

Line By Line Guidance Document for Acuity Criteria

Introduction

The Acuity Tool and this corresponding guidance document were created in a collaborative effort between the Oregon Department of Education (ODE) and the Oregon School Nurses Association (OSNA). The documents were created to support registered nurses (RN) working in school settings in Oregon in assessing student acuity. School districts are required to annually report student acuity data to the ODE which is then analyzed and submitted to the state legislature in the [Oregon School Nurse Report](#). Standardized assessment of student acuity is critical to ensuring appropriate school nurse staffing. Importantly, the availability of a school nurse plays a vital role in promoting the health and well-being of students, which impacts academic achievement (Baisch et al., 2011; Wyman et al., 2013; Wiley et al., 2016).

It is important that nurses use this tool in conjunction with their knowledge, training, and experience to determine the appropriate acuity level of students. This guidance describes suggested practice and is not legal advice, nor should it be relied on as legal advice. If you require legal advice regarding the issues discussed, please consult an attorney.

Related laws and resources:

- [ORS 336.201](#) (Nursing Services Provided by District)
- [OAR 581-022-2220](#) (School Health Services)
- Oregon School Nurses Association [Acuity Toolkit](#)

Oregon Law

ORS 336.201 defines *three levels of acuity related to required nursing services*:

- **Medically Complex:** *students who may have an unstable health condition and who may require daily professional nursing services.*
- **Medically Fragile:** *students who may have a life-threatening health condition and who may require immediate professional nursing services.*
- **Nursing-Dependent:** *students who have an unstable or life-threatening health condition and who require daily, direct, and continuous professional nursing services.*

ORS 336.201(2) further states that *each school district shall ensure that the district has access to a sufficient level of nursing services to provide:*

- *One registered nurse or school nurse for every 225 medically complex students.*

- One registered nurse or school nurse for every 125 medically fragile students.
- One registered nurse or school nurse, or one licensed practical nurse under the supervision of a registered nurse or school nurse, for each nursing-dependent student.

In addition to the requirements of subsection (2) of this section, each school district is encouraged to have one registered nurse or school nurse for every 750 students in the school district.

OAR 581-022-2220 clarifies that the school nurse is responsible for assessing and determining the health services required for the student to access their education and that the district health services plan must include a:

(h) Process to assess and determine a student's health services needs, including availability of a nurse to assess student nursing needs upon, during, and following enrollment with one or more new medical diagnose(s) impacting a student's access to education, and implement the student's individual health plan prior to attending as per 336.201.

Assessing Acuity

“Patient acuity is generally defined as a measurement of intensity of nursing care needed by a patient. For the proper development of a staffing plan for people receiving care, patient acuity is a particularly critical benchmark” (COCA., 2019). Acuity includes the measure of a patient’s severity of illness or medical condition(s), as well as the stability of physiological and psychological parameters of the condition, and the dependency needs and behaviors of the patient and the patient’s family (API Law Insider, 2023).

Acuity is a concept significantly related to patient safety under the premise that as acuity rises, more nursing resources are required to provide safe and effective care. This may include more intensive nursing time, continuous surveillance, or advanced nursing skills and related tasks that cannot be delegated (Jennings, 2008; ANA., 2017). Because the field of nursing is so diverse, there is no one universal acuity tool for all settings. However, there is agreement in literature as it relates to acuity measurement:

- Using a consistent model of measurement provides objective, consistent, and sustainable data (American Nurses Association, 2018; Ingraham & Powell, 2018)
- Acuity measurement should be quantifiable (American Nurses Association, 2020; Ingraham & Powell, 2018; Edelson et al., 2011)
- Acuity Assessment must be completed by a RN (Washington Department of Health, 2006; Kidd et al, 2014; Juve-Udina et al., 2020)
- Acuity should consider time and complexity of nursing (Jennings, 2008; Juve-Udina et al., 2020)
- All patient problems must be considered to appropriately assess acuity (Juvé-Udina et

al, 2019; American Nurses Association 2020; Kim et al., 2020)

- Social determinants of health impact complexity and acuity of an individual and their health outcomes (CSDH, 2008; Weir et al, 2020)
- Insufficient nursing numbers are directly associated with patient safety and outcomes (Carlson, 2017).

