Nurse Practitioner Spotlight: Diagnosis

Nurses Service Organization (NSO), in collaboration with CNA, has published the Nurse Practitioner Liability Claim Report: 5th Edition. The report includes statistical data and case scenarios from CNA claim files, as well as risk management recommendations designed to help nurse practitioners (NPs) reduce their malpractice exposures and improve patient safety.

You may access the complete report, and additional Risk Control Spotlights, at: www.nso.com/NPclaimreport.

This NP Spotlight focuses on an analysis and risk recommendations regarding one of the most significant topics in the report: **Diagnosis**.

Nurse Practitioner Allegations Related to Diagnosis

Among NP claims analyzed in the 5th Edition of the NSO/CNA Nurse Practitioner Liability Claim Report, diagnosis-related claims represent the highest distribution among all allegation categories at 37.1 percent. Diagnosis-related claims also reflect an average total incurred of $385,947, which is greater than the overall average total incurred for all claims in the dataset ($332,137).

Arriving at a timely, accurate diagnosis requires NPs to balance efficiency with careful consideration of where errors most often occur in the diagnostic process. **Figure 1** displays the distribution and average total incurred of diagnosis-related claims, categorized by the step of the diagnostic process where a critical error occurred in the claim. Diagnosis-related errors tend to occur more often during the steps of the diagnostic process that rely on test result interpretation and communication, namely during the diagnostic/ laboratory testing and the history and physical examination phases. These findings demonstrate the importance of creating and implementing processes and systems that help support decision making, reduce the reliance on memory, and promote patient engagement and inter- and intra-professional collaboration.

Office practices, aging services facilities, and other healthcare settings where NPs practice must promote work conditions and workflow design that facilitate optimal cognitive performance without creating a barrier to essential communications. It is recommended that work settings provide resources to limit unnecessary distractions, make up-to-date, evidence-based information readily available, and limit reliance on memory and task saturation. Furthermore, these findings demonstrate the importance of NP investment in continuing education, simulations, clinical peer review, and training to update and refine their diagnostic decision-making processes. Training that addresses the NP's diagnostic decision-making process may include topics such as metacognition (which is the process of thinking about how you think), cognitive biases, and other systemic methods for presenting information, reasoning, and critical thinking. Organizations such as the Society to Improve Diagnosis in Medicine, the Agency for Healthcare Research and Quality's Patient Safety Network (PSNet), and The Joint Commission offer additional information and resources to assist practitioners and their workplaces with improving diagnosis and reducing harm from diagnostic error.

1 Distribution and Severity of Diagnosis-Related Claims by Step of the Diagnostic Process

Closed Claims with Paid Indemnity of ≥ $10,000

This figure highlights only those diagnosis-related causes of failures.

Average total incurred	Claim distribution	Diagnostic process step	Examples of potential failure points at each step
$443,316	15.1%	Referral management	• Failure to obtain consultations to establish a diagnosis • Failure to timely/properly establish and/or order appropriate treatment
$420,854	59.3%	Diagnostic/ lab testing	• Failure to order appropriate tests to establish a diagnosis • Failure or delay in obtaining/addressing diagnostic test results
$296,588	19.8%	History and physical	• Failure to consider/assess patient's expressed complaints/symptoms • Failure to perform and/or document a timely and complete history and physical examination • Failure to properly or fully complete patient assessment
$184,562	5.8%	Patient follow-up	• Failure to identify and report observations, findings, or change in condition • Failure to obtain/refer for immediate emergency treatment
$385,947	100.0%		

Figure 2 displays the distribution and average total incurred of the top allegations related to diagnosis in the *Nurse Practitioner Liability Claim Report: 5th Edition*. The following case study provides an example of circumstances where the NP failed to order appropriate diagnostic tests to establish the correct diagnosis:

Legal Case Study: Failure to order appropriate diagnostic tests to establish a diagnosis

While working at an urgent care clinic, an NP saw a young pediatric male patient who had been evaluated at the clinic two days earlier by another provider for a fever and rash. The parents returned to the clinic because the patient's fever and rash had continued to worsen. The NP failed to document a complete history and physical of the patient and failed to review the documentation from the patient's previous visit, which noted that the patient had sustained a tick bite. As a result, the NP failed to order any diagnostic laboratory testing and misdiagnosed the patient with hand, foot, and mouth disease.

The patient's condition deteriorated over the next several days, eventually requiring hospitalization and treatment for seizure activity, cardiac dysfunction, and respiratory compromise, which required intubation. During the patient's hospitalization, laboratory testing revealed that the patient was suffering from Rocky Mountain Spotted Fever. The patient was treated with antibiotics and discharged after 10 days.

