



**JUST A DIAPER RASH?
A POPULATION
HEALTH/SOCIAL
DETERMINANTS OF
HEALTH CASE STUDY**



RUTGERS

School of Nursing

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GREETINGS!

Just a Diaper Rash is focused on population health and social determinants of health concepts as they regularly present in the primary care setting, at home, and in the community. This case study is designed to assist learners in identifying social determinants of health that affect the health of their individuals and communities, involving community-based and other social services in the care of individuals, and understanding how the decisions and engagement of nurses can influence the health of individuals and populations. There truly is no health or social condition that the involvement of a nurse cannot improve, especially when nurses collaborate with other professionals and prioritize the wishes of community members and key audiences. Nurses who understand the context of their patient's and practice population's lives are well suited to lead and collaborate, create and innovate, implement, and evaluate population health initiatives in their practice population and community as well as the policy arena both locally and nationally.

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DOCUMENT SEQUENCE

Learning Aim and Objectives	1
Introduction - Population Health	2
Introduction - Social Determinants of Health	5
Population Health and Social Determinants of Health Glossary	7

Case Study Sections

• Part 1: Meet the Hall Family	9
• Part 2: When it is More than Just a Diaper Rash	12
• Part 3: Home Safe Home	18
• Part 4: The Hunger Game	24
• Part 5: Work, Work, Work	29
• Part 6: Babies Like Books	35
• Part 7: No Words and a Worried Mother	40
• Part 8: At Home and in the Community	48
• Part 9: The Nurse in the Mirror.....	58

Supplemental Documents

• Autism Spectrum Disorder Diagnosis and Treatment	63
• Diaper Need Worksheet	64
• Health Literacy Tips for Nurses	65
• Dear Nursing Student: Letter from the National Diaper Bank Network	68
• Low Literacy 'Red Light' Developmental Monitoring	69
• Rehabilitation Counselors: Hidden Gems in Interprofessional Care	71
• Social Determinants of Health Nursing Clinical Practice Process	74
• Social Determinants of Health (SDoH) 'Screening' Tools	75
• Ten Social Work Practice Facts	76
• What is Diaper Rash?	78

Instructor Resources

• Instructors Guide	82
• Population Health and Social Determinants of Health Quiz	100
• Learner Assessment with Grading Rubric	103

Slide Set	105
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LEARNING AIM

Learner will understand the concepts of population health and social determinants of health as the foundation to ascertaining community concerns, assessing patient and community needs, addressing social determinants of health through nursing intervention, and advocating for individuals and communities to improve health outcomes.

LEARNING OBJECTIVES

1. Describe the concept of population health
2. Summarize the concept of social determinants of health
3. Cite social determinants of health and the key influencing factors per Healthy People 2020*
4. Articulate how social determinants of health may precede and exacerbate health conditions
5. Demonstrate how population data informs clinical practice
6. Relate how social determinants of health are connected
7. Explain how social determinants of health may have a greater impact on certain key populations than on the general population
8. Illustrate upstream and downstream approaches to population health within a social determinants of health framework
9. Devise strategies to identify and address priorities of key populations
10. Analyze how governmental and institutional policies affect individual's health and well being
11. Reflect on the nurse's role in population health

*Do note that Healthy People 2030 <https://health.gov/healthypeople/objectives-and-data/social-determinants-health> is now available

INTRODUCTION: POPULATION HEALTH



At its core, population health is about achieving the best possible **health outcomes** for a group of individuals, a community, or a nation. Nash et al (2021) defined population health as the:

- Distribution of health outcomes within a population,
- The determinants that influence distribution, and
- The policies and interventions that affect the determinants.

Health outcomes

In population health, the term “health outcomes” often refers to length and quality of life. Conversely, poor health outcomes would refer to someone (or a population) dying at an earlier age or living with disease or illness.

Kindig and Stoddart (2003) defined population health as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.”

Per Storfjell (2017) “population health is broadly used to describe collaborative activities for the improvement of a population’s health status. The purpose of these collaborative activities, including interventions and policies, is to reduce inequities that influence the social determinants of health. Accountability is shared, since outcomes arise from multiple upstream factors that influence the health of a group or community. Population health requires system thinking. It means doing business differently, including clinical and community prevention and working across disciplines and sectors. Population management and population focused care are pathways to achieve population health.”

What is a population?

A particular ‘population’ may be determined using different denominators such as ethnicity, medical diagnosis (e.g., people who are diabetics, people with HIV), employment conditions (e.g., people who work in mines, people who are truck drivers), locale (e.g., all New Yorkers, all people in Japan), or service provider (e.g., all individuals using a particular clinic or hospital, all high school students). Individuals may fit into more than one population group. The population of focus could also be defined by age, health insurance source such as Medicare, service needs, or social condition.

Any population health approach that aims to positively affect health outcomes would engage residents, consumers, employees, advocates, and family members as well as academia, philanthropic foundations, health care providers and institutions, industry, public health, and local government entities along with other stakeholders to determine and formulate actions (Centers for Disease Control and Prevention).

What drives population health decision?

Population health tends to focus on health outcomes of care, so who best defines these outcomes is important. Population health includes the input of a wide range of disciplines, from nurses and physicians, to therapists, engineers, farmers, and policy specialists. As important, population health seeks out the point of view, perspective, and priorities of those whose health is most directly affected and being measured. This interdisciplinary, collaborative approach is customizable using innovative partnerships among different segments of the community or population of focus (also referred to as population of interest).