While in an acute care setting the mechanism of acuity assessments occur both in real time and retrospectively, in the school setting the data is typically collected over the course of the year to plan for subsequent academic years (American Nursing Association, 2017).

The National Association of School Nurses suggests that student acuity data be reviewed at minimum annually (Combe et al., 2015).

Assessment Tool

Assessing individual acuity is focused on determining the nursing intensity associated with patient (student) needs and the relationship to nursing priority, clinical judgment, and nursing time that these needs will take to address (Juve-Udina et al., 2019). Assessment of acuity status is needs focused and, while predictors may exist based on the main clinical need, the full acuity is based on the appraisal of compiled individual acuity components to make up a complete acuity assessment. Because the components are found in the nursing process and clinical complexity, it is necessary that a nurse performs the assessment (Juve-Udina et al., 2020; Kidd et al., 2014).

The development of an assessment tool for acuity is thereby based on the appraisal of individual acuity components that make up a whole assessment leading to an acuity assignment.

Acuity Component	Description
Complexity of Student	<ul style="list-style-type: none"> ● Comorbidities or multiplicity of conditions ● Health conditions complicated by psychosocial factors, developmental factors, cognitive factors or limiting factors ● Polypharmacy, number of medical devices and technology interventions ● Duration of treatment
Chronicity	<ul style="list-style-type: none"> ● Anticipated duration and continuation of health management and chronic disease maintenance ● Prolonged course of illness leading to other health complications ● Ongoing functional Impairments associated with health conditions
Severity of Condition(s)	<ul style="list-style-type: none"> ● Potential to be life-threatening ● Level of medical meaningfulness ● Potential for disease to be progressive ● Stage of disease ● Potential for complications ● Potential for hospitalization ● Potential to respond to therapeutic interventions ● Level of invasiveness of interventions

Acuity Component	Description
Stability of Condition (s)	<ul style="list-style-type: none"> ● Level to which a condition is stable or predictable ● The potential inference of a clinical pathway based on available medical history, and current clinical practices, guidelines and decisions ● Conditions that are fragile or friable vs. well controlled and maintained ● Conditions that have reliable therapeutic interventions. ● Coping mechanisms related to the diagnosis are stable
Level of Dependence (Level of Participation)	<ul style="list-style-type: none"> ● Level of ability to provide maintenance of chronic health needs. ● Level of self-management ● Level of dependence on the nurse ● Level of overall participation in self-care
Physiological Parameters	<ul style="list-style-type: none"> ● Physical factors, data or assessment information or characteristics that impact health decision-making ● Physical ability to participate in care
Psychological Parameters	<ul style="list-style-type: none"> ● Psychological or behavioral data, assessment, characteristics or factors that impact clinical decision-making ● Behavioral barriers to learning self-care skills ● Developmental ability to participate in care
Psychosocial Parameters	<ul style="list-style-type: none"> ● Social barriers to effective healthcare, health maintenance or health outcomes ● Limited support network as a barrier to health maintenance and developing self-care
Complexity of Nursing Care	<ul style="list-style-type: none"> ● Nursing assessment ● Technology ● Volume of tasks
Intensity of Nursing Care	<ul style="list-style-type: none"> ● Frequency and duration of nursing tasks ● Advanced level of nursing skill ● Intensity of nursing surveillance ● Delegation/Consultation

(AQHR, 2020; Jennings, 2008; ANA 2017; American Nurses Association, 2020; Ingraham & Powell, 2018; Edelson et al, 2011; Kidd et al, 2014; Juve-Udina et al., 2020; Juve-Udina et al., 2020; Kim et al., 2020; CSDH, 2008; Weir et al, 2020; Carlson, 2017; Welton, 2017, Mezzich & Solloum, 2008; Rinjbeek & Reys, 2021; Cordon et al, 2021; Bernell, 2016)

Line by Line Guidance

The following includes line by line guidance for the acuity tool with a short list of (non-exhaustive) examples related to each line. Nursing judgment should drive the assessment and final acuity measurement and any deviation should be noted in the rationale column.

