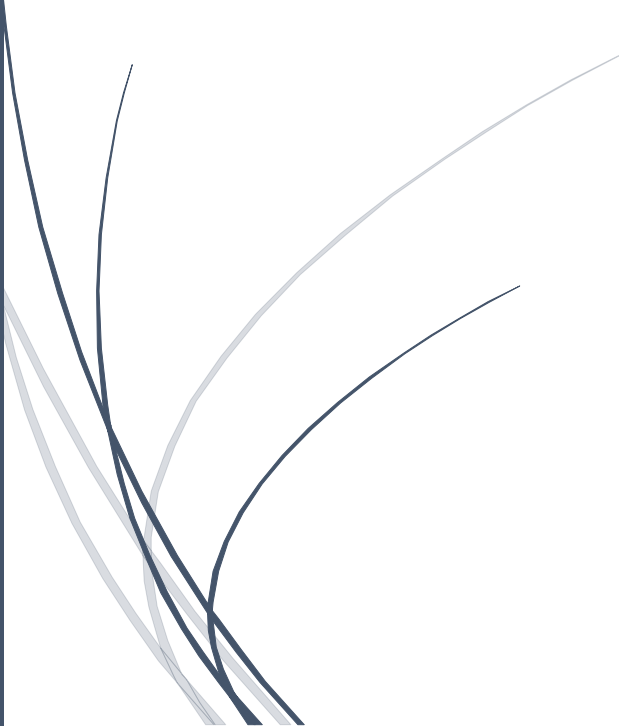


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6/9/2020

Evidence Tables

Core A and Core B

Several thin, curved lines in shades of blue and grey originate from the bottom left and curve upwards and to the right.

Lauren Koen, BSN, RN, MPA
KATHY AUBERRY, DNP, RN, CDDN

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GENERAL CORE TRAINING EVIDENCE TABLES

Evidence Table A: Scope and Significance of Health Issue/ Priority Group

Health Concerns for People with I/DD		
Author(s), Date	Research Method	Findings Relevant to Scope and Magnitude of Health Issue
(IFSSA, 2018) <i>Recommendations</i>	<ul style="list-style-type: none"> • Mortality Review Triage Team (MRTT) reviews all information 30 days prior to death or hospital admission • Documentation in mortality review includes: provider documents, provider internal investigation, any abuse and neglect complaints, medical records, case manager notes, incident reports, staff training records, death certificate, and autopsy (if available) • MRTT creates mortality brief of each case to present to Mortality Review Committee (MRC) • MRC meets monthly to review all mortality cases to determine any trends and make suggestions for possible changes in care • MRC is composed of physician, nurse, and staff educated in program delivery and expectations 	<ul style="list-style-type: none"> • Ten service areas needing improvement <ul style="list-style-type: none"> ○ 911 Issues <ul style="list-style-type: none"> ▪ Staff called a colleague first rather than 911 in an emergency ○ Behavior Support Plan ○ Cardiopulmonary Resuscitation (CPR) Certification Not Available or Not Current ○ Change in Behavior or Medical Condition ○ Environmental Issues ○ General Recommendations ○ Individual-Specific Plans (25% of recommendations) <ul style="list-style-type: none"> ▪ Lack of documentation that staff were trained on client's individual plan ○ Medication or Medical Issue (12% of recommendations) <ul style="list-style-type: none"> ▪ Provider didn't recognize change in medical condition ▪ Not understanding drug interactions ▪ Not documenting critical info ▪ Not contacting physician when required ○ Regulations Not Met ○ Risk Plans ○ Wellness Coordination (29% of recommendations) <ul style="list-style-type: none"> ▪ Lack of needed risk plans ▪ Insufficient tracking of vitals or BS by staff; not clear in plan ▪ Wellness and risk plans having different directives for same issue; lack of clarity and consistency ▪ Nurse is to review all meds for possible medication interactions
(IFSSA, 2018) <i>Mortality Review</i>	<ul style="list-style-type: none"> • Mortality Review Triage Team (MRTT) reviews all information 30 days prior to death or hospital admission 	<ul style="list-style-type: none"> • Mortality rate for waiver and non-wavier was 11.9 deaths per 1,000 • Mortality rate has been steadily trending down since 2014 • Total 389 deaths in 2017, 38% in community integration and habilitation waiver, 32% in nursing facilities, 20% in supported group living (SGL and waiver trending up since 2014 and nursing facility trending down)

	<ul style="list-style-type: none"> • Documentation in mortality review includes: provider documents, provider internal investigation, any abuse and neglect complaints, medical records, case manager notes, incident reports, staff training records, death certificate, and autopsy (if available) • MRC is composed of physician, nurse, and staff educated in program delivery and expectations 	<ul style="list-style-type: none"> • Highest rates of mortality for women aged 50-79 and men aged 40-69; general population IN and nationally men ages 60-89 and women 70-99 • Primary Causes of death <ul style="list-style-type: none"> • Disease of respiratory system 27% and 35% of those were due to aspiration <ul style="list-style-type: none"> ○ Compared to general population of IN at 11% and nationally at 10% • Disease of circulatory 25% and 64% of those were related to heart failure • Disease of nervous system 10% and 31% of those were related to seizure • Cancer 6% • Infections 8% • Except for the age group of 0-9 and 90-99, conditions of both the Circulatory and Respiratory systems comprised two of the top three causes of death in every age group of individuals in BDDS services. • Fatal Four: Aspiration, bowel obstruction, dehydration and seizures
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Evidence Table B: Training Methods/ Current Material

Author(s), Date	Research Method	Findings Relevant to Selecting Priority Group
(Auberry, Wills, and Shaver, 2017)	<ul style="list-style-type: none"> • DSPs with current Living in the Community Med Admin training and less than one year experience • DSPs participated in day long training in a simulation lab • Quasi experimental • Pre and post Likert scale test for each skill learned to measure DSP confidence rating • Pre and post test to measure knowledge attained by DSPs for each skill • Training material included oral medication, GT, diabetes and insulin admin 	<ul style="list-style-type: none"> • Med management and insulin admin improved by 36% after simulation training and debriefing. • GT med admin improved by 10% after training • Confidence in med management, GT med admin and insulin med admin increased significantly post training. • Mixed reviews from DSPs on the helpfulness of reflection activities between trainings • <u>Qualitative results</u> <ul style="list-style-type: none"> ○ DSPs stated they felt they had more of an understanding of the meds they were passing rather than just being “pill-poppers” ○ Expressed better understanding for necessity of GT ○ Expressed better understanding of correct insulin admin
DDNA Guidelines	<ul style="list-style-type: none"> • Utilized State Nurses Practice Act statutes, related IDD program structures and/or regulation, and prevailing 	<ul style="list-style-type: none"> • Advocate for standardized training curriculum • Use a competency-based approach with face to face med admin assessment with a nurse • P 17 has listed topics that should be covered on core training material <ul style="list-style-type: none"> • Ethical and Legal issues: rights of individuals, ensuring privacy, maximizing independence