Upstream, midstream, and downstream approaches

Population health interventions focus on upstream and midstream approaches to prevention and a targeted downstream approach to improve access to evidence-informed interventions (Salmond & Allread, 2019).

- **Upstream** approaches involve enacting policies that can affect large populations through regulation (e.g. tobacco or fast food industries), increased access (such as through universal health care, prenatal care, health insurance, or on-demand treatment), or economic incentives (e.g. payments to hospitals that reduce readmission rates).
- **Midstream** interventions occur within organizations (e.g. providing employees access to gym membership or 24/7 access to healthy food options) or populations (e.g., supporting healthy eating or exercise through education and/or policy).
- **Downstream** interventions involve individual-level behavioral modification approaches for prevention or disease management (e.g. low salt diet for those with hypertension or smoking cessation support) (Brownson, Seiler & Eyler, 2010).

Nurses and population health

Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, facilitation of healing, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities, and populations (American Nurses Association, 2015). As highly trusted professionals, nurses who understand the context of their patient's and practice population's lives and how that context affects health outcomes, are well-suited to collaborate and lead, create and devise, implement, and evaluate population health initiatives in their practice population, community, and also statewide and nationally.

Discussion

Identify a population of interest to you:

- How would you define population health within the context of this population using one denominator of population health? ("Denominator" is defined above.)
- How large is the population you defined?
- Describe the factors that may influence health outcomes in the selected population.

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INTRODUCTION: SOCIAL DETERMINANTS OF HEALTH

Per Healthy People 2020 Social Determinants of Health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Healthy People 2020 identifies five key areas (social determinants) along with factors that influence each of the key areas/social determinants.



Social determinants of health and key influencing factors

Key Areas/Social Determinants of Health	Influencing Factors
Economic Stability	<ul style="list-style-type: none"> • Employment • Food insecurity • Housing instability • Poverty
Education	<ul style="list-style-type: none"> • Early childhood education and development • Enrollment in higher education • High school graduation • Language and literacy
Health and Health Care	<ul style="list-style-type: none"> • Access to health care • Access to primary care • Health literacy
Neighborhood and Built Environment	<ul style="list-style-type: none"> • Access to foods that support healthy eating patterns • Crime and violence • Environmental conditions • Quality of housing
Social and Community Context	<ul style="list-style-type: none"> • Civic participation • Discrimination • Incarceration • Social cohesion
<p>There are determinants beyond the social factors listed above that may drive health. These factors include genetics and biology, the physical environment, and lifestyle behaviors.</p>	

The social determinants of health and their associated influencing factors are interrelated. For example, institutional-level discrimination by one system (e.g., criminal justice) may lessen an individual’s trust in other institutions including health care and education. Consider, as another example, the individual who lives in poverty: this person is likely less educated and less able to command a well-paying job; he is also less likely to access health care when needed because of a fear

of incurring costs. Moreover, those who are less educated are less likely to participate in civic life and more likely to be incarcerated (in fact, those who did not complete high school are 3.5 times more likely to be arrested than high school graduates).

Social determinants of health are important in population health. Addressing, or modifying, social determinants of health through upstream policy initiatives may reduce health inequity, which in turn supports improved population health outcomes. For example, the provision of universal quality early childhood education and development programs starting prenatally and extending through five years of age reduces the need for special education, reduces the number of children retained in a school grade, and increases high school graduation rates. Investing in early childhood education helps prevent the achievement gap by building the cognitive and social skills necessary for school readiness. It is widely recognized that those with higher educational attainment live healthier and longer.

Nurses and social determinants of health

Nurses should understand how social determinants of health contribute to incidence, prevalence, and outcomes of health conditions. Nurses want to understand how to ascertain, assess, address, and advocate for social determinants of health concerns with individuals, community, and beyond. Improving social determinants of health realities is not a one-time activity, but rather requires on-going sustained effort and investment.