Line 1: Student condition(s) is/are chronic (Example: condition is expected to last longer than 3 months, condition with intermittent flares or lifelong diagnosis)

A chronic disease is one that lasts longer than 3 months, and cannot be prevented by vaccines, cured by medications, or is otherwise self-limiting (Bernell & Howard, 2016). With acuity being need focused, acuity assessment will often focus on the main need, but all needs should be considered (Juve-Udina et al., 2019).

Example 1: Student has diagnosed mild intermittent asthma with maintenance meds at home and inhaler at school.

Example 2: Student has diagnosed depression and anxiety with polypharmacy.

Example 3: Student has a diagnosed severe allergic reaction to food items.

Line 2: Student's diagnosis is stable but has the *potential* to be life-threatening (Example: shunt dependent hydrocephalus, thermoregulation, bleeding disorder, risk of choking).

Student has a chronic disease that is stable, however planning and coordination must occur on behalf of the student to account for *potentially life-threatening complications*. Life threatening complications are potential complications that result in death without appropriate interventions (i.e., airway, breathing, respirations, cardiac, neurological, metabolic, hematologic).

Example 1: A student has shunt dependent hydrocephalus that does not require regular interventions but requires communication to parent and provider annually and training of staff annually to ensure potential risks and complications are identified secondary to injury or shunt failure.

Example 2: Student has a progressive cardiac aneurysm that is under Q 3 Mos surveillance, with multiple activity restrictions.

Example 3: Student has mild hemophilia B that requires rare factor infusions.

OR

Line 3: The stability of the student's condition(s) lends to the *possibility* of daily life-threatening events (Example: daily risk of aspiration, unstable cardiac diagnosis, history of status epilepticus, fragile mental health with suicidal ideation, fragile diabetic).

The student has a medical diagnosis with a level of stability that lends to the risk of life-threatening events daily.

Example 1: Student has an unstable seizure condition with multiple daily seizures, polypharmacy, Vagus nerve stimulation (VNS), oxygen, with a history of status epilepticus with hospitalization.

Example 2: Student has fragile diabetes with history of glucagon administration on multiple occasions or emergency interventions with recent hospitalization secondary to Type One Diabetes (T1D) complications.

Line 4: Student requires standard or individualized procedures, plans, or interventions consistent with basic first aid, or medication training (Example: standard seizure procedure, medication plan).

The student has a condition in which standard medical procedures or standard first aid can reasonably be expected to be used.

Example 1: Student has daily prescribed medication for Attention-Deficit Hyperactivity Disorder (ADHD.)

Example 2: Student has a seizure disorder with a history of infrequent self-limiting seizures with no emergency medications.

Line 5 Student requires individualized emergency procedures for potentially life-threatening events that deviate from standard first aid (Example: VNS, Epinephrine, Glucagon, Solu-Medrol)

The student requires a plan for emergency medication administration. This means medications/devices that fall into the category of lifesaving treatments.

Example 1: Student with Adrenal Insufficiency (AI), who has emergency solu-cortef prescribed.

Example 2: Student with T1D with Glucagon prescribed.

Example 3: Student has tonic-clonic seizures with intranasal midazolam

Line 6: Student requires focal nursing assessment to make clinical decisions about complex nursing interventions (Example: medication via feeding tube, trach care, suctioning).

Student requires procedures where ongoing nursing assessment is necessary to determine appropriate interventions.

Example 1: A student requires Pro Re Nata (PRN) trach care with assessment.

Example 2: Student with severe complex seizures that require multiple emergency interventions, including medication administration via feeding tube, VNS, or oxygen administration.

Line 7: Student requires complex, multi-step procedures that may be delegated or require direct nursing care (Example: feeding tube, catheter care, diabetes management).

Student requires complex care throughout the day with multiple daily interventions or multi-step interventions to manage a chronic disease for the student to access their education.

Example 1: A student with regularly scheduled catheter or ostomy care from a nurse or delegated by a RN to an Unlicensed Assistive Personnel (UAP).

Example 2: A student with T1D that is fully dependent on nursing staff and UAPs to test, treat, and provide response and monitoring to high or low blood glucose.