	<p>service providers and agency practices</p>	<ul style="list-style-type: none"> • Role and responsibility of Trained Unlicensed Person (TUP) • Safety: infection control, preventing med errors, reporting errors, storing meds • Communication and Documentation: MAR, recoding vital signs • Medication and Health Fundamentals: body systems, fundamentals of vital signs, common health issues and treatment, medication categories, commonly mistaken meds, common actions and effects of meds, factors effecting how body processes meds, handling special health concern • Med Admin: forms of meds, route, how to administer, rights of med admin, admin techniques • Demonstration of med admin <p>• P. 33 has a checklist for DSPs to pass meds</p>
<p>Bogenschutz, Nord, & Hewitt, 2015</p>	<ul style="list-style-type: none"> • Randomized control study with 14 different organizations involving 141 different sites • Sites at each organization were assigned a number and a computer system randomly determined which sites were in the control group and which in intervention group; each organization's sites had half in the control and half in the intervention • Data was collected via a site level survey and DSP surveys all randomly assigned • Intervention: control sites participated in organization's typical training and experimental group participated in yearlong competency training • Training included technical assistance training, 35 different online trainings (some of which included health and safety), pre and posttests with each online 	<ul style="list-style-type: none"> • After accounting for other factors, the control group experienced a 10.3% average increase in DSP turnover while the intervention group experienced a 6% decrease in DSP turnover for a total of 16.3% difference between the two groups. • Competency based trainings over the period of a year decrease DSP turnover • Per crude estimates of DSP turnover and cost of training, competency-based training could save a company \$21,500 which could off-set the cost of implementing these trainings

	training, and interactive trainings every 2 months utilizing videos, real stories, and discussions	
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CORE A EVIDENCE TABLES

Evidence Table C: Universal Precautions, Inflammation, and Infection

Author(s), Date	Findings Relevant to Selecting Priority Group
<p>(CDC, 2018) Guideline for Hand Hygiene in Health-Care Settings</p>	<p>Standard Precautions</p> <ul style="list-style-type: none"> • “Perform Hand Hygiene • Use PPE whenever possible exposure to infectious material • Follow Respiratory Etiquette • Properly Handle and clean patient care equipment • Handle laundry carefully • Follow safe injection practices and use of sharps containers”
<p>(CDC, 2002) Standard Precautions for All Patient Care</p>	<ul style="list-style-type: none"> • Proper handwashing technique; scrub for 15-20 seconds • When to use soap versus hand sanitizer • When to use gloves
<p>(Drexler, 2010) What You Need to Know About Infectious Disease</p>	<ul style="list-style-type: none"> • Microbes enter the body through nose, eyes, mouth, urogenital openings, and cuts in the skin. • Common vehicles: Contaminated food, water, blood, or other vehicles may spread pathogens. Microorganisms like E. coli and Salmonella enter the digestive system in this manner.
<p>(Mayo Clinic, 2018) Handwashing Do’s and Don’t’s</p>	<p>Hand washing steps</p> <ul style="list-style-type: none"> • “Wet your hands with running water — either warm or cold. • Apply liquid, bar or powder soap to a cupped hand. • Lather well. • Rub your hands, palm to palm, vigorously for at least 20 seconds. Remember to scrub all surfaces, including the backs of your hands, wrists, between your fingers and under your fingernails. • Rinse well. • Dry your hands with a clean towel. • Use the towel to turn off the faucet.”
<p>(OSHA, 2011) Blood Borne Pathogens and Needle Stick Prevention</p>	<ul style="list-style-type: none"> • “Bloodborne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV)” • “Every agency with potential for exposure should have a procedure for handling hazardous material, use of sharps containers, and a protocol for post exposure evaluation and follow-up” • Follow Universal precautions • Provide PPE • Provide information and training to all workers regarding blood borne pathogen prevention for exposure and what to do if exposed

<p>(CDC, 2016) The ABC's of Hepatitis</p>	<ul style="list-style-type: none"> • Hepatitis A transmission through fecal matter via person to person contact, ingesting contaminated food and drink, or sexual contact with an infected person <ul style="list-style-type: none"> • No potential for chronic infection • Hepatitis B transmission through blood, semen and other bodily fluids: sexual contact, sharing needles, accidental needle stick • Hepatitis C transmission through blood: sharing needles or accidental needle stick • Symptoms of all Hepatitis infections include: Fever, Fatigue, Loss of appetite , Nausea, Vomiting, Abdominal pain, Gray-colored bowel movements , Joint pain, Jaundice
<p>(American Lung Association, 2018) Learn About Tuberculosis</p>	<ul style="list-style-type: none"> • Tuberculosis is caused by mycobacterium tuberculosis • Latent TB means that a person was exposed to the bacterium but does not have an active infection; cannot infect others • Active TB means they have an active infection and can transmit disease via air; must take medication as ordered to cure
<p>(Evans, Repasky & Fisher, 2015)</p>	<ul style="list-style-type: none"> • Increase in core body temperature by 1-4 degrees Celsius is correlated with improved survival with most infections. • Use of antipyretics to diminish fever correlates with 5% increase in mortality rates among humans with influenza • Uncontrolled fever with extreme inflammatory response is associated with worse outcomes in the case of sepsis and neurological diseases
<p>(Mayo Clinic, 2018) Fever Treatment: Quick Guide to Treating a Fever</p>	<ul style="list-style-type: none"> • For healthy adults age 18 and older, rest and drink plenty of fluids for fever up to 102 degrees Fahrenheit. Call doctor if also shortness of breath, stiff neck, severe headache, or other unusual symptoms. No need for antipyretics • For healthy adults age 18 and older, take antipyretics for fever over 102. Call doctor if fever does not come down with medication or consistently over 103. • Treatment will vary for adults taking chemotherapy or adults that are immunocompromised
<p>(Mayo Clinic, 2016) Diarrhea: Diagnosis and Treatment</p>	<ul style="list-style-type: none"> • Most diarrhea is acute and will resolve on its own • Diarrhea can be caused by antibiotics or other medications • If diarrhea is caused by chronic condition, consult with a specialist for treatment • The best treatment is replacing lost electrolytes and fluids through water, juice and broth • Avoid certain foods that could be cause such as dairy, fatty foods, spicy foods, and high-fiber foods • Antidiarrheals may help but if bacterial or parasitic infection can actually worsen <ul style="list-style-type: none"> ○ Want the body to expel the bacteria or parasite causing the diarrhea so antidiarrheals will prevent this and possibly worsen infections • Take probiotics to restore natural bacteria in gut, especially when taking antibiotics.
<p>(CDC, 2018) Strep Throat: All You Need to Know</p>	<ul style="list-style-type: none"> • Strep throat is caused by a bacterial infection and is treated with antibiotics unlike most causes of sore throat which are from viral infections • Signs and symptoms of Strep <ul style="list-style-type: none"> • “Sore throat that can start very quickly • Pain when swallowing • Fever • Red and swollen tonsils, sometimes with white patches or streaks of pus • Tiny, red spots (petechiae — pronounced pi-TEE-kee-eye) on the roof of the mouth (the soft or hard palate) • Swollen lymph nodes in the front of the neck”