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POPULATION HEALTH/SOCIAL DETERMINANTS OF HEALTH GLOSSARY

Term	Definition
Built environment	<ul style="list-style-type: none"> All the physical parts of where we live and work (e.g., homes, buildings, streets, open spaces, and infrastructure (Centers for Disease Control and Prevention)).
Civic participation	<ul style="list-style-type: none"> Community members working together to address an issue of concern in the community.
Discrimination	<ul style="list-style-type: none"> Federal statutes prohibiting discrimination (i.e., the unjust or prejudicial treatment of different categories of people) on the basis of race, color, sex, disability, religion, familial status, and national origin exist. Discrimination may occur toward other groups as well. Structural racism is historical and contemporary policies, practices, and norms that create and maintain white supremacy (Urban Institute). Implicit bias also negatively affects certain groups.
Early childhood education and development	<ul style="list-style-type: none"> Includes education, health, nutrition, and parenting investments for infants and young children through age five. Quality early childhood education significantly benefits low-income children. The best return on investment is achieved with interventions during the prenatal and infant periods.
Economic stability	<ul style="list-style-type: none"> Household income and financial stability that supports overall health and well-being. Poverty, unemployment, food insecurity, and housing insecurity adversely affect economic stability.
Food insecurity	<ul style="list-style-type: none"> Household-level economic and social condition of limited or uncertain access to adequate food (U.S. Department of Agriculture).
Green space	<ul style="list-style-type: none"> Land that is partly or completely covered with grass, trees, shrubs, or other vegetation. Green space includes parks, community gardens, and cemeteries (U.S. Environmental Protection Agency EPA Region 1).
Health disparity	<ul style="list-style-type: none"> A health difference that is closely linked with social, economic, or environmental disadvantage (Healthy People 2020). Often used interchangeably with the terms health inequality or health inequity.
Health literacy	<ul style="list-style-type: none"> The degree to which an individual has the capacity to obtain, communicate, process, and understand basic health information and service to make appropriate health decisions (Patient Protection and Affordable Care Act).
Housing insecurity	<ul style="list-style-type: none"> High housing costs in proportion to income, poor housing quality, unstable neighborhoods, overcrowding, or homelessness. (U.S. Department of Health and Human Services)
Incarceration	<ul style="list-style-type: none"> Incarcerated population is the population of inmates confined in a prison or a jail. This may also include halfway-houses, boot camps, weekend programs, and other facilities in which individuals are locked up overnight (Department of Justice). Incarceration status also affects non-incarcerated family members and overall incarceration rates affect community members.

Term	Definition
Literacy	<ul style="list-style-type: none"> The ability to use printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential (National Assessment of Adult Literacy).
Limited English proficiency	<ul style="list-style-type: none"> Individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English (U.S. Department of Energy).
Neighborhood	<ul style="list-style-type: none"> The proximal area surrounding a particular person, family, or community.
Population health	<ul style="list-style-type: none"> The health outcomes of an aggregated large group of individuals based on distribution of determinants, interventions, and policies.
Poverty	<ul style="list-style-type: none"> Poverty frequently equates to material hardship. Link to federal poverty guidelines that determine eligibility for certain federal assistance programs: https://aspe.hhs.gov/poverty-guidelines.
Primary care	<ul style="list-style-type: none"> The provision of integrated, accessible health care services by clinicians who are accountable for addressing the large majority of personal health care needs, developing a sustained partnership with individuals/families, and practicing in the context of family and community (Institute of Medicine).
Social and community context	<ul style="list-style-type: none"> Social context is a person's direct experience shaped by family, social support, and social networks and community context is how an individual interacts with larger community and institutional systems for good or ill. Healthy People 2020 lists civic participation, discrimination, incarceration, and social cohesion as critical elements of the social and community context.
Social cohesion	<ul style="list-style-type: none"> The willingness of a group of people to work together to achieve common goals.
Social determinants of health	<ul style="list-style-type: none"> Conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Healthy People 2020).

Adapted from Porter, S., Qureshi, R., Chase, S., Allread, V., & Salmond, S. (2017). *Addressing the Effects of Psychological Trauma in a Community Using a Social Determinants of Health Approach: A Case Study*. Rutgers School of Nursing, Association for Prevention, Teaching and Research & Office of Disease Prevention and Health Promotion. <http://www.teachpopulationhealth.org/psychtraumasdohcases.html>

PART 1: MEET THE HALL FAMILY

Nurses who understand the context of the individuals/families and practice population's lives are well suited to collaborate and lead, create and innovate, implement, and evaluate population health initiatives in their practice population, community, and at the state and national level. Recognizing the influence of social determinants of health on a population's health and well-being can assist in this understanding.

Keywords: *access to foods that support healthy eating patterns, access to primary care, crime and violence, discrimination, early childhood education and development, employment, food insecurity, high school graduation, health literacy, housing instability, quality of housing, poverty*

Learning Objective: Cite social determinants of health and the key influencing factors per Healthy People 2020 and 2030.



Case Study: Meet Emma Hall and family

I step through the pediatric clinic doors. I am holding Leah and my husband Andrew's got Jonathan along with our giant backpack full of baby paraphernalia. We are here for Leah's 6-month well visit. I wave at Billie – they're the nurse we usually see. I really like them. "Them" and "they" are Billie's preferred pronouns. I know that from the button they usually wear on their lab coat. I like Billie, they treat us nice, not condescending, or fake.

Sometimes, when you are on Medicaid, health care people are not so nice. Some nurses and doctors get all judgmental or act like you are stealing from them because you have government-funded health insurance. But I do not care, it is really important my babies go to the doctor to stay healthy and get their immunizations and stuff.

In New Jersey, there are programs for low-income families, we get help through the WorkFirst NJ (New Jersey's Temporary Assistance for Needy Families – TANF). Andrew lost a lot of work hours after our home burnt down in a fire. I waitressed as much as I could until Leah was born. But, finding and affording childcare for two small children is tough and expensive.

I am Emma and I am 25 years old. Andrew is my husband and he is 23 years old. We have two babies – Jonathan who is 2 years old and Leah who is almost 7 months old. I want you to understand how important my family is to me, to us, we love each other and it is super important we stay together. I was in foster care for a long time and kids need real permanent families. My parents were drug users, off the chart drinkers. I totally get that substance misuse is a disease, but I am going to do better for my babies.