Two years after the patient was discharged, the patient's parents filed a lawsuit against the NP. The NP's lack of documentation of a history and physical, including the failure to note the patient's tick bite, made the case difficult to defend. Two and a half years after the lawsuit was filed, the parties agreed to a settlement. The claim resolved with a total incurred of greater than $160,000. After the lawsuit was settled, the settlement payment was reported to the State Board of Nursing (SBON), as required by law. The SBON investigated the NP's conduct, and ultimately ordered the NP to complete 20 hours of continuing education courses and pay a $500 fine. The total costs incurred to defend the NP in the SBON matter exceeded $6,300.

2 Distribution and Severity of Top Diagnosis-Related Allegations

Closed Claims with Paid Indemnity of ≥ $10,000

This figure highlights only those diagnosis-related injuries.

Top allegations in diagnosis-related closed claims	Claim distribution	Average total incurred
Failure to order appropriate diagnostic tests to establish diagnosis	30.2%	$473,644
Failure to timely/properly establish and/or order appropriate treatment	18.6%	$232,221
Failure or delay in obtaining/ addressing diagnostic test results	8.1%	$161,381
Average Total Incurred of Diagnosis-Related Allegations		$385,947

Figure 3 displays the top injuries associated with diagnosis-related closed claims in the *Nurse Practitioner Liability Claim Report: 5th Edition*. A delay in the diagnosis of cancer and infection comprised the highest percentage of closed claims in this sub-category. A delay or failure to diagnose cancer also contributed to an average total incurred ($454,158) 17.7 percent higher than the average total incurred for all diagnosis-related allegations ($385,947). Of the diagnosis-related allegations in the dataset, the four most commonly missed cancers included breast cancer, colorectal cancer, female reproductive cancer and lung cancer. Failure to perform diagnostic/ laboratory tests (screening tests), failure to obtain a complete patient and family history and thorough patient physical assessment, and failure to follow up with the patient on test results (such as an abnormal chest x-ray or PSA) were the most common causes of diagnosis-related allegations.

3 Distribution and Severity of Top Diagnosis-Related Injuries

Closed Claims with Paid Indemnity of ≥ $10,000

This figure highlights only those diagnosis-related injuries.

Top injuries in diagnosis-related closed claims	Claim distribution	Average total incurred
Cancer	33.7%	$454,158
Infection	19.8%	$353,727
Cardiac/vascular	16.3%	$277,493
Neurological	12.8%	$390,222
Average Total Incurred of Diagnosis-Related Allegations		$385,947

RISK MANAGEMENT DISCUSSION AND RECOMMENDATIONS

The following discussion and risk control recommendations are intended to serve as a starting point for NPs seeking to assess and enhance their patient safety and risk management practices regarding diagnosis.

Acknowledging Biases

Many factors influence an NP's thought process, including level of experience, workload, physical, mental, and emotional fatigue, environment, and availability of resources. Biases provide "cognitive shortcuts" that may be useful- they allow us to cut through the complexity of everyday life by focusing on what is familiar. However, biases can adversely influence the provider-patient relationship as well as the complex decision-making process required to arrive at the correct diagnosis. By increasing awareness of how biases can contribute to diagnostic errors, NPs can work to improve their diagnostic reasoning skills. Examples of biases include:

- *Anchoring bias:* Relying on initial impressions and not adjusting from this "anchor", despite the availability of new information.
- *Availability bias:* Drawing on familiar, common, recent, or memorable examples to assess the likelihood of a particular outcome. This bias also may lead NPs to generalize testing and treatment recommendations, forgetting to take specific, individualized steps for their patient.
- *Confirmation bias:* Selectively seeking out or noticing information, which confirms existing opinions, rather than actively seeking out information that may refute those existing beliefs.
- *Diagnostic overshadowing:* Also referred to as "diagnostic momentum." Once a diagnostic label is associated with a patient, it becomes more difficult to consider other alternatives. Diagnostic overshadowing is often perpetuated by "cut and paste" documentation in the electronic healthcare information record and is a greater risk for patients with disabilities and pre-existing conditions.
- *Framing effect:* How information is presented, including the source of the information and the context in which it is received, influences opinions, and impacts future decisions.
- *Unpacking principle, search satisficing, or premature closure:* Failure to elicit all relevant information and accepting a diagnosis before considering all available information and taking all necessary steps to verify the diagnosis.
- *Implicit biases:* Automatic, unconscious, and unintentional biases that affect our judgments, decisions, and behaviors towards others. This phrase is used to describe how personal experiences and inherent, subconscious biases influence your interactions with patients. For example, an ever-growing body of research has provided evidence that implicit biases of healthcare providers may adversely affect outcomes for patients who are:
  - Black, Indigenous, and other people of color
  - Non-English-speaking, or for whom English is not their primary language
  - Disabled
  - LGBTQIA+ identifying
  - Experiencing homelessness
  - Overweight