Line 8: Student's condition, disability, or health status requires consultation and/or surveillance by the RN.

Students with conditions, disabilities, or complex health status may or may not warrant an Individualized Health Plan (IHP) but may require nursing services by way of nursing consultation and/or nursing surveillance, or referral to care with collaboration with the provider.

Consultation

Nursing consultation is often provided through means of an Individualized Education Program (IEP) or Section 504 plan but may occur through any multidisciplinary or stakeholder team within the school setting.

Example 1: Student has a Section 504 plan for Inflammatory bowel disease (IBD). An IHP may not be required, however accommodation and coordination with providers may be necessary for exacerbations of symptoms and planning around absences and health related accommodations.

Example 2: Student has an IEP eligibility for Other Health Impairment (OHI) under muscular dystrophy. The nurse serves as an expert consultant on the IEP/504 team to provide information on the connections of MD to cognitive and language weaknesses as well as potential for mobility and respiratory impact and to provide recommendations on accommodations.

Example 3: Student has a functional neurological condition requiring consultation with providers and school staff to maintain student safety and wellbeing.

Example 4: Student has a remote history of TBI, and the RN participates in the IEP meeting related to accommodation planning and neurology communication.

Example 5: Student has Lupus and requires nursing consultation regarding medication side effects and potential complications.

Nursing Surveillance

Nursing surveillance is an essential management tool for complex students in provision of safety. In the school setting this may or may not be related to a student's IHP.

Example 1: Student with a history of stable seizures being weaned off of anti-seizure medication.

Example 2: Student with a history of organ transplant that requires increased provider and family communication during peak illness seasons.

Example 3: Student with ADHD who has frequent medication changes.

Example 4: Student has Failure to Thrive Issues, and nurse periodically assesses progress at school in collaboration with family and providers.







Example 5: Student has hypertension, requiring periodic daily blood pressure assessment at school.

Line 9: Student has one or more assessed social determinants of health (SDOH) impacting health maintenance or potential complications (Example: economic disadvantage, lack of transportation, lack of healthcare access).

Social determinants of health (SDOH) are nonmedical factors that impact health and may influence health outcomes. These are the conditions in which people are born, live, grow, work and age. SDOH largely impact health behaviors, living conditions, daily life, and health maintenance. These forces also significantly include systemic influences such as social policies, societal norms, climate change, political systems and systemic description and racism, as well as social economics and distribution of resources (CDC, 2022; USDHHS, 2021).

Many social determinants are inextricably linked with one another and inevitably connected to inequity and stress, which both pose a major impact on health and well-being. Research shows that social determinants are more significant in influencing health than access to health care alone (WHO, 2022).

The Oregon Health Authority (OHA) in conjunction with the Department of Human Services (DHA) and Oregon Pediatric Improvement Partnership (OPIP) sanctioned an exploratory group to identify health complexity in subsets of Oregon's pediatric population. Health complexity is based on the combination of medical complexity and social complexity (OHA, 2018).

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
					
<ul style="list-style-type: none"> • Employment • Income • Expenses • Debt • Medical Bills • Economic Support 	<ul style="list-style-type: none"> • Housing • Transportation • Safety • Parks • Playground • Walkability 	<ul style="list-style-type: none"> • Literacy • Language • Early Childhood Education • Vocational Training • Higher Education 	<ul style="list-style-type: none"> • Hunger • Access to Healthy Options • Food Scarcity 	<ul style="list-style-type: none"> • Social Integration • Support Systems • Community Engagement • Discrimination 	<ul style="list-style-type: none"> • Health Coverage • Provider Availability • Quality of Care • Provider Linguistic and Cultural Competency

Assessment

In assessing the presence of SDOH, to correlate these determinants to the impact on the stability and outcomes of the students' health condition(s) being managed in the school setting, the increased medical complexity these determinants may provoke may lead to an increased need for school nursing services. A SDOH may not have a direct impact on the need for school nursing services and may be mitigated by protective factors or community assets. As such, a score in this category should only be applied if it is determined that the SDOH increases the medical complexity and subsequently the need for school nursing services.