	<ul style="list-style-type: none"> • The following symptoms suggest a virus is the cause of the illness instead of strep throat: <ul style="list-style-type: none"> • “Cough • Runny nose • Hoarseness (changes in your voice that makes it sound breathy, raspy, or strained) • Conjunctivitis (also called pink eye)” • Only a rapid strep test or throat culture can determine if group A strep is the cause. A doctor cannot tell if someone has strep throat just by looking at his or her throat. • People with strep throat should stay home from work, school, or daycare until they: <ul style="list-style-type: none"> • No longer have a fever AND Have taken antibiotics for at least 24 hours
<p>(CDC, 2018) Key Facts About Influenza (Flu)</p>	<ul style="list-style-type: none"> • Flu is caused by various forms of the influenza virus and is a respiratory illness that can infect nose throat and lungs • “Flu can cause mild to severe illness, and at times can lead to death. Flu is different from a cold. Flu usually comes on suddenly. People who have flu often feel some or all of these symptoms: <ul style="list-style-type: none"> • fever* • cough • sore throat • runny or stuffy nose • body aches • headache • chills • fatigue • sometimes diarrhea and vomiting • *It’s important to note that not everyone with flu will have a fever.” • Doctor may or may not do a rapid flu test since test results often do not change treatment • There is no cure for flu • Flu vaccine can prevent certain types of flu virus; typically, more dangerous/ deadly strains of virus • Antivirals can lessen the severity of symptoms and may shorten length of illness by 1-2 days; does not cure flu, the body must fight off flu through immune system. They should be started within 2 days of contracting flu. Not all people need antivirals, consult with doctor. Antivirals are recommended for those at higher risk for serious flu complications • People are contagious 1 day prior to illness and 5 to 7 days after symptoms start
<p>(CDC, 2018) Pneumonia</p>	<ul style="list-style-type: none"> • Pneumonia is an infection in the lungs caused by a virus, bacteria, or fungus • Common symptoms include difficulty breathing, fever, and cough • Treatment will vary depending on what is causing the pneumonia • Pneumonia can be mild to severe and may require hospitalization
<p>(ALA 2019) Pneumonia Symptoms and Diagnosis</p>	<ul style="list-style-type: none"> • The signs and symptoms of pneumonia may include: <ul style="list-style-type: none"> • “Cough, which may produce greenish, yellow or even bloody mucus • Fever, sweating and shaking chills • Shortness of breath • Rapid, shallow breathing

	<ul style="list-style-type: none"> • Sharp or stabbing chest pain that gets worse when you breathe deeply or cough • Loss of appetite, low energy, and fatigue • Nausea and vomiting, especially in small children • Confusion, especially in older people” <p>• Pneumonia is diagnosed through medical history, do a physical exam, and run some tests. Tests may include sputum culture or chest x-ray</p>
(Mayo Clinic, 2018) Athlete’s Foot	<ul style="list-style-type: none"> • Preventing athlete’s foot includes: <ul style="list-style-type: none"> • “Keep your feet dry, especially between your toes. Go barefoot to let your feet air out as much as possible when you’re home. Dry between your toes after a bath or shower. • Change socks regularly. If your feet get very sweaty, change your socks twice a day. • Wear light, well-ventilated shoes. Avoid shoes made of synthetic material, such as vinyl or rubber. • Alternate pairs of shoes. Don’t wear the same pair every day so that you give your shoes time to dry after each use. • Protect your feet in public places. Wear waterproof sandals or shoes around public pools, showers and lockers rooms. • Treat your feet. Use powder, preferably antifungal, on your feet daily. • Don’t share shoes. Sharing risks spreading a fungal infection.”
(CDC, 2019) Conjunctivitis	<ul style="list-style-type: none"> • Signs and symptoms include <ul style="list-style-type: none"> • “Pink or red color in the white of the eye(s) • Swelling of the conjunctiva (the thin layer that lines the white part of the eye and the inside of the eyelid) and/or eyelids • Increased tear production • Feeling like a foreign body is in the eye(s) or an urge to rub the eye(s) • Itching, irritation, and/or burning • Discharge (pus or mucus) • Crusting of eyelids or lashes, especially in the morning • Contact lenses that feel uncomfortable and/or do not stay in place on the eye” • Caused by bacteria, virus and allergens
(CDC, 2018) Be Antibiotics Aware	<ul style="list-style-type: none"> • Over use of antibiotics can cause antibiotic resistance in bacteria • Side effects include: <ul style="list-style-type: none"> • “rash, • dizziness, • nausea, • diarrhea, and • yeast infections.”

Evidence Table D: Vital Signs and Emergencies

Author(s), Date	Findings Relevant to Selecting Priority Group
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<p>(Mayo Clinic, 2018) What's a normal resting heart rate</p>	<ul style="list-style-type: none"> • Average heart rate is 60-100. Resting HR may be as low as 40 in a trained athlete • Assess via radial pulse on wrist on the same side as the thumb • Count number of pulses in 15 seconds and multiply the number by 4 • Many factors can alter normal heart rate ranges such as: <ul style="list-style-type: none"> • “Age • Fitness and activity levels • Being a smoker • Having cardiovascular disease, high cholesterol or diabetes • Air temperature • Body position (standing up or lying down, for example) • Emotions • Body size • Medications”
<p>(Mayo Clinic, 2018) Low Blood Pressure Readings</p>	<ul style="list-style-type: none"> • Below 90 systolic and below 60 diastolic • Signs and symptoms include <ul style="list-style-type: none"> • “Dizziness or lightheadedness • Fainting (syncope) • Blurred vision • Nausea • Fatigue • Lack of concentration” • Causes: dehydration, heart problems, lack of nutrition, and sepsis
<p>(American Heart Association, 2017) Understanding Blood Pressure Readings</p>	<ul style="list-style-type: none"> • Normal Blood Pressure reading is less than 120/80 • Hypertension is over 130/80 • Hypertension stage 2 140-90 • Hypertension crisis over 180/120
<p>(Mayo Clinic, 2018) Hypoxemia</p>	<ul style="list-style-type: none"> • Normal pulse oximeter range 95-100%. Any reading under 90% is considered low.
<p>(American College of Emergency Physicians, 2018) When to Call 911</p>	<ul style="list-style-type: none"> • When to call 911 <ul style="list-style-type: none"> • “Severe difficulty breathing, especially that does not improve with rest. • Chest pain • A fast heartbeat (more than 120-150) at rest especially if associated with shortness of breath or feeling faint • You witness someone faint/pass out or someone is unresponsive (comatose) • Difficulty speaking, numbness, or weakness of any part of the body • Sudden dizziness, weakness or mental changes (confusion, very odd behavior, difficulty walking) • Sudden blindness or vision changes • Heavy bleeding from your mouth, nose, vagina or bottom

	<ul style="list-style-type: none"> • Bleeding from any wound that won't stop with direct pressure • Broken bones visible through an open wound, or a broken leg • Drowning • Choking • Severe burns • Allergic reaction, especially if there is any difficulty breathing • Extremely hot or cold • Poisoning or drug overdose • New severe headache • Sudden intense severe pain • Someone is threatening to hurt or kill themselves or someone else”
(Mayo Clinic, 2018) Anaphylaxis	<ul style="list-style-type: none"> • Most common causes of anaphylaxis include <ul style="list-style-type: none"> • “Certain medications, including antibiotics, aspirin and other over-the-counter pain relievers, and the intravenous (IV) contrast used in some imaging tests • Stings from bees, yellow jackets, wasps, hornets and fire ants • Latex • The most common anaphylaxis triggers in children are food allergies, such as to peanuts, and tree nuts, fish, shellfish and milk.” • Signs and symptoms include <ul style="list-style-type: none"> • “Skin reactions, including hives and itching and flushed or pale skin • Low blood pressure (hypotension) • Constriction of your airways and a swollen tongue or throat, which can cause wheezing and trouble breathing • A weak and rapid pulse • Nausea, vomiting or diarrhea • Dizziness or fainting” • Administer an Epi pen if you have one and seek medical attention immediately, even if the epi pen improves the symptoms.