Leah is a really wonderful baby but fussy, sometimes, too. Leah's bottom gets red and that seems to bother her especially when she is trying to fall asleep. But most of the time she gives me big smiles and loves cuddles. I think she would have me hold her all of the time if she could.

I have been breastfeeding Leah since she was born. It is not easy but with all our moving around, it ended up as the most sensible thing and now I am proud that I have stuck with it. Lots of mothers cannot do the breastfeeding thing but breast is best! Nurse Billie has a button that says that, too. When I was in the hospital the post-partum and nursery nurse really pushed breastfeeding. A lactation counselor came in too to help with 'latching on', so that was good. But the person who really got me started and kept me on track was the unit housekeeper, encouraging me and giving me tips while she cleaned and even coming back in twice to make sure I was doing okay. My mother is not around and I did not breastfeed Jonathan, so having an experienced 'cheerleader' this time around really helped.

We lost our home right after Leah was born. One of our downstairs neighbors fell asleep smoking. Our building was old and not all the smoke alarms were working. We lost everything – furniture, clothes, all the baby stuff, our cooking pans, even Andrew's work tools. It has been tough. You accumulate stuff little by little and then whoosh, it is all gone. We did not have a regular place to stay most of the last half year. Without his work gear, Andrew could not get enough work.

It is not easy eating healthy when you do not have a regular place to stay. I know it is super important for Jonathan to eat fresh healthy food, but he is so picky. With breastfeeding, I need a healthy diet, too, for Leah's sake. But sometimes, McDonalds is the only option and sometimes, we only have enough money to feed Jonathan.

Jonathan is not talking at all and much of the time seems in his own world. I am worried especially when I see other kids his same age saying some words and stuff. Could it be all the moving around or having a new baby sister? Jonathan likes dinosaurs a lot so I can always get his attention if I pull out his dinosaur sticker book or show him some dinosaur YouTube videos. We have another dinosaur book that Billie gave us as a part of the Reach Out and Read program at the clinic. I try to read to Jonathan and Leah every day.

We missed Leah's originally scheduled 6-month well visit because we did not have bus fare. It takes two buses plus walking on both ends to get to the pediatric clinic from where we were staying – my friend Betsy's couch. But this time Andrew's grandmother lent us her car; we are staying with her right now, and then we walked about 12 blocks so we did not have to pay for parking. The pediatric clinic neighborhood is kind of dodgy. There was a stabbing in the employee parking lot and there are lots of people hanging out – cursing or yelling, drinking, too. Some of the people are intimidating, so I feel like we have to be on guard all the time. Things are not so great in the different places we have been staying, usually there is at least one or two abandoned houses nearby where people are taking or selling drugs, passed out or sleeping, and having sex for drugs. It used to bother me seeing the used condoms, but now I just focus on walking fast and keeping Jonathan's little hands and feet away from anything dangerous.

There is a parking lot right across from the clinic, but it is \$13 to park for 4 hours and usually we are here close to that amount of time. Most of the time we are in the waiting room; it takes a long time to check in, then they weigh and measure the baby, then we wait more time in the exam room, and finally, we see the doctor, the doctor doesn't usually take very long with us, but then it takes a while for us to check out and schedule our next appointment. With two babies, there are lots of 'well visits' or as Dr. Peggy calls them 'health supervision visits'.

Our 'Doctor' is Dr. Peggy who is a pediatric nurse practitioner and she is a cool lady, except sometimes she talks too fast and uses words I do not completely understand. I try to remember the words and look them up later on my phone, But those phone minutes are not cheap. I know I should stop Dr. Peggy and question exactly what she means, but I never finished high school and well, she seems so busy all the time, and it is embarrassing not to know stuff. Like I said health professionals can be judgmental.

Discussion

1. Why is addressing the role of social determinants of health important for this family?
2. Identify the social determinants of health – both positive and negative – that may influence the health of Emma and her family – Andrew, Jonathan, and Leah. Refer back to the table found in the Introduction: Social Determinants of Health section for prompts. What sort of education and supports might you offer?
3. As the pediatric clinic nurse, what three questions might you ask to find out more about the social determinants of health you identified above?

PART 2: WHEN IT IS MORE THAN JUST A DIAPER RASH

The most important social determinant of health for the developing child and their family may be economic stability. Poverty frequently equates to material hardship. Poor people tend to have poorer health compared to non-poor individuals.

Poverty and its associated challenges are not uncommon. Almost 12% of individuals live in poverty in the United States (U.S. Census, 2019). Population-level data reveals that almost half of families with infants and very young children live at or below 200% of the federal poverty level (Jiang et al, 2017). The United States federal poverty guidelines are used to determine financial eligibility for certain federal programs.

Diaper need occurs when a family cannot furnish sufficient diapers to keep their baby clean, dry, comfortable, and healthy. Diaper need is a common manifestation of material hardship with one in three households lacking sufficient diapers to ensure their baby's health and comfort (Raver et al, 2010). Over half of urban pregnant and parenting low-income women reported experiencing diaper need (Austin & Smith, 2017).

Diaper need has a potential impact on both the infant's and the mother's health outcomes. Infants require more than 2600 diapers during their first year of life. Keep in mind that the term 'diaper need' can also apply to supplies needed by older or disabled individuals with incontinence.

