians in the practice.

Next, in both the survey group and the study group, reimbursement economics appear to drive the selection and development of the collaborative practice. This is evidenced by the prevalence of the incident-to practice model in this study.

Another important conclusion is that there is little observed correlation between the subjective perception of workload and the objective measure of work production. Five of the nine practices that produced higher than average patient encounters per FTE provider indicated that they could be even busier. Conversely, three of the eight practices with lower than average productivity reported that they were too busy.

Finally, physician and NPP satisfaction with their collaborative practice model is high, indicating a positive professional experience. Taken together, these findings provide strong support for the inclusion of NPPs in oncology practices.

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Authors' Disclosures of Potential Conflicts of Interest

Although all authors completed the disclosure declaration, the following authors indicated a financial or other interest that is relevant to the subject matter under consideration in this article. Certain relationships marked with a "U" are those for which no compensation was received; those relationships marked with a "C" were compensated. For a detailed description of the disclosure categories, or for more information about ASCO's conflict of interest policy, please refer to the Author Disclosure Declaration and the Disclosures of Potential Conflicts of Interest section in Information for Contributors.

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Feature Article

Filling the Gap: Development of the Oncology Nurse Practitioner Workforce

By Brenda Nevidjon, MSN, RN, FAAN, Paula Rieger, RN, MSN, AOCN, FAAN, Cynthia Miller Murphy, MSN, RN, CAE, Margaret Quinn Rosenzweig, PhD, FNP-BC, AOCNP, Michele R. McCorkle, RN, MSN, and Kristen Baileys, RN, MSN, CRNP, AOCNP

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One goal of the ongoing health care reform debate is to increase access to care through insurance reform. In contradistinction to these efforts, the future shortage of health care professionals will clearly limit such access. In cancer care, shortages of health care professionals will occur in conjunction with a growing older population, expanded treatment options, and increased cancer survivorship.[1,2] Cancer care is distinguished by its interprofessional and multispecialty model. The ASCO Fall 2008 Workforce Statement urged development of the workforce to ensure continuous delivery of high-quality cancer care.[3] Developing new strategies for oncology care delivery by increasing the numbers and expanding the roles of nonphysician practitioners, such as nurse practitioners (NPs) and physician assistants (PAs), is critically important to meet the current and potential cancer care needs of the US population. There are differences that each discipline brings, and this article will present an overview of advanced practice registered nurses (APRNs) in oncology and demonstrate potential collaborative opportunities for the Oncology Nursing Society (ONS) and ASCO in closing the gap between demand and supply.

Advanced Practice Nurses

There are four distinct advanced practice nursing roles: NP, clinical nurse specialist (CNS), nurse midwife, and nurse anesthetist. The two APRN roles in oncology are CNS and NP. The CNS functions as a clinical expert, consultant, educator, mentor, researcher, and institutional change agent. The NP may share some of these roles, but his or her primary role is individual patient care management.

NPs, in general, have grown in number and capabilities over the past several years. They are licensed independent practitioners who have been educated at the graduate level, with a minimum of a master's degree. Traditionally, NP education has covered a broad spectrum of patient populations but lacked concentrated attention to specific diseases. A majority of NPs working in the oncology setting have completed graduate programs that did not focus on the specialty (Oncology Nursing Certification Corporation [ONCC] 2008 survey, data not published). Cancer care reaches across all patient populations, making no NP educational preparation (eg, family, adult, acute care, and women's health) entirely adequate for the care of patients with cancer and their families. Although all APRNs have been educated in at least one age-specific population, some are additionally prepared to work in a subspecialty, such as oncology. However, only a minority of accredited NP programs in the United States offer a specialty in oncology.[4]

Currently, a master's degree is the entry-level educational requirement for NPs. An emerging NP educational path is the doctor of nursing practice degree. In its Statement on the Practice Doctorate in Nursing, the National Organization of Nurse Practitioner Faculties recognized the practice doctorate as "an important evolutionary step for the preparation of NPs," which it expects "will become the future standard for entry into NP practice."[5] Some of the factors building momentum for this change in nursing education at the graduate level include the rapid expansion of knowledge underlying practice; the increased complexity of patient care; national concerns about the quality of care and patient safety; and shortages of nursing personnel, which demand a higher level of preparation.[6] Nursing education is moving in a direction similar to those of other health professions, such as pharmacy (PharmD), psychology (PsyD), physical therapy (DPT), and audiology (AudD), which all offer practice doctorates.[6]