Evidence Table E: Fatal Four and Sepsis

Author(s), Date	Findings Relevant to Selecting Priority Group
(Baily, 2017) The Fatal Four	<ul style="list-style-type: none"> • Fatal four often go undiagnosed in people with IDD because people do not recognize s/s • Aspiration is the inhalation of food, fluid, medication or other foreign material into the trachea and lungs during or following swallowing. <ul style="list-style-type: none"> • People with IDD have increased risk factors for aspiration including decreased alertness, chronic chest congestion, and behavioral issues related to eating. • Aspiration can lead to pneumonia, which often goes undiagnosed until symptoms are serious

	<ul style="list-style-type: none"> • Dehydration occurs when the body loses more fluid than it produces. <ul style="list-style-type: none"> • Dehydration can cause decreased cognitive ability, constipation, increased seizure frequency, and in extreme cases coma and death. • People that need assistance drinking or have impaired ability to feel thirsty are at an increased risk • The most common causes of preventable death in people in community settings with IDD are due to complications related to constipation, such as bowel obstruction. <ul style="list-style-type: none"> • Many medications can cause constipation and the longer it goes unaddressed, the more difficult it is to treat • Individuals with IDD have a higher incidence of seizure disorders or epilepsy.
<p>(Cedars-Sinai, 2019) Aspiration from Dysphagia</p>	<ul style="list-style-type: none"> • Dysphagia is difficulty swallowing which can cause aspiration • About 50% of people with dysphagia have aspiration • Some signs and symptoms include <ul style="list-style-type: none"> • “Feeling that food is sticking in your throat or coming back into your mouth • Pain when swallowing • Trouble starting a swallow • Coughing or wheezing after eating • Coughing while drinking liquids or eating solids • Chest discomfort or heartburn • Fever 30 minutes to an hour after eating • Too much saliva • Feeling congested after eating or drinking • Having a wet-sounding voice during or after eating or drinking • Shortness of breath or fatigue while eating • Repeated episodes of pneumonia” • People may have silent aspiration meaning no signs and symptoms • Some things to treat dysphagia can help prevent aspiration such as <ul style="list-style-type: none"> • “Changing your diet (such as thickening liquids or not having liquids) • Changing your position while eating (such as eating upright, tilting your head back, or bending your neck forward) • Not eating in bed • Eating smaller bites of food • Eating with supervision • Not talking while eating • Not being distracted during meals • Eating when you are most alert • Using tools such as straws • Doing exercises to strengthen your lips and tongue • Using special swallowing methods”
<p>(Mayo Clinic Staff, 2018) Dehydration</p>	<ul style="list-style-type: none"> • Dehydration can be caused by vomiting and diarrhea, fever, excessive sweating, decreased fluid intake, and increased urination. • Some signs and symptoms include:

	<ul style="list-style-type: none"> • “Extreme thirst • Less frequent urination • Dark-colored urine • Fatigue • Dizziness • Confusion” • Call a doctor if: <ul style="list-style-type: none"> • “Has had diarrhea for 24 hours or more • Is irritable or disoriented and much sleepier or less active than usual • Can't keep down fluids • Has bloody or black stool” • Older adults and those with certain chronic illnesses are at an increased risk
<p>(Mayo Clinic, 2018) Constipation</p>	<ul style="list-style-type: none"> • Chronic constipation is infrequent bowel movements or difficult passage of stools that persists for several weeks or longer. • Signs and symptoms include <ul style="list-style-type: none"> • “Passing fewer than three stools a week • Having lumpy or hard stools • Straining to have bowel movements • Feeling as though there's a blockage in your rectum that prevents bowel movements • Feeling as though you can't completely empty the stool from your rectum • Needing help to empty your rectum, such as using your hands to press on your abdomen and using a finger to remove stool from your rectum” • Some causes of constipation include blockages in the colon from anal fissure, bowel obstruction, narrowing of the colon or certain cancers • Some other causes include <ul style="list-style-type: none"> • “Inability to relax the pelvic muscles to allow for a bowel movement (anismus) • Pelvic muscles don't coordinate relaxation and contraction correctly (dyssynergia) • Weakened pelvic muscles • Neurological disorders such as neuropathy, Parkinson's, multiple sclerosis • Diabetes, hyperthyroidism and hypothyroidism” • Risk factors include <ul style="list-style-type: none"> • “Being an older adult • Being a woman • Being dehydrated • Eating a diet that's low in fiber • Getting little or no physical activity • Taking certain medications, including sedatives, narcotics, some antidepressants or medications to lower blood pressure • Having a mental health condition such as depression or an eating disorder” • Prevention of constipation

	<ul style="list-style-type: none"> • “Include plenty of high-fiber foods in your diet, including beans, vegetables, fruits, whole grain cereals and bran. • Eat fewer foods with low amounts of fiber such as processed foods, and dairy and meat products. • Drink plenty of fluids. • Stay as active as possible and try to get regular exercise. • Try to manage stress. • Don't ignore the urge to pass stool. • Try to create a regular schedule for bowel movements, especially after a meal. • Make sure children who begin to eat solid foods get plenty of fiber in their diets.”
<p>(Mayo Clinic, 2018) Seizures</p>	<ul style="list-style-type: none"> • “A seizure is high electrical activity suddenly occurring in the brain. It can cause changes in your behavior, movements or feelings, and in levels of consciousness.” • Seizures typically last from 30 seconds to two minutes • Seizures lasting over 5 minutes are medical emergencies • Symptoms include <ul style="list-style-type: none"> • “Temporary confusion • A staring spell • Uncontrollable jerking movements of the arms and legs • Loss of consciousness or awareness • Cognitive or emotional symptoms, such as fear, anxiety or déjà vu” • Call 911 if <ul style="list-style-type: none"> • “The seizure lasts more than five minutes. • Breathing or consciousness doesn't return after the seizure stops. • A second seizure follows immediately. • You have a high fever. • You're experiencing heat exhaustion. • You have diabetes. • You've injured yourself during the seizure.” • “Prevent seizures by taking meds every day as prescribed, get enough sleep, reduce stress, eat healthy, be active and wear a medical alert bracelet” • “To increase safety take precautions when near water, wear a helmet if prescribed, take showers instead of bathes, modify furnishings, have seizure first aid available where people know where to find it if needed” • If someone is having a seizure <ul style="list-style-type: none"> • “Carefully roll the person onto one side • Place something soft under his or her head • Loosen tight neckwear • Avoid putting your fingers or other objects in the person's mouth • Don't try to restrain someone having a seizure • Clear away dangerous objects, if the person is moving • Stay with the person until medical personnel arrive

	<ul style="list-style-type: none"> • Observe the person closely so that you can provide details on what happened • Time the seizure • Stay calm”
(CDC, 2018) What is sepsis?	<ul style="list-style-type: none"> • Sepsis is an extreme, life-threatening response to an infection in the body. It is caused when an infection continues to spread in the body and the immune system is unable to fight it off alone. • If it is not treated, it can lead to organ failure and death • People at higher risk for sepsis include those with chronic diseases such as kidney disease, diabetes and cancer, people over the age of 65, children under 1 and people that are immunocompromised • Some signs and symptoms include, shortness of breath, fast heart rate with low BP, fever with shivers and feeling cold, confusion or disorientation, clammy or sweaty, and extreme pain. • Prevention: get vaccines as recommended by the CDC; take good care of chronic diseases; wash hands regularly; clean out cuts and treat immediately, keep covered while still open • Know the signs and symptoms and act immediately if you suspect sepsis

Evidence Table F: Developmental Disabilities and Dementia

Author(s), Date	Findings Relevant to Selecting Priority Group
(CDC, 2018) Facts About Developmental Disabilities	<ul style="list-style-type: none"> • Developmental disabilities are a group of conditions due to an impairment in physical, learning, language, or behavior areas. These conditions begin during the developmental period, may impact day-to-day functioning, and usually last throughout a person’s lifetime. • Developmental disabilities occur among all racial, ethnic, and socioeconomic groups.
(AAIDD, 2018) Definition of Intellectual Disability	<ul style="list-style-type: none"> • Intellectual disability is a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18. • Intellectual functioning—also called intelligence—refers to general mental capacity, such as learning, reasoning, problem solving • Generally, an IQ test score of around 70 or as high as 75 indicates a limitation in intellectual functioning. • “Adaptive behavior is the collection of conceptual, social, and practical skills that are learned and performed by people in their everyday lives.” <ul style="list-style-type: none"> • “Includes social skills, conceptual skills (language, literacy, money, time, number concepts), and practical skills (activities of daily living, occupation, “ • “Finally, assessments must also assume that limitations in individuals often coexist with strengths, and that a person’s level of life functioning will improve if appropriate personalized supports are provided over a sustained period.” • When determining level of ability must consider the following <ul style="list-style-type: none"> • “community environment typical of the individual’s peers and culture • linguistic diversity • cultural differences in the way people communicate, move, and behavior” • “The goal is to enhance people’s functioning within their own environment in order to lead a more successful and satisfying life. Some of this enhancement is thought of in terms of self-worth, subjective wellbeing, pride, engagement in political action, and other principles of self-identity.”