Keywords: *diaper bank, diaper need, diaper rash, economic stability, material hardship, poverty*

Learning Objective: Articulate how social determinants of health may precede or exacerbate health conditions

"We're here for Leah's 6-month well check-up. Leah still has a pretty bad diaper rash that is even worse than when we were here the last time. The skin on her bottom, lower tummy, and upper thighs is red and shiny. Is there any prescription cream we can get? Jonathan is still in diapers, too. It is hard to always have enough diapers on hand for the both of them. Jonathan goes ballistic when his diaper is wet or dirty. But I do not think he is ready for toilet training."

~ Emma (Leah and Jonathan's mother)



Why is it the first priority to attend to the parent's concerns at health supervision visits?

It is essential to address parent's concerns as the first priority during a health supervision visit. Hagan, et al. (2017) in Bright Futures Guidelines notes "that families bring an agenda, and we must address these needs in the visit if we are to be successful" (p.259). Addressing parent's concerns may increase individuals/family's provider trust and increase parent perceived value of the health supervision visit. In Leah's case, her mother's immediate concern is diaper rash.

To save time, consider recommending to parents that they complete, before the clinic visit, a pre-visit questionnaire such as the Bright Futures Previsit Questionnaires. The questionnaire can be accessed online prior to the visit or, if the parent does not have access to a computer or the internet, immediately prior to the appointment in the waiting area. These questionnaires ask about the health and development of the child – information that serves as the foundation for health supervision visits. The questionnaires are available for ages 0–21 years. As Leah is six months old, the Bright Futures questionnaire for her can be reviewed here:

<https://www.elpasoped.com/files/html/Forms/English/Infancy-Core-Tools-6Month-English.pdf>

Tips for talking to parents (Childcare, 2019)

1. Find a place where you and parent can talk privately and close the exam room door
2. Be prepared for strong emotions
3. Be caring, supportive, and respectful
4. Begin by saying something positive about the child or the parent's caregiving skills
5. Choose your words carefully
6. Be ready to share information and resources
7. Trust your instincts

What are the types of diaper rash?

There are multiple diaper rash types, also referred to as diaper dermatitis. The most common type of diaper rash is irritant diaper rash. Skin irritation from urine and feces looks red and shiny. Skin affected includes the buttocks and sometimes the thighs, abdomen, and waist. Skin creases and folds are often spared. Other diaper rash types include yeast, bacteria, allergy to certain diaper or diaper wipe brands, and more rare types such as seborrheic dermatitis and an inherited form of zinc deficiency.

Learners should read the supplemental document *What is diaper rash?*

Based on Emma's description, what type of diaper rash is Leah likely to be experiencing?

Leah probably has an irritant rash as her mother describes it as 'red and shiny.'

What is diaper need?

Diaper need is when a family cannot afford sufficient diapers to keep their child clean, dry, comfortable, and healthy. Diaper need in the form of incontinence supplies also exists for certain older individuals or certain individuals with disabilities. Diaper need may be an issue for children with Autism Spectrum Disorder, as these children may experience delayed toilet training or gastrointestinal issues. Parents who receive diapers report positive economic, health, and social outcomes (Massengale, Erausquin, & Old, 2017); however, only about 4% of babies from low-income families obtain diapers from diaper banks (Massengale, Comer, Austin, & Goldblum, 2020).

Learners should complete the supplemental document *Diaper Need Worksheet*.

How should I ask about diaper need?

- "Are you able to buy enough diapers for your baby all month long?"
- "If you have a child in diapers, do you ever feel that you do not have enough diapers to change them as often as you would like? If yes, what do you do when you don't have enough diapers?" (Austin & Smith, 2017)

Learners should read the supplemental document Dear Nursing Student: A letter from the National Diaper Bank Network.

Why might a parent specifically request a ‘prescription’ diaper rash medication?

Generally, home remedies to treat a diaper rash are effective and over-the-counter medications are readily available. Some popular over-the-counter products include A + D, Balmex, Desitin, Triple Paste, and Lotrimin (for yeast infections). These may be costly, however, and not affordable by families experiencing economic instability.

For individuals with health insurance coverage, appropriate prescription medication may be a better alternative as the insurance may cover part of the cost. However, rational prescribing should prevail, including consideration of cost, resource utilization, and best practice prescribing principles. In Leah’s case, a prescription might be a viable alternative, as home treatment is not working. Medications that may be considered by the prescriber include:

- A mild hydrocortisone (steroid) cream if inflammation is present.
- An antifungal cream if the baby is determined to have a fungal infection.
- Topical or oral antibiotics if the baby has a bacterial infection.

Diaper rashes usually require several days to improve, and the rash may come back repeatedly. If the rash persists despite prescription treatment, the baby may need evaluation by a pediatric dermatologist.

Acknowledging the financial and emotional challenges of parenting as a source of stress and exploring the particulars may elicit additional insight into the parent’s request.

What sort of diaper rash parent education would you provide?

Educate parents in the prevention of diaper rash. The underlying premise to preventing diaper rash is to limit contact of urine and stool with baby’s skin. Advise parents to:

- Change baby’s diapers as soon as they are wet or dirty. Keep the diaper area as clean as possible.
- At each diaper changing: gently clean the skin with cotton balls dipped in clean, warm water. Do not use wipes with alcohol or fragrance, even better, do not use baby wipes at all.
- Coat the diaper area with a barrier paste containing zinc oxide or petroleum jelly to help shield the skin from urine and stool. (Rowe et al, 2008)
- Use a highly absorbent disposable diaper. Cloth diapers tend to be less absorbent than disposable diapers, so cloth diapers may not be as helpful for diaper rash prevention or healing.
- Keep diapers a little loose, especially in the overnight hours. Do not cover diapers with plastic panties.