Example 1: A student with T1D experiences food insecurity at home resulting in difficulty managing diet that contributes to instability of blood glucose levels. [Economic Stability & Food]

Example 2: A student with asthma resides in an industrial area with poor Air Quality Index, and the apartment complex contains mold and mildew impacting asthma frequency and severity. [Neighborhood and Physical Environment & Economic Stability]

Example 3: Student with chronic mental health diagnoses resides in a rural community with no mental health providers, limited family transportation, no access to public transportation, and no access to the internet for telehealth. [Health Care Systems & Economic Stability].

Example 4: Student with obesity, type 2 diabetes, hypertension and hyperlipidemia lives in a high violence neighborhood where it is unsafe to access outdoors and is alone in the evening, resorting to processed microwaveable meals due to parents work schedule. [Neighborhood & Physical Environment & Community and Social Context]

Example 5: Student with celiac disease resides in a multi child household, single parent with WIC and food stamps that limit the amount and type of groceries purchased and the family is unable to provide gluten free food to mitigate symptoms resulting in FTT, GI distress and anemia. [Food & Economic Stability]

Example 6: Student has one incarcerated parent and one chronically ill parent who are collectively unable to get student to routine provider appointments to renew anti-seizure medications. Parents decline signing a release for correspondence to the neurology clinic and the student is without medication and seizures are occurring with increasing frequency. [Community & Social Context, Health Care Systems]

In population settings SDOH are often assessed through demographics, atlases, indexes, rankings and roadmaps. While these are critical in determining overall population need, acuity, and risks, narrowing SDOH to individuals refines the measure in which these factors are assessed more specifically to gender, race, ethnicity, socioeconomic positions, residential and community context and socioeconomic position (RHIH, 2023). While there are many tools to assess SDOH, the focus in the school setting is to evaluate in the context of health outcomes, and immediate health impact. This may be done in a formal social needs screening via a formally vetted tool, or informally assessed in information finding, or interaction or assessment of family and student (Moen et al., 2020; Bernazzani, 2016).

SDOH	Factors	Potential Health Related Impact	Assessment Indicators	Example
Economic Stability	<p>Families without steady employment are more likely to live in poverty</p> <p>People with disabilities are more likely to experience financial instability</p>	Income provides social protection and security, and impacts every element of living conditions, housing, basic amenities, social inclusion, stress, and access to care as well as social stigmatization and discrimination.	<p>Student is helping to support family</p> <p>Student/parent reports parental unemployment</p>	<p>Student experiences Chronic houselessness</p> <p>Parents experience chronic unemployment and subsequent lack of resources or financial stress</p>
Neighborhood and Physical Environment	<p>Families in unsafe neighborhoods have lower levels of community access, and exercise.</p> <p>Environments that are not walkable limit access to community resources and exercise.</p>	Neighborhood and Physical environment may impact routine growth and development, impact chronic disease such as asthma, or lead to decreased health maintenance related to limited outdoor access and or exercise.	<p>Polluted Air (indoor or outdoor)</p> <p>Dangerous neighborhoods</p> <p>Limited access to exercise</p> <p>Limited access to community</p>	<p>Child resides in an industrial area with chronically marginalized Air Quality Index</p> <p>Child resides in a home with chronic indoor smoking or chronic substance use.</p> <p>Child resides in a home</p>