Strategies to Improve Decision-Making

While it is impossible to eliminate biases, their effects can be mitigated through recognition and application of clinical knowledge to the problem at hand. Use the following strategies to help identify potential biases and improve the diagnostic process:

- *Engage in self-reflection*
  - Acknowledge how the patient makes you feel and how those feelings may affect your interactions with the patient.
  - Consider how your environment and level of physical, mental, and emotional fatigue may be influencing your thought process. Ask yourself:
    - Do I need to slow down?
    - Would it be helpful for me to consult with others?
  - Seek out continuing education on diagnostic reasoning, cognitive biases, and cultural competencies.
  - Build and support a culture of collaboration, seeking opportunities to participate in clinical peer review, professional case review conferences, and other opportunities to examine challenging cases.
- *Do not delegate completion of the medical history and purposeful physical examination.*
  - Review the patient healthcare information record and any information received since the last patient encounter.
  - Consider findings of the patient assessment, history, and physical examination, as well as the patient's expressed concerns, in establishing a diagnosis, and document those findings.
  - Diligently screen, test for, monitor, and/or treat diseases known to have high morbidity and mortality, such as cancer, infection, heart disease, hypertension, and diabetes.

- Document your thought process and clinical justification when establishing a diagnosis and providing treatment, especially regarding any deviation from protocols.

- *Consider potential unintended consequences of pursuing a particular diagnosis.*
  - Are factors present that do not align with the diagnosis?
  - Are there elements that cannot be explained?
  - Are there symptoms that are inconsistent with the current diagnosis?
  - Why are these symptoms not indicative of another diagnosis?
  - Is there a life-threatening condition with similar symptoms that I haven't considered?
  - Is it possible that there are multiple issues ongoing?

Test Result Management and Serial Testing

Consistent routines, reliable backup systems, and thorough documentation are key to effective tracking of test results and patient notification. Office practices, aging services facilities, and other healthcare organizations should have policies and procedures in place to support diagnostic testing and patient follow-up, such as:

- *Tracking and Reviewing Diagnostic Information.* Develop and implement a policy and procedure that clarifies practitioner and staff responsibilities regarding clinical tests, including ordering tests, reviewing results, and notifying patients of findings. Policies and procedures must include timely practitioner notification of critical test results or patient notification of urgent symptoms or concerns.

- *Ordering Tests, Sending Specimens, and Receiving Results.* Develop and implement systems for sending specimens to testing laboratories, ordering tests, and ensuring that test results are reported back and reviewed in a timely manner.

- *Reviewing Test Results.* Develop and implement systems and processes for notifying the ordering practitioner of test results, as well as for notifying the patient regarding the test results, next steps, and any signs and symptoms that require immediate medical attention, if any. Practitioners and staff should be aware that:
  - All test results, no matter how they are reported, must be reviewed and signed by the practitioner prior to filing them in the patient's electronic healthcare information record.
  - If the ordering practitioner is unavailable, test results should be referred to another practitioner (in accordance with written policy) to ensure prompt review.
  - When notifying practitioners of critical test results, staff should document the time and date that the practitioner was notified, as well as the patient notification.

- *Serial Testing.* Certain drugs and conditions require serial monitoring and close clinical observation. In these situations, risk-reduction measures are important to protect the patient's health and reduce risk.
  - Identify the drugs and conditions requiring periodic reassessment, which need to be reviewed and updated at least annually.
  - Develop and implement an alert system to ensure that patients are notified of their test results, practitioners follow up as needed, and serial tests are ordered at appropriate intervals.
  - Engage in informed consent discussions with patients regarding the need for serial follow up testing, including an assessment of potential obstacles to the patient's ability to adhere to recommended testing. Practitioners may need to refer patients to case managers or social workers to ensure that patients have access to appropriate support services, such as transportation to/from the diagnostic testing site, financial resources to obtain required testing and therapeutic agents, and/or home health care services.
  - Educate the patient and/or their caregiver regarding the signs and symptoms that would prompt a call to the practitioner or require immediate medical attention.

Nurse Practitioner Spotlights

For risk control strategies related to:

- Defending Your License
- Depositions
- Patient Adherence
- Telemedicine
- Documentation
- Prescribing

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Patient Education and Follow-Up

Failure to educate or follow-up with the patient can be a major contributing factor in diagnostic errors. Follow-up information regarding the effectiveness of prescribed treatment or any new symptoms can be critical to arriving at an accurate diagnosis.

- *Provide patients with written information about their diagnosis*, treatment, follow-up care, side effects or symptoms that could arise, and when to seek medical attention. Written information should be provided in the patient's primary language. Patients should receive information regarding whom to contact if they have questions or concerns, including contact information.