What resources are available to assist families experiencing diaper need?

Diaper Banks. There are more than 300 diaper banks in the United States. In addition to no-cost to end user caregiver and baby diaper distribution, diaper banks may also supply feminine hygiene products, education, and other resources.

- Central Jersey Diaper Bank <https://www.aecdc.org/central-jersey-diaper-bank>
- CNY Diaper Bank <http://www.cnydiaperbank.org/>
- Houston Diaper Bank <https://houstondiaperbank.org/>
- Moms Helping Moms <https://momshelpingmomsfoundation.org/>
- National Diaper Bank Network <https://nationaldiaperbanknetwork.org/>
- San Francisco Diaper Bank <http://www.sfdiaperbank.org/>
- Western Pennsylvania Diaper Bank <https://www.wpadiaperbank.org/>

Food Banks/Pantries and local faith-based organizations may also assist with diaper need.

Girl Scouts Baby Bundles

<https://www.wanaqueps.org/cms/lib/NJ01912976/Centricity/Domain/145/BABY%20BUNDLES%20-%20Girl%20Scouts.pdf>

Temporary Assistance to Needy Families (TANF) <https://www.benefits.gov/benefit/613> TANF provides financial assistance to eligible families and does not directly provide diapers

How does diaper need cause or exacerbate health problems with lifelong consequences?

Babies left in soiled diapers can develop diaper dermatitis that may require health care system attention. Infants with soiled diapers and irritated bottoms may sleep poorly. Mothers of infants experiencing diaper rash report more symptoms of anxiety and depression (Smith et al, 2013; Wallace et al, 2017). Excessively soiled, leaking diapers may increase the spread of infectious diseases. Crying, cranky babies with diaper rash may increase parental stress and potentially the likelihood of child abuse and neglect. Depressed and stressed parents negatively affect their child's academic achievement.

How may social determinants of health precede or exacerbate health conditions?

Social determinants of health may precede or exacerbate health conditions. For example, an infant may develop irritant diaper rash because their parents cannot afford sufficient diapers to enable frequent enough diaper changes to preclude dermatitis from urine or stool. Children who live in areas with high levels of particulate matter in the air or in an apartment where a neighbor's cigarette smoke filters into child's bedroom may be predisposed to asthma exacerbation (Butz et al, 2019). Young children who are exposed to lead in their drinking water may exhibit developmental and cognitive changes (Vorvolakas et al, 2016). Adolescents living in communities with high levels of violence may later be diagnosed with anxiety or depression (Slopen et al, 2012).

Thinking population health, what are some upstream and midstream approaches the nurse may take to address diaper need?

- Determine the population level prevalence of diaper need.
- Collaborate with community members, other healthcare professionals, and additional stakeholders if/how diaper need is prioritized.
- Gather evidence about diaper need to inform and guide clinical practice.
- Pilot test process to assess for diaper need and share helpful resources in the clinical practice site.
- As appropriate, expand successful process to additional practice sites both community and hospital based.
- Create and share diaper need related education and resource material.
- Advocate with policymakers to allocate additional resources diaper need.
- Support quality diaper need resource options through volunteering time and nurse expertise.

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PART 3: HOME SAFE HOME

Economic stability is a social determinant of health. Per Healthy People 2020, housing instability is a key influencing factor for economic stability. The United States Department of Health and Human Services (DHHS) defines housing insecurity as high housing costs in proportion to income, poor housing quality, unstable neighborhoods, overcrowding, or homelessness. The DHHS definition combines the Healthy People 2020 social determinants of health key influencing factors of housing instability and quality of housing. Quality of housing as an influencing factor is found within the key area neighborhood and built environment social determinant of health. Healthy People 2030 is now available.



The terms housing instability, housing insecurity, quality of housing, and even homelessness may be used interchangeably in the literature, which can be confusing. Nurses need to understand that housing inadequacy in any form affects health outcomes for individuals, children, and families. It is also important to comprehend that a shelter bed in a homeless shelter is not housing. Shelter beds prevent people from having to sleep outdoors. Whereas, housing ends homelessness. Infants under age 12 months are the population most likely to be homeless (Child Trends; Stewart, 2019).

Keywords: *economic stability, homelessness, housing insecurity, housing instability, neighborhood and built environment, quality of housing, social determinants of health*

Learning Objective: Demonstrate how population data informs clinical practice

“Our living situation? It has been challenging. We had a place, an apartment, but the building was condemned after the fire. We lost everything. We still have not gotten back our security deposit. At first, we got help with a motel but since then we have been moving around a lot: friends places, relatives, people’s couches, a couple of times we slept in the park, it all is really hard. Scary. We could have gone to a homeless shelter. I stayed in a few after I aged out of foster care. But at best most are loud and not so clean. Leah is just so new. Jonathan is just so set in his ways. Just thinking about not having a permanent place to stay gets me stressed and emotional. For the last week or so we have been staying with Andrew’s grandmother. Her house is small. Yes, this is a big worry for us. So no, we do not really have a regular place to call home.”