	<ul style="list-style-type: none"> • “Intellectual Disability is no longer considered to be a static condition with no room for improving abilities”
<p>(American Psychiatric Association, 2017) What is Intellectual Disability?</p>	<ul style="list-style-type: none"> • Intellectual disability involves problem in general mental abilities including intellectual functioning (learning, problem solving, judgement) and adaptive functioning (activities of daily living such as communication and independent living) • ID affects about 1% of the population and of those individuals about 85% are considered to have mild ID on a range of mild, moderate, severe • Is determined during developmental years (before age 18) • Specific full scaled IQ tests scores are not required for diagnosis but are still used as part of the process for diagnosing intellectual function. An IQ score of 75 or less indicates significant limitation in intellectual functioning. IQ score must be considered in context of persons’ difficulties in general mental abilities • Adaptive functioning is also considered which includes: <ul style="list-style-type: none"> • “Conceptual – language, reading, writing, math, reasoning, knowledge, memory • Social – empathy, social judgment, communication skills, the ability follow rules and the ability to make and keep friendships • Practical – independence in areas such as personal care, job responsibilities, managing money, recreation and organizing school and work tasks” • Assessed with individual and interviews with others such as family and teachers
<p>(CDC, 2018) What is Cerebral Palsy?</p>	<ul style="list-style-type: none"> • CP is a group of disorders that affect ability to maintain posture and mobility • Most common movement disorder in children • Ranges from severe requiring equipment to walk or may not be able to walk at all to mild in which a person may walk awkwardly but does not require equipment to walk • Symptoms include <ul style="list-style-type: none"> • “Stiff muscles (spasticity) • Uncontrollable movements (dyskinesia) • Poor balance and coordination (ataxia)” • Common treatments include medicines; surgery; braces; and physical, occupational, and speech therapy. No single treatment is the best one for all children with CP. Before deciding on a treatment plan, it is important to talk with the child’s doctor to understand all the risks and benefits.
<p>(Cerebral Palsy Alliance, 2018) How Does Cerebral Palsy Affect People?</p>	<ul style="list-style-type: none"> • CP can affect posture, balance, ability to move, ability to communicate, move, eat, sleep and learn • CP can vary from minimal symptoms and affects with movement to having very little to no control over body movements requiring 24-hour care • 1 in 2 or 50% of people with CP have an intellectual disability • 1 in 4 have a seizure disorder; CP with ID have a higher incidence of seizure disorder at 48% • 1 in 3 have hip displacement • 1 in 4 have bladder control issues • Higher than average incidence with reflux disorders with 1 in 15 requiring a GT to eat • 3 out of 4 experience pain from numerous causes such as hip displacement, skin breakdown, contractures, abnormal posturing
<p>(American Psychiatric Association, 2018)</p>	<ul style="list-style-type: none"> • “Autism spectrum disorder (ASD) is a complex developmental condition that involves persistent challenges in social interaction, speech and nonverbal communication, and restricted/repetitive behaviors. The effects of ASD and the severity of symptoms are different in each person.”

<p>What is autism spectrum disorder?</p>	<ul style="list-style-type: none"> • First symptoms tend to develop around age 2-3 years old • Ranges from mild to severe and no two children with autism spectrum DO appear the same • “While many people with autism have normal intelligence, many others have mild or significant intellectual delays. Also, those with ASD are at greater risk for some medical conditions such as sleep problems, seizures and mental illnesses.” • Characteristics include: “social interaction and communication problems, difficulty relating to people, things, and events, and restricted and repetitive behaviors, interests, or activities”
<p>(Autism Speaks, 2019) DSM-5 Criteria</p>	<ul style="list-style-type: none"> • Autism Spectrum Disorder is diagnosed based on <ul style="list-style-type: none"> • “Persistent deficits in social communication and social interaction across multiple contexts, • Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history, • Occur during developmental period” • Severity levels range from 1-3 <ul style="list-style-type: none"> • “Level 3: Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others. For example, a person with few words of intelligible speech who rarely initiates interaction and, when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches” <ul style="list-style-type: none"> ○ Extreme difficulty coping, inflexibility in behavior, great distress with any changes • “Level 2: Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions; and reduced or abnormal responses to social overtures from others. For example, a person who speaks simple sentences, whose interaction is limited to narrow special interests, and who has markedly odd nonverbal communication.” <ul style="list-style-type: none"> ○ Difficulty coping with change, inflexible behaviors, distress with changes • “Level 1: Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful response to social overtures of others. May appear to have decreased interest in social interactions. For example, a person who is able to speak in full sentences and engages in communication but whose to- and-fro conversation with others fails, and whose attempts to make friends are odd and typically unsuccessful.” <ul style="list-style-type: none"> ○ Inflexibility in behavior, difficulty switching between activities
<p>(American Psychiatric Association, 2017) What is ADHD?</p>	<ul style="list-style-type: none"> • “Symptoms of ADHD include inattention (not being able to keep focus), hyperactivity (excess movement that is not fitting to the setting) and impulsivity (hasty acts that occur in the moment without thought).” • It is more common among boys than girls and can affect adults as well as children • “Inattentive type – six (or five for people over 17 years) of the following symptoms occur frequently: <ul style="list-style-type: none"> • Doesn’t pay close attention to details or makes careless mistakes in school or job tasks. • Has problems staying focused on tasks or activities, such as during lectures, conversations or long reading. • Does not seem to listen when spoken to (i.e., seems to be elsewhere). • Does not follow through on instructions and doesn’t complete schoolwork, chores or job duties (may start tasks but quickly loses focus). • Has problems organizing tasks and work (for instance, does not manage time well; has messy, disorganized work; misses deadlines).