SDOH	Factors	Potential Health Related Impact	Assessment Indicators	Example
	Households with lack of environmental stability pose specific risk to children as it relates to air quality secondary to pollution, mold/mildew, chemical exposure of second and third hand smoke exposure.	<p>Neighborhoods that are unsafe due to violence increase cortisol significantly.</p> <p>Neighborhoods that are unwalkable due to built environment issues impact access, specifically when public transportation is also a barrier.</p>	<p>Lack of public transportation.</p> <p>Lack of family transportation</p>	<p>with mold, mildew, or infestations.</p> <p>Child resides in a high violence community that limits outdoor access and poses a threat to safety.</p> <p>Family has no transportation to medical appointments.</p> <p>Community has no resources in walking distance and no public transportation. And the family has limited transportation access.</p>
Education	<p>People with higher levels of education are more likely to live healthier lifestyles related to increased access, information and income.</p> <p>Children in poorly performing schools have increased stress and less potential for college.</p>	<p>Lack of education, increased stress (cortisol) and poverty are all major factors in health maintenance.</p> <p>Education level is often congruent with health literacy level.</p> <p>Individuals with higher education live longer because they are inextricably connected to access income, social connections and opportunities.</p>	<p>Health behaviors illustrate lack of education or health literacy.</p> <p>Family has limited income unless both parents are working multiple jobs. Parents have limited income options related to lack of high school education.</p>	<p>Child with T1D who runs chronically hyperglycemic brings only high carbohydrate foods for lunches and snacks despite nursing education.</p> <p>Single parent household with primary parent working multiple jobs, which leaves student unsupervised overnight and lends to poor sleep hygiene.</p>
Food	<p>Food scarcity/hunger pose major impacts to family health and wellbeing</p> <p>Food scarcity is an indicator of under nutrition, but also a flag for poverty.</p>	<p>Good nutrition is essential to growth and development, health maintenance and chronic disease prevention.</p> <p>In addition, many chronic conditions are impacted by food and nutrition.</p> <p>When access to healthy foods are limited, high calorie processed foods are often used in place.</p>	<p>Student reports no food at home</p> <p>Student reports access to food only when they are able to obtain “boxes from church”</p>	<p>Family relies on food stamps for food but runs out before the end of the month resulting in lack of food access days a month.</p> <p>Parents report being unable to obtain food from the local food pantry because of disability and lack of transportation.</p>

SDOH	Factors	Potential Health Related Impact	Assessment Indicators	Example
		Food scarcity and insecurity are also major stressors and factors in overall familial health. Children who are hungry are sick more often, miss more school, and are less able to engage in learning when at school.		Literacy level or language barrier has prevented family from applying for free and reduced lunch. Student with a chronic condition requiring specialized diet for health maintenance is unable to access appropriate food (i.e., celiac disease, T1D, PKU)
Community and Social Context	People's relationships and interactions with friends, communities and family, have a major impact on their well-being.	<p>Positive relationships reduce stress (cortisol)</p> <p>Children with chronic diseases rely on familial support for disease maintenance.</p> <p>Faith communities often provide benevolent support to low income families</p> <p>Discrimination has a major impact in access to environment, community, health and education</p>	<p>Incarcerated parent</p> <p>Chronic Discrimination</p> <p>Chronic bullying</p> <p>Lack of family support network at home</p> <p>Lack of family collaboration with school or providers.</p> <p>Chronic abuse and neglect occurring at home</p>	<p>Students with chronic health maintenance needs are alone in the evenings to eat and medicate and regulate sleep hygiene.</p> <p>Student reports chronic bullying due to gender identification and "hides" in the nurse's offices chronically.</p>
Health Care Systems	Health care systems reflect several layers of access for health prevention and health maintenance, this includes access to health insurance, ability to pay for health care, access to providers who accept health insurance, availability of providers accepting patients, ability to schedule, access to specialists, access to providers geographically.	Access to health care and maintenance are critical for health prevention activities, maintenance of chronic disease and emergency access, when care is limited by financial, logistical or geographical access it poses major barriers to health and wellness.	<p>Student/family report lack of access to care.</p> <p>Student/family reports being uninsured or underinsured.</p> <p>Nurse assesses no reasonable health care access within geographical proximity.</p> <p>Family reports barriers to telehealth when it is the only option.</p>	<p>Parents have chronic health needs that are under addressed.</p> <p>Student has no access to care in the geographical vicinity because of rurality.</p> <p>Student has lack of access to mental health care.</p> <p>Student is on the Oregon Health Plan, but no dentists within 50 mile radius are accepting new OHP patients.</p>

Conclusion

The Acuity Tool and this corresponding guidance document were created in a collaborative effort between the Oregon Department of Education (ODE) and the Oregon School Nurses Association (OSNA). These documents were designed to support registered nurses (RN) working in school settings in Oregon to assess student acuity and to increase accuracy and reliability of school district data collected by ODE. If you have any questions please email Ely Sanders, School Health Services Specialist at ely.sanders@ode.oregon.gov

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