Regulation

Each state board of nursing independently determines the requirements for entry into practice and the legal scope of practice for NPs. This variability limits the mobility of NPs in practicing from state to state as well as patient access to the care provided by NPs. Of most concern is variability in the legal scope of practice for NPs from state to state, including prescriptive authority, admitting privileges, and other functions, which in turn also affect reimbursement.[7] In 2004, a national work group comprising representatives from nursing education, certification, accreditation, and regulation began a process to establish a consensus model for advanced practice nursing regulation. In 2008, a new model for the regulation of advanced practice nurses was launched, and 46 nursing organizations have endorsed it to date. The model is to be fully adopted by 2015. Under the new model, all advanced practice nurses, including NPs, are licensed as independent practitioners who have completed an accredited graduate education program with a focus on a specific patient population. They hold board certification at the population level, and this certification is required by the state board of nursing for regulatory purposes. The graduate education program may include an emphasis on a specialty (eg, oncology) beyond the population level (eg, adult). How-

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Board Certification for Oncology Nurse Practitioners

- Administered by the Oncology Nursing Certification Corporation, an independent certifying body affiliated with the Oncology Nursing Society
- To be eligible for the Advanced Oncology Certified Nurse Practitioner (AOCNP) examination, a nurse must hold a valid, active, unrestricted registered nurse license and must have attained a minimum of a master's degree in nursing, completed an accredited nurse practitioner (NP) educational program, and completed a minimum of 500 hours of supervised clinical practice as an oncology NP
- Administered at computer testing sites throughout the United States and available year round
- Currently, 652 NPs hold AOCNP certification
- NPs renewing AOCNP certification have the option of again passing the certification examination or documenting 125 points of professional development every 4 years
- Visit http://www.oncc.org for details and more information

ever, these competencies must be taught in addition to the competencies at the population level and assessed in a separate certification examination.[8]

Specialty certification for NPs became available in 2005 (see Board Certification for Oncology Nurse Practitioners). However, in the future, specialty certification will not be required at the regulatory level. This is similar to requirements for physicians, wherein licensure is based on the general medical board examination, and specialty board certification is required in the workplace but not by state regulatory medical boards. Under this model, the oncology NP of the future will attain graduate education imparting competencies focused on a broad population-based area, which will qualify the graduate to take the board certification examination in that area (eg, adult or family). This certification will be the proxy for licensure as an adult or family NP. Ideally, the graduate program will also include didactic and clinical courses in oncology, qualifying the NP to take the board certification examination in oncology, which will be a requirement in the oncology workplace. For those who do not attain the oncology competencies in the graduate program, alternate educational strategies, such as those described in this article, will be needed to attain the knowledge, skills, and abilities to competently practice in oncology.

Role of the APRN in the Interdisciplinary Cancer Care Team

Nursing represents the largest segment of the US health care workforce and therefore has a significant role in patient care. The oncology NP (ONP) has been providing care in a variety of primary, acute, and tertiary settings, including physician practices. ONPs are also beginning to practice at nontraditional health care sites, such as survivorship and symptom management clinics as well as high-risk and early detection clinics, demonstrating the unique skills ONPs have to offer in the delivery of quality cancer care. In multiple care settings, evidence has demonstrated the cost effectiveness, patient satisfaction, and quality care outcomes produced by NPs, prompting this growth of ONPs in cancer care.[9-13] Improved outcomes have been documented in quality of life and cost outcomes in breast cancer care,[14] but these must be further clarified in important subspecialties such as cancer survivorship.[15]

NPs are uniquely educated at the master's or doctoral level to provide quality care within a comprehensive health promotion framework.[5] Equivocal or superior patient outcomes by advanced practice nurses in primary,[16] acute specialty,[17] and home-based cancer care[18] have been well documented. Particular strengths of NPs are patient education, communication, duration of visits,[16] and adherence to evidence-based practice guidelines.

Gaps in Learning Needs: The ONP Perspective

A descriptive analysis of NP learning needs was conducted by a national panel convened by ONS to address educational needs for NPs on entry to cancer care.[19] A survey of 104 self-described ONPs was conducted through ONS in June 2009 to determine the educational gaps experienced by NPs on entry to practice in cancer care. The respondents reported they were well prepared for the foundational NP skills of obtaining a history, performing a physical exam, and writing and presenting a patient case. The clinical practice components for which the ONPs felt poorly prepared were specific to cancer care. The following items ranked as "not at all prepared" by the highest level of respondents included oncology-specific procedures such as bone marrow biopsies, thoracentesis, paracentesis, and lumbar punctures; chemotherapy/biotherapy competency; billing and reimbursement; and recognition and management of oncologic emergencies. The manner in which the respondents learned these clinical skills was most often via collaborating/supervising physician (80.8%) and self study (61.5%) and less often via collaborating/supervising NP (34.6%) and institutional training/orientation (26.9%).