	<ul style="list-style-type: none"> • Avoids or dislikes tasks that require sustained mental effort, such as preparing reports and completing forms. • Often loses things needed for tasks or daily life, such as school papers, books, keys, wallet, cell phone and eyeglasses. • Is easily distracted. • Forgets daily tasks, such as doing chores and running errands. Older teens and adults may forget to return phone calls, pay bills and keep appointments.” • “Hyperactive/impulsive type – six (or five for people over 17 years) of the following symptoms occur frequently: <ul style="list-style-type: none"> • Fidgets with or taps hands or feet, or squirms in seat. • Not able to stay seated (in classroom, workplace). • Runs about or climbs where it is inappropriate. • Unable to play or do leisure activities quietly. • Always “on the go,” as if driven by a motor. • Talks too much. • Blurts out an answer before a question has been finished (for instance may finish people’s sentences, can’t wait to speak in conversations). • Has difficulty waiting his or her turn, such as while waiting in line. • Interrupts or intrudes on others (for instance, cuts into conversations, games or activities, or starts using other people’s things without permission). Older teens and adults may take over what others are doing.” • “Adults with ADHD are treated with medication, psychotherapy or a combination. Behavior management strategies, such as ways to minimize distractions and increase structure and organization, and involving immediate family members can also be helpful.”
<p>(Alzheimer’s Association, 2019) What is dementia?</p>	<ul style="list-style-type: none"> • “Dementia is not a specific disease. It’s an overall term that describes a group of symptoms associated with a decline in memory or other thinking skills severe enough to reduce a person’s ability to perform everyday activities.” • Most common cause of dementia is Alzheimer’s disease • “At least two of the following core mental functions must be significantly impaired to be considered dementia: <ul style="list-style-type: none"> • Memory • Communication and language • Ability to focus and pay attention • Reasoning and judgment • Visual perception” • People with dementia tend to have issues with short term memory and may have a hard time keeping track of where they put things from day to day • Memory loss tends to start out slowly and then progress • Early diagnosis is important to determine if certain treatments can be beneficial • Dementia caused by Alzheimer’s does not have a treatment and there are not any treatments to slow or stop progression • There are some medications that may help improve symptoms temporarily • About one in ten people in US over the age of 65 have Alzheimer’s disease • As more people live longer lives, the rates of dementia increase • People with family members such as parents or siblings that develop dementia have a higher risk for developing dementia themselves • 10 early signs of dementia include

	<ul style="list-style-type: none"> • “Memory loss that disrupts daily living: forgetting recently learned information, forgetting important dates or events, asking the same information repeatedly • Challenges in planning or solving problems: difficulty following a familiar recipe or paying bills • Difficulty completing familiar tasks at home, at work, or at leisure • Confusion with time and place: losing track of dates, seasons, and passage of time • Trouble Understanding visual images and spatial relationships: difficulty reading, judging distances or determining between different colors • New Problems with words in speaking or writing: difficulty following or joining a conversation, may stop mid conversation and not know how to continue, difficulty with vocabulary and remembering the names of things • Misplacing things and losing the ability to retrace steps: may put things in unusual places, may accuse others of stealing things • Decreased or poor judgement: poor judgment in spending money or may stop grooming themselves • Withdrawal from Work or Social Activities • Changes in mood or personality: become confused, suspicious, depressed, fearful or anxious; they may become easily upset at home, work, with friends or in new places” <p>• “Some typical signs of aging include forgetting a word periodically, not remembering the date but able to recall it later, making occasional errors in check book or missing a bill payment once, misplacing things from time to time but able to retrace steps to find it, having a set routine and becoming irritable when it is interrupted”</p>
<p>(National Institute on Aging, 2017) Alzheimer’s Disease in People with Down Syndrome</p>	<ul style="list-style-type: none"> • About 50% of people with Down Syndrome develop dementia • Dementia tends to present in people with Down Syndrome in their 50’s-60’s

Evidence Table G: Direct Support Professional Roles and Responsibilities

Author(s), Date	Findings Relevant to Selecting Priority Group
<p>(NADSP, 2019) NADSP Competency Areas</p>	<p>15 needed competencies of a DSP include:</p> <ul style="list-style-type: none"> • “Communication, • Participant empowerment, <ul style="list-style-type: none"> • DSP assists and supports the participant to develop strategies, make informed choices, follow through on responsibilities, and take risks. • DSP promotes participant partnership in the design of support services, consulting the person and involving him or her in the support process. • DSP provides opportunities for the participant to be a self-advocate by increasing awareness of self-advocacy methods and techniques, encouraging and assisting the participant to speak on his or her own behalf, and providing information on peer support and self-advocacy groups.

- The competent DSP provides information about human, legal, civil rights and other resources, facilitates access to such information and assists the participant to use information for self-advocacy and decision making about living, work, and social relationships.”
- “Assessment
 - The competent DSP initiates or assists in the initiation of an assessment process by gathering information (e.g., participant’s self-assessment and history, prior records, test results, additional evaluation) and informing the participant about what to expect throughout the assessment process.
 - The competent DSP conducts or arranges for assessments to determine the needs, preferences, and capabilities of the participants using appropriate assessment tools and strategies, reviewing the process for inconsistencies, and making corrections as necessary.
 - The competent DSP discusses findings and recommendations with the participant in a clear and understandable manner, following up on results and reevaluating the findings as necessary”
- Community and Service Networking
- “Facilitation of services
 - DSP maintains collaborative professional relationships with the participant and all support team members (including family/friends), follows ethical standards of practice (e.g., confidentiality, informed consent, etc.), and recognizes his or her own personal limitations.
 - DSP assists and/or facilitates the development and implementation of an individualized plan based on participant preferences, needs, and interests.”
- “Community Living Skills and Support
- Education, Training, and Self-Development
- Advocacy
- Vocational, Educational, and Career Support
- Crisis Prevention and Intervention
- Organizational Participation”
- “Documentation
 - The competent DSP maintains accurate records, collecting, compiling and evaluating data, and submitting records to appropriate sources in a timely fashion.
 - The competent DSP maintains standards of confidentiality and ethical practice.
 - The competent DSP learns and remains current with appropriate documentation systems, setting priorities and developing a system to manage documentation.”
- “Building and Maintaining Friendships and Relationships
- Provide Person Centered Supports “
- “Supporting Health and Wellness
 - Administers medications accurately and in accordance with agency policy and procedures.
 - Observes and implements appropriate actions to promote healthy living and to prevent illness and accidents.
 - Uses appropriate first aid/safety procedures when responding to emergencies.
 - Assists individuals in scheduling, keeping, and following through on all health appointments.

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| | <ul style="list-style-type: none">• Assists individuals in completing personal care (e.g., hygiene and grooming) activities.• Assists with identifying, securing and using needed adaptive equipment (i.e. adaptive equipment) and therapies (e.g., physical, occupational, speech, respiratory, psychological).• Assists individuals in implementing health and medical treatments.• Assists individuals to take an active role in their health care decisions.” |
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Core B Evidence Tables

Evidence Table H: Fundamentals for Pharmacology

Author(s), Date	Findings Relevant to Selecting Priority Group
<p>(USFDA, 2018) Generic Drugs</p>	<ul style="list-style-type: none"> • “A generic drug is a medication created to be the same as an already marketed brand-name drug in dosage form, safety, strength, route of administration, quality, performance characteristics, and intended use.” • Generic medications are just as effective as brand-name medications • Generic drugs typically look different than trade mark drugs due to trademark laws • Still regulated by FDA and are often cheaper
<p>(USFDA, 2017) Prescription Drugs and OTC</p>	<ul style="list-style-type: none"> • “A drug is a substance intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease. “ • “Prescription drugs must be prescribed by a physician, bought at a pharmacy, prescribed for and intended to be used for only one person, and regulated by FDA through NDA process.” • “OTC meds are drugs bought off the shelf in stores that do not require a doctor’s order.” Still regulated by FDA
<p>(USFDA, 2018) Side Effects</p>	<ul style="list-style-type: none"> • “Side effects, also known as adverse events, are unwanted or unexpected events or reactions to a drug.” • Side effects can be minor to life-threatening • Some things that can affect whether you experience side effects include age, gender, allergies, how the body absorbs the drug, other drugs, vitamins and dietary supplements that you may be taking. • Common side effects include upset stomach, dry mouth, and drowsiness. • Serious side effects are anything that causes death, disability, permanent damage, hospitalization, or damaging affects to a fetus • The most common times to experience side effects are when you first start taking a drug, change in dose (increase or decrease), or you stop taking a drug • Talk to pharmacist to get prescribing information on medication to indicate possible side effects • Talk to prescriber about things you can do to prevent side effects such as taking with food to prevent nausea. Prescriber may suggest dietary changes, or possibly changing a dose or switching to a different medication to avoid side effects.
<p>(RX Outreach, 2017) Understanding Medication Labels</p>	<ul style="list-style-type: none"> • The site has a picture of a medication label with flags indicating the parts of the label • Components of a med label includes patient name, medication name, medication dose, medication administration instructions including frequency and number of pills, doctor information, refill information, expiration date, fill date, pharmacy information, number of pills in container, prescription number, pill description • Always ensure label has your name on it and is the medication your doctor prescribed • Ensure that the medication is taken exactly as instructed on the label.
<p>(Registered Nursing)</p>	<ul style="list-style-type: none"> • Ten rights of medication administration include: “Medication, Dose, Time or frequency, Patient, Route, Client education, Documentation, Right to refuse, Assessment, and Evaluation” • Check allergies, expiration data and contraindications