~ Emma (Leah and Jonathan’s mother)

How does Bright Futures suggest incorporating social determinants of health screening in health supervision visits?

The American Academy of Pediatrics supported Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents endorses priority attention to social determinants of health at each

well-child health supervision visit prenatally through 21 years of age. Bright Futures identifies risk factors in social determinants including abuse and neglect, homelessness, parental dysfunction, poverty, and separation or divorce. Bright Futures also recognizes that social determinants found beyond the immediate household have an impact on children and families in both the current and longer timeframes. These determinants include neighborhood conditions; the built environment including safe and green play spaces; the availability of affordable, nutritious food; geographic access to quality health care services; and quality education starting with early childhood developmental programs.

There are many social determinants of health assessment/screening tools available. However, the accuracy of social determinant of health screening tools is largely unevaluated (Sokol et al, 2019). Social determinants of health screening should be population-sensitive, i.e., the questions you ask should reflect the circumstances and priorities of the people you most frequently professionally encounter.

No specific social determinants of health-related screening tools are recommended in the Bright Futures guidelines as sufficient evidence to endorse a specific tool is lacking. However, there are broad-based screening tools that can identify unmet basic needs and condition-specific tools to detect concerns such as maternal depression and intimate partner violence. Potentially useful tools include the following:

- WE CARE survey,
- Pediatric Intake Form,
- SEEK parent screening questionnaire,
- Edinburgh Post-Natal Depression Screening tool,
- Survey of Wellbeing of Young Children,
- Whole Child Assessment, and
- 2-Item Screen to Identify Families at Risk for Food Insecurity.

In addition, to evaluating the accuracy of social determinants of health screening tools, evaluation of referrals and interventions to address social determinant of health are also needed (Gold & Gottlieb, 2019; Sokol et al, 2019). One example of such an evaluation is from Gottlieb (2020) who found that both in-person verbal and personalized written resources reduced social risks and improved child and caregiver health six months after. This underscores the importance of providing up-to-date personalized written resources to individuals and families experiencing social risk factors.

Learners should review Social Determinants of Health (SDoH) 'Screening' Tools.

What does Bright Futures recommend as priority areas for the six-month well child health supervision visit?

The Bright Futures Guidelines are available for download from the American Academy of Pediatrics <https://brightfutures.aap.org/materials-and-tools/guidelines-and-pocket-guide/Pages/default.aspx>.

Social determinants of health is given priority in all Bright Futures Health Supervision visits. For the 6-month health supervision visit, consider a discussion about

- The family living situation
- Food security
- Alcohol, tobacco and other drug use
- Parental depression (p. 458).

How common is housing insecurity?

The rate of housing insecurity when screened in pediatric primary care ranges from 2% (homelessness only) through 14–56% for more comprehensive screening tools that ask about housing problems such as crowding (41%) and multiple moves (5%) (Cutts et al, 2011; Fleepler et al, 2007; Porter et al, 2019; Zielinski et al, 2017). Often, housing insecurity screening tools do not address high housing costs in proportion to income, poor housing quality in general, or unstable neighborhoods.

How does housing insecurity affect child health and development?

Homelessness and poverty are among the social conditions most consistently associated with poor health outcomes and higher costs. Housing insecurity is associated with poor health, lower weight, and developmental risk in infants and young children. Households behind on rent have higher odds of child lifetime hospitalizations and fair/poor child health. Similar adverse child outcomes are found for families with multiple moves and a history of homelessness (Sandel et al, 2018). Homeless infants are known to have poor birth outcomes and poorer outcomes in asthma diagnosis, higher emergency department use and healthcare costs (Clark et al, 2019). Federal rental assistance for families with low incomes may reduce emergency department visits for asthma (Boudreaux, Slopen, & Newman, 2020).

What screening questions best identify housing insecurity?

- Are you homeless or worried you might be in the future?
- Do you think you are at risk for becoming homeless?
- Do more than two people share a bedroom in your residence?
- Does more than one family live in your residence?
- Have you moved two or more times in the past year?

What are some quality of housing issues concerning to children and families?

- Air pollution
- Asbestos
- Disaster readiness
- Lead in old paint or from lead water pipes
- Outside lighting that disturbs sleep
- Mold and mildew
- Noise
- Radon
- Safety hazards
- Second-hand smoke
- Vermin

Where can you find population level data for populations of interest?

Social determinants of health screening should be population-sensitive, i.e., the questions you ask should consider the circumstances and priorities of the people you most frequently professionally encounter.

- PLACES: Local Data for Better Health <https://www.cdc.gov/places/index.html>
- County Health Rankings <https://www.countyhealthrankings.org/>
- Kids Count 2021 <https://www.aecf.org/resources/2021-kids-count-data-book>
- Sources for social determinants of health data <https://www.cdc.gov/socialdeterminants/data/index.htm>
- United States Census Bureau <https://www.census.gov/>
- United States Interagency Council on Homelessness [https://www.usich.gov/tools-for-action/map/#fn\[\]=1400&fn\[\]=2800&fn\[\]=6200&fn\[\]=10000&fn\[\]=13200](https://www.usich.gov/tools-for-action/map/#fn[]=1400&fn[]=2800&fn[]=6200&fn[]=10000&fn[]=13200)
- Zero to Three State of Babies Yearbook 2020 <https://stateofbabies.org/>

What are some examples of Federal programs that address the health and housing link?