These results have implications for hiring institutions and supervising physicians.[20] Although it is reasonable to assume that invasive-procedure psychomotor skills will be obtained in mentored, supervised on-the-job training, other content areas such as competency in chemotherapy and biotherapy and recognition and management of oncologic emergencies are critically important components of cancer care and cannot be taught on the job for NPs practicing with a high level of autonomy and patient care responsibility.

Improving and standardizing the cancer care education available to NPs entering oncology is essential to providing optimal, safe cancer care. Innovative approaches must be employed to assist NPs in gaining the knowledge and skills they need to competently practice in the oncology setting. This can be accomplished through extensions of current graduate education programs and continuing education programs and work-

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Oncology Nursing Society Resources for the Nurse Practitioner

National Conferences
- 2009 Advanced Practice Nursing Conference Virtual Meeting: http://www.softconference.com/ons/
- Coming in 2010: Advanced Practice Nursing Conference, November 11-13, 2010, Orlando, FL
- Visit http://www.ons.org for details and more information

Publications
- Oncology Nurse Practitioner Competencies: http://www.ons.org/media/ons/docs/publications/npcompentencies.pdf
- Oncology Nursing Society Position Statement: The Role of Advanced Practice Nurses in Oncology Care: http://www.ons.org/Publications/Positions/APNrole
- Master's Degree With a Specialty in Advanced Practice Oncology Nursing
- Standards of Oncology Education: General and Advanced Practice Levels
- Statement on the Scope and Standards of Advanced Practice Nursing in Oncology
- Advanced Oncology Nursing Certification Review and Resource Manual
- Putting Evidence Into Practice: Improving Oncology Patient Outcomes
- Clinical Manual for the Oncology Advanced Practice Nurse
- The Oncology Nurse Practitioner and You: Partnering to Provide Quality Cancer Care
- "So, You Want to Be an Oncology Nurse Practitioner?!"
- A Guide to Symptom Management
- Advancing Nursing Science

Journals
- Oncology Nursing Forum
- Clinical Journal of Oncology Nursing

Continuing Nursing Education Courses
- Access Devices: The Virtual Clinic
- Advanced Oncology Certified Nurse Practitioner Online Review Course
- Cancer Basics
- Cancer Biology
- Chemotherapy and Biotherapy
- Genetics
- Reimbursement for Nurses and Managers
- Safe Handling of Hazardous Drugs
- Sessions from the 10th National Conference on Cancer Nursing Research
- Treatment Basics
- Other site specific courses available
- Visit http://www.ons.org for new releases in 2010

Networking
- Nurse Practitioner Special Interest Group and virtual communities: http://nursepractition.vc.ons.org

shops. ONS has developed entry-level competencies for ONPs that can be used as outcome measures for these educational programs.[20]

Developing the ONP Workforce

Professional membership societies play an important role in educating their constituents in their respective professional fields. ONS serves as a professional home for oncology nurses, including ONPs and other APRNs, and serves as a resource for the profession of nursing and nurses caring for patients with cancer. ONS is uniquely positioned to understand what nurses need to know and how to deliver the education. Ongoing comprehensive continuing education is important for NPs to attain and maintain current knowledge and skills in the specialty. ONS offers intensive continuing education specifically for advanced practice nurses (presented in Oncology Nursing Society Resources for the Nurse Practitioner). Each fall, the ONS APN Conference provides a full 3 days of didactic instruction on a range of oncology topics for NPs and CNSs. The conference is preceded by a skills workshop offering both didactic and hands-on training in skills such as bone marrow biopsy and lumbar puncture. ONS held its second annual workshop for the novice ONP in November 2009, entitled "The Nuts and Bolts of Advanced Oncology Care—Oncology Nursing Society's Novice Oncology NP Workshop." The goals of this workshop are twofold: to establish a foundation for advanced practice in oncology for the NP with limited or no prior experience in oncology and to establish a network and resource set for the NP new to oncology. The evaluation of the pilot program held in November 2008 indicated that because of the workshop, the care of participants' oncology patients improved as a result of a "better basic understanding of cancer and the treatment that it entails." Respondents also said the workshop enhanced their collaboration with physician colleagues by "validating their knowledge base for delineation of privileges" and "gave me a more comprehensive understanding of the treatment process and the fundamental knowledge to enable me to help coordinate in that care" (ONS 2008 evaluation, data not published). ONS also offers educational tracks for APRNs at its annual conference in addition to many other CNE offerings geared toward the APRN.