	<ul style="list-style-type: none"> • Controlled meds must be locked and medications must be stored out of reach of people with cognitive impairment to prevent accidental poisoning • Prior to administering meds check any ordered vital signs and allergies • “A complete med order includes client's full name, the date and the time of the order, the name of the medication, the ordered dosage, and the form of the medication, the route of administration, the time or frequency of administration, and the signature of the practitioner” • Ensure that the label on the medication matches the practitioner orders. If anything is unclear or not ordering, clarify the order prior to administering. • “A prn order indicates that the ordered medication is only given when a specified condition, like pain or nausea, is present.” • Routes of administration: <ul style="list-style-type: none"> • “oral ensure medication is swallowed • Buccal or Sublingual: between teeth and cheek or under back of tongue; do not chew let dissolve in its place • Topical: apply to the skin using gloves • Transdermal: apply a patch to ordered area of body, may need to remove body hair for the patch to remain in place and in contact with the skin; wash site with soap and water and dry thoroughly before applying • Ophthalmic: meds administered in the eye via drops or ointment; apply sterile without touching eye, have client tilt head back • Otic: administer in ear; tilt head to the side or lay head down on the side, pull ear up and back for adult and down and down and back for children under 3 years old • Inhalation: client breathes in the medication; client may use a device called an inhaler to administer this medication • Vaginal route: medication is administered directly into the vagina through a suppository • Rectal route: medication is administered in the rectum through a suppository • Subcutaneous: Administered in abdomen, back of upper arms, and front of thighs. Common route for insulin”
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Evidence Table I: Rights and Documentation

Author(s), Date	Findings Relevant to Selecting Priority Group
(The Arc, 2018) Rights	<ul style="list-style-type: none"> • Personal autonomy, liberty, freedom, and dignity of each individual with I/DD must be respected and supported • Right to be free from abuse, neglect, or any mistreatment • People with I/DD have the right to self-determination and control over their own lives • People with I/DD have the right to participate fully in the community
(ABPLA, 2017) Medical Malpractice	<ul style="list-style-type: none"> • Medical malpractice is when a “health care professional through a negligent act or omission, causes an injury to a patient. The negligence might be the result of errors in diagnosis, treatment, aftercare or health management.” • Standard of Care refers to the generally accepted standard for medical professional and patients have a right to expect health care professionals to provide care that is consistent with generally accepted standards of care • Examples of medical negligence include <ul style="list-style-type: none"> • “Failure to diagnose or misdiagnosis, Misreading or ignoring laboratory results, Unnecessary surgery, Surgical errors or wrong site surgery, Improper medication or dosage, Poor follow-up or aftercare, Premature discharge, Disregarding or not taking appropriate patient history, Failure to order proper testing, Failure to recognize symptoms”

<p>(Dispensing of Controlled Substances to Residents at Long Term Care Facilities, 2010)</p>	<ul style="list-style-type: none"> • “Controlled substances are drugs and other substances that have a potential for abuse and psychological and physical dependence; these include opioids, stimulants, depressants, hallucinogens, anabolic steroids, and drugs that are immediate precursors of these classes of substances.” • “every registrant authorized to dispense controlled substances must maintain, on a current basis, a complete and accurate record of each such substance dispensed.” • “The facility must also provide separately locked, permanently affixed compartments for storage of controlled drugs listed in Schedule II and other drugs subject to abuse unless the facility uses single unit package drug distribution systems in which the quantity stored is minimal and a missing dose can be readily detected.”
<p>(Justad, 2016) Filling Out Medication Administration Records</p>	<ul style="list-style-type: none"> • ABC’s charting: accurate, brief, concise • Medical record should portray pertinent information regarding any medical treatment or care. • Medical record is confidential and only people providing care need to see medical information • Initial in the column under the designated date and right medication, dose and time • Never use ditto marks • Sign in the appropriate line on the MAR • Never erase anything on a MAR or use white out. Draw a single line through and write the word error and initial and date it • Record right after person takes med • If med not given as ordered or person refuses initial in box and circle. Then write a note to indicate the exception • If person is refusing, continue to attempt to offer med until outside designated window • Prescriptions should have the following <ul style="list-style-type: none"> • “The name of the person 2. The date the prescription was written 3. The birthdate of the person 4. The medication(s) prescribed a. Name of medication b. Dose of medication c. Instructions for taking the medication. Some prescription will not signify “po” as the route for taking the medication. Unless some other route is given, assume that the medication is given by mouth and write that on the MAR. d. The number of pills or amount of medication prescribed e. Refills (if applicable) 5. The signature and name of the physician”

Evidence Table J: Medication Errors

Author(s), Date	Findings Relevant to Selecting Priority Group
<p>(USDHHS, 2019) Medication Errors and Adverse Drug Events</p>	<ul style="list-style-type: none"> • “A medication error is an error (of commission or omission) at any step along the pathway that begins when a clinician prescribes a medication and ends when the patient actually receives the medication.” • “An adverse drug event (ADE) is defined as harm experienced by a patient as a result of exposure to a medication.” Some are preventable and some are not, like if someone receives a medication for the first time without knowing they are allergic. • To prevent ADE’s, must ensure that there are checks in place at multiple levels including: correct order, correct transcription of order with paper-based systems, correct dispensing of medication from pharmacy, administration: correct med, correct patient, correct time, • To prevent med error administration, follow five rights: right patient, route, medication, time, dose <ul style="list-style-type: none"> • Minimize interruptions during med passes • Educate patient on their medications • Barcode med administration

	<ul style="list-style-type: none"> • Joint Commission has identified med error reduction as a national patient safety goal
<p>(Mayo Clinic, 2017) Medication Errors: Cut Your Risk with These Tips</p>	<ul style="list-style-type: none"> • “Medication errors are preventable events due to the inappropriate use of medications. Medication errors that cause harm are called preventable adverse drug events.” • Common causes of med errors are: <ul style="list-style-type: none"> • “Poor communication between your doctors • Poor communication between you and your doctors • Drug names that sound alike and medications that look alike • Medical abbreviations” • Ensure that the prescriber knows <ul style="list-style-type: none"> • “The name and strength of all medications you're taking and when you take them, including prescription medications, herbs, vitamins, nutritional supplements, over-the-counter drugs, vaccines and anything received intravenously, including diagnostic and contrast agents, radioactive medications, feeding tube supplements and blood products • Any medications that you're allergic to or that have caused problems for you in the past” • Don’t ever take someone else’s medications • Common mistakes include chewing pills that can’t be chewed, using dining utensils to measure medications, splitting medications that can’t be split, confusing ear drops with eye drops • To decrease risk of errors, keep meds in their original labeled containers, keep an up to date list of all meds, use the same pharmacy, check that the pharmacy gives you the right prescription