- *Ensure that the patient's primary care provider receives copies of test results*, instructions provided to the patient, and information regarding any follow-up appointments.
- *Establish an alert system for patients with high risk conditions or drug regimens* to determine whether symptoms are controlled by treatment and that practitioner instructions are being followed.

Documentation

In many diagnosis-related closed claims in the 3rd, 4th, and 5th Editions of the Nurse Practitioner Liability Claim Report, a lack of sound documentation supporting the decision-making process of the treating NP or other staff members under the supervision of the NP weakened the legal defense of the case. Examples of missing or incomplete documentation noted in the report datasets include, but are not limited to:

- Lack of a complete patient and family history.
- Incomplete physical assessment.
- Failure to list current medications and/or complaints.
- Failure to document patient non-adherence with appointments, ordered diagnostic tests and/or prescribed medications.
- Absence of notification of diagnostic test results and recommendations for further treatment or testing.

For recommendations regarding documentation, consult the Risk Control Self-Assessment Checklist for Nurse Practitioners: Diagnosis on the next page of this resource and the Nurse Practitioner Spotlight: Documentation.

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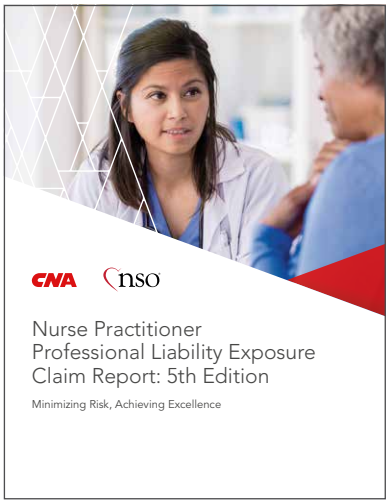
Risk Control Self-Assessment Checklist for Nurse Practitioners: Diagnosis

The following checklist, selected to focus on diagnosis, is designed to help NPs evaluate risk exposures associated with their current practice.

Diagnosis Self-Assessment Topic	Yes/No	Actions Needed to Reduce Risk
I utilize an objective, evidence-based approach, applying organization-approved clinical guidelines and standards of care to timely and accurately determine the patient's differential diagnosis.		
I utilize active listening and interviewing techniques designed to engage patients and promote shared decision making, allowing my patients to express their concerns and questions, and paying close attention to non-verbal communication.		
I use an intersectional framework when assessing patients belonging to historically marginalized groups, looking beyond previous diagnoses, and overcoming cognitive biases.		
I consider the findings of the patient's assessment, history, and physical examination, as well as the patient's expressed concerns, in establishing the diagnosis, and document my findings.		
I order and timely obtain results of appropriate diagnostic testing – including laboratory analysis, radiography, EKG, etc. – before determining the diagnosis, and documenting ordered tests and results.		
I consult specialists or other colleagues, as appropriate, to establish the diagnosis and treatment plan, and document all such encounters.		
I request, facilitate, and obtain other appropriate consultations, as necessary, to achieve a timely and correct diagnosis.		
When establishing the diagnosis, I comply with the standard of care, as well as my facility's policies, procedures, and clinical and documentation protocols.		
If a patient is unstable, acutely ill and in need of immediate diagnostic testing and/or consultation, I refer them to hospital emergency care and facilitate this process, if necessary.		
If a diagnostic test or procedure involves risk, I conduct and document an informed consent discussion with the patient and obtain the patient's witnessed consent.		
I proactively compile, document, and respond to the results of diagnostic tests/procedures and provide necessary orders.		
I obtain, document, and respond to the results of diagnostic consultations with physicians and other healthcare providers.		
I establish the diagnosis, determine a treatment plan, document clinical decision-making, and order and implement the treatment and care plan.		

Diagnosis Self-Assessment Topic	Yes/No	Actions Needed to Reduce Risk
I discuss clinical findings, diagnostic test/procedure results, consultant findings, diagnosis, the proposed treatment plan, and reasonable expectations for a desired outcome with patients, in order to ensure their understanding of their care or treatment responsibilities. I document this process, noting the patient's response.		
I counsel the patient regarding the ability to comply with diagnostic testing, treatment and consultation recommendations, as well as the risks of nonadherence, and document discussions. If recurrent nonadherence is potentially affecting the safety of the patient and regular counseling has been ineffective, I consider discharging the patient from the practice.		
If the patient is uninsured or unable to afford necessary diagnostic and consultative procedures, I refer them for financial assistance, payment counseling, and/or free or low-cost alternatives, and document these actions.		



This information was excerpted from NSO and CNA's full report, *Nurse Practitioner Liability Claim Report: 5th Edition*. www.nso.com/NPclaimreport

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