An additional model for continuing education may be the expansion of university programs offering oncology content into clinical practice areas. A traditional 15-week, three-credit oncology course for NP students at the University of Pittsburgh School of Nursing (Pittsburgh, PA) was redesigned for NPs and PAs new to cancer care as a weekly, day-long seminar for 6 weeks of didactic and experiential learning. Content was developed on the basis of the ONS Oncology Nurse Practitioner Competencies[20] and through consultation with leaders in nursing and medicine at the University of Pittsburgh Cancer Institute. Pre- and post-testing and anecdotal information from participants and supervising physicians noted improvement in knowledge and clinical skills including history taking and decision making.

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Challenges to Developing the ONP Workforce

As the need for NPs who specialize in oncology increases, the barriers to practice that NPs currently experience need to be resolved. Professional organizations, such as ONS and ASCO, can work together to help resolve these obstacles. Issues of concern include the lack of formalized academic education for NPs in the specialty of oncology and lack of uniformity in the regulatory requirements for NPs among states. Compounding these issues is the movement among some medical organizations to limit the practice of NPs.

A 2008 survey of advanced practice ONS members, conducted by the ONCC, revealed that only 16% of the NPs who responded had completed an NP program that focused on oncology (data not published). The vast majority had completed a program that focused on a broader population-based area like family or adult in primary or acute care. Of those who have taken the board certification examination for ONPs since its inception in 2005, only 21% have completed graduate education focusing specifically on oncology care, with the majority having completed a family or adult NP program. However, it is important to note that most ONPs have had a significant amount of experience working as RNs in the specialty of oncology before becoming NPs. The survey revealed that approximately 63% of the NPs had more than 10 years of experience in oncology nursing, with only 25% working as ONPs for more than 10 years. Even for NPs with oncology experience, there is additional education specific to this unique role that is necessary for the provision of safe and appropriate care for patients with cancer and their families across the cancer care trajectory.[21-23] The broad population-based programs do not offer this in-depth specialty education. Although in the minority, there are also those with no RN oncology experience who complete an adult or family NP program and then choose to work in oncology. These NPs need even more intense postgraduate training to attain the specialty competencies.

Another issue of concern that may create barriers to practice for NPs is the movement among some medical groups to limit the scope of practice of NPs. Although the need for NPs is clear, and the safety, quality, and cost effectiveness of NP care in a variety of specialties has been demonstrated, the American Medical Association is continuing to move to restrict the independent practice of health care professionals who are not physicians.[24,25] These efforts are divisive and impede rather than enhance patient access to quality care. Physicians and NPs in various specialties share common goals of providing high-quality care, improving patient outcomes, and enhancing the health of the US population. They also share concerns regarding the declining workforce and provision of appropriate reimbursement for services. A high-quality and efficient health care system requires effective multidisciplinary teams that collaborate to provide patient-centered care.[26-28] Collaborative efforts are needed to strengthen the dialogue between physicians and NPs to improve future health care delivery.[29] There is strong need to work together to eliminate barriers to practice through political advocacy.

Conclusion

ONS is the professional home of more than 37,000 RNs and other health care providers dedicated to excellence in patient care, education, research, and administration in oncology nursing. ONS recognizes the value ONPs bring to the interdisciplinary oncology team and has assumed a leadership role in providing education to generalist NPs and in advocating for the NP role in oncology. By working collaboratively, organizations such as ONS, the ONCC, and ASCO can provide the resources required to develop the workforce necessary to meet the needs of patients with cancer through appropriate education and the elimination of barriers to practice.

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ERRATUM

The January article by Nevidjon et al, entitled "Filling the Gap: Development of the Oncology Nurse Practitioner Workforce" (J Oncol Pract 6:2-6, 2010), contained an error in the corresponding author's e-mail address. It was originally published as mmcorkle@ons.org, whereas it should have been mmccorkle@ons.org. The online version has been corrected in departure from the print. *Journal of Oncology Practice* apologizes to the authors and readers for the mistake.

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