Evidence Table K: Dual Diagnosis and Psychotropics

Author(s), Date	Findings Relevant to Selecting Priority Group
<p>(NADD, 2019) Information on Dual Diagnosis</p>	<ul style="list-style-type: none"> • “Dual Diagnosis is a term applied to the co-existence of the symptoms of both intellectual or developmental disabilities and mental health problems.” • “Mental health problems are severe disturbances in behavior, mood, thought processes and/or interpersonal relationships.” • “Estimates of the frequency of dual diagnosis vary widely, however, many professionals have adopted the estimate that 30-35% of all persons with intellectual or developmental disabilities have a psychiatric disorder.” • Treatments include psychopharmacology, psychotherapy, and behavioral management • Prevalence of dual diagnosis may be so high due to limited coping skills due to different disability leading to higher stress levels and higher prevalence of mental health diagnoses; this is just a theory and cause is unknown
<p>(NIMH, 2016) Mental Health Medications</p>	<ul style="list-style-type: none"> • If prescribed meds be sure your doctor knows all current meds and supplements, don’t take another person’s meds, tell your doctor about any allergies or issues with meds in the past • if any issues with your med or if it is making things worse, call your doctor right away • “Antidepressants are medications commonly used to treat depression.” Can also treat pain, anxiety or insomnia. <ul style="list-style-type: none"> • “all antidepressant medications work about as well as each other to improve symptoms of depression and to keep depression symptoms from coming back. For reasons not yet well understood, some people respond better to some antidepressant medications than to others.”

- If medication is not working well, it is important to let your doctor know, but you should try to stay on a med for 4-6 weeks to allow it to fully work if possible.
- Sometimes a med may work well for awhile and then symptoms come back later. It is important to notify doctor if this happens.
- Sometimes people may feel that the med worked and no longer need it, so they stop taking it. This can cause symptoms to return and may cause “withdrawl” symptoms if stopped abruptly. You should always talk to your doctor before stopping any meds.
- Call doctor right away if med causes severe anxiety, panic attacks, suicidal thoughts, mania, angry or violet behavior, impulsive behavior
- Ensure your doctor is aware of any migraine meds or MAOIs due to risk of serious condition called serotonin syndrome
- “Anti-anxiety medications help reduce the symptoms of anxiety, such as panic attacks, or extreme fear and worry. The most common anti-anxiety medications are called benzodiazepines.”
 - Benzos and beta blockers work quickly, so may be taken for immediate relief of symptoms as needed
 - “If people suddenly stop taking benzodiazepines, they may have withdrawal symptoms or their anxiety may return. Therefore, benzodiazepines should be tapered off slowly.”
 - Antidepressants may also be prescribed for long term use for anxiety, but may take a few weeks to take full effect.
 - Common side effect for benzos is drowsiness and dizziness
 - Call doctor immediately if signs of allergic reaction, suicidal thoughts, seizures, yellowing of skin or eyes
- “stimulants increase alertness, attention, and energy, as well as elevate blood pressure, heart rate, and respiration”
 - Used to treat ADHD
 - May be used for narcolepsy and sometimes depression
 - “Prescription stimulants have a calming and “focusing” effect on individuals with ADHD. Stimulant medications are safe when given under a doctor's supervision.”
 - Most common side effects are difficulty sleeping and loss of appetite
 - If causes tics or personality changes with flat affect, call doctor right away
- “Antipsychotic medicines are primarily used to manage psychosis. The word “psychosis” is used to describe conditions that affect the mind, and in which there has been some loss of contact with reality, often including delusions (false, fixed beliefs) or hallucinations (hearing or seeing things that are not really there). It can be a symptom of a physical condition such as drug abuse or a mental disorder such as schizophrenia, bipolar disorder, or very severe depression (also known as “psychotic depression”).”
 - May also be used to treat OCD, ADHD, eating disorders, severe depression, GAD, PTSD,
 - Antipsychotics only relieve symptoms, do not cure
 - “Certain symptoms, such as feeling agitated and having hallucinations, usually go away within days of starting an antipsychotic medication. Symptoms like delusions usually go away within a few weeks, but the full effects of the medication may not be seen for up to six weeks.”
 - Every person is different so it may take trialing several drugs before finding one that works well
 - People may relapse with symptoms if they stop taking it abruptly or only take the med periodically rather than as ordered
 - People should only stop taking med if ordered by doctor and should never stop abruptly, the med should be tapered
 - “A person taking an atypical antipsychotic medication should have his or her weight, glucose levels, and lipid levels monitored regularly by a doctor.”

	<ul style="list-style-type: none"> • “Long-term use of typical antipsychotic medications may lead to a condition called tardive dyskinesia (TD). TD causes muscle movements, commonly around the mouth, that a person can't control. TD can range from mild to severe, and in some people, the problem cannot be cured. Sometimes people with TD recover partially or fully after they stop taking typical antipsychotic medication. People who think that they might have TD should check with their doctor before stopping their medication. TD rarely occurs while taking atypical antipsychotics.” • “Mood stabilizers are used primarily to treat bipolar disorder, mood swings associated with other mental disorders, and in some cases, to augment the effect of other medications used to treat depression.” <ul style="list-style-type: none"> • May also be used to treat schizoaffective DO, depression, and disorders of impulse control • Anticonvulsants typically used to treat seizures, may be used as mood stabilizers • Blood levels should be checked to ensure levels do not get too high and cause serious side effects such as hallucinations, seizures, blackouts, changes in vision, tremors, irregular heartbeat, swelling • “People over 65 have to be careful when taking medications, especially when they're taking many different drugs. Older adults have a higher risk for experiencing bad drug interactions, missing doses, or overdosing.” • “Older adults also tend to be more sensitive to medications.” May require smaller or less frequent doses
<p>(Chen, 2012) Drug-Induced Movement Disorders</p>	<ul style="list-style-type: none"> • Drug induced movement disorders (DIMDs) are abnormal movements including tardive dyskinesia, akathisia, dystonia, and parkinsonism. May also be referred to as extrapyramidal symptoms (EPS). It is best to determine which type of DIMD to determine best way to treat • Anxiety and stress can exacerbate DIMD symptoms • Akathisia: “feeling of restlessness and need to move” “one or more fidgety movements such as leg swinging while seated, marching on the spot while standing, or rocking from one foot to another, pacing to relive subjective restlessness or inability to sit or stand still for several minutes. Symptoms may improve during sleep. Distressed if restrained or unable to move.” • Dystonia: “sustained involuntary muscle contractions or spasms resulting in abnormal postures or twisting and repetitive movements.” “body parts affected include neck, upper and lower extremities, jaw, larynx, and trunk.” “Difficulty with breathing, ambulation, head turning, speech and swallowing may occur.” <ul style="list-style-type: none"> • “Symptoms include sustained postures, which can be focal or generalized. The severity of symptoms and anatomic distribution varies but the classic clinical presentation is characterized by the three O's: oculogyric crisis (conjugate deviation of the eyes upward or laterally), opisthotonos or extensor axial dystonia (involuntary posturing in which the head, neck, and spine are arched backward), and oromandibular dystonia (forceful contractions of the jaw causing difficulty in opening or closing the mouth). Blepharospasm (involuntary eyelid closure), jaw-closing dystonia, laryngeal spasm, tongue protrusion, and respiratory stridor may be also be present. Symptoms are usually painful and can interfere with ambulation, breathing, speaking, swallowing, and vision.” • Parkinsonism: “tremor, rigidity, slowness of movement affecting bilateral upper and lower extremities and truncal regions. Masked facies, micrographia, sow shuffling gait, and stooped posture may be observed. “ • Tardive Dyskinesia

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