- Centers for Disease Control and Prevention https://www.cdc.gov/nceh/information/healthy_homes_lead.htm
- Healthy Choice Vouchers Fact Sheet https://www.hud.gov/topics/housing_choice_voucher_program_section_8
- Housing and Urban Development https://www.hud.gov/program_offices/healthy_homes/hhi
- National Center for Healthy Housing <https://nchh.org/>
- United States Department of Agriculture National Institute of Food and Agriculture <https://nifa.usda.gov/healthy-homes-initiative>
- Healthy Homes Portal <https://extensionhealthyhomes.org/>

How may population level health data influence clinical practice?

Population-level health data helps nurses determine which issues are quantitatively most important to address in clinical practice. For example, knowing that substance use disorder or syphilis is increasing may guide resource allocation in a particular practice or community. The same knowledge may encourage the individual nurse to seek out more evidence on the topic or attend a continuing education event. Knowing that a particular census tract or other geographic area has a high prevalence of a condition may assist health planners and urban planners on where to locate new or specific services. Policy initiatives developed based on population level data (e.g., Census) may influence resource and services allocation.

Thinking population health, what are some upstream and midstream approaches the nurse may take to address housing insecurity and quality of housing?

- Ascertain the population level prevalence of a particular condition of interest.
- Collaborate with community members, other healthcare professionals, and additional stakeholders to determine priorities and issues of concern.
- Gather evidence to inform and guide clinical practice.

- Pilot test a process that can be used in the clinical setting to assess for housing insecurity and quality of housing.
- As appropriate, expand the above process to the practice setting or to the entire health care system. For example, implement universal screening for housing insecurity and quality of housing for all new and follow-up individuals including individuals being discharged.
- Create and share related education and resource materials.
- Advocate with policymakers to allocate additional resources to the prioritized issues of concern.
- Support quality resource options through volunteering time and expertise.

Supplemental document

- Social Determinants of Health (SDoH) 'Screening' Tools

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PART 4: THE HUNGER GAMES

Economic stability is a social determinant of health. Food insecurity is a key influencing factor within economic stability. Food insecurity is defined by the United States Department of Agriculture as a “household-level economic and social condition of limited or uncertain access to nutritionally adequate food” (Food Insecurity, 2016). Food insecurity has implications through-out the life course.



Connected to food insecurity is the neighborhood and built environment social determinants of health key influencing factor ‘access to foods that support healthy eating patterns.’ Some communities do not have fresh fruits and vegetables, or other healthy food options available for purchase (food deserts); some communities are overwhelmed with fast food choices, convenience stores, and liquor stores (food swamps). Neither food deserts nor food swamps aid access to foods that support healthy eating patterns. Ideally, everyone should have sufficient economic resources and reasonable access to healthy and nutritious food.

Keywords: *access to foods that support healthy eating patterns, breastfeeding, economic stability, food bank, food desert, food insecurity, food security screening, food swamp, hunger, neighborhood and built environment, SNAP, WIC*

Learning Objective: Relate how social determinants of health are connected

“Within the last 12 months have we worried about food running out and not having the money to buy more? Sure, almost every day, that is one of the reasons why I am breastfeeding Leah. So yes, we need help to get enough food. We do get help from SNAP and WIC, but it is really not enough especially toward the end of the month. There was a big food store just up the road from Andrew’s grandmother’s place, but it closed down. Now fruit and vegetable choices are even more limited. It is unreal, but McDonalds, Wendys, and Checkers are all closer to us than any place selling healthy food. The hospital across from the closed big food store has a farmers’ market but only on Tuesdays during the summer. We can use SNAP benefits there. I wish it were open all the time. I want my babies to be healthy and never hungry. My parents, they spent money on drugs and alcohol, not food for us kids.”
 ~ Emma (Leah and Jonathan’s mother)

For more information on WIC and SNAP, please see:

- Special Supplemental Assistance Program for Women, Infants, and Children (WIC)
<https://www.fns.usda.gov/wic/about-wic>
- Supplemental Nutrition Assistance Nutrition Program (SNAP)
<https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program>

What is food insecurity?

Determination of food insecurity considers the quantity of food available, but may or may not consider the quality or healthfulness of the food that is available (Porter et al, 2019). Food insecurity is an indicator of limited resources and material hardship. Food insecure households are not necessarily food insecure all the time making screening at multiple time points important. Food insecure households may need to choose between food and diapers, food and medications, or food and rent. Food insecurity is a source of stress for parents (Knowles et al, 2016).

What is the rate of food insecurity?

The rate of food insecurity identified in the pediatric primary care setting ranges from 10–39% (Porter et al, 2019). Of note, food insecurity rates may vary with setting as well as by key population and geographic area. Economic downturns, pandemics, and other disasters may push formerly food secure individuals and households into food insecurity.

How might the rate of hunger or food insecurity be estimated for a state or other locale?

The nonprofit, Feeding America, offers an interactive map that reports population-level food insecurity and poverty metrics <https://map.feedingamerica.org/>.

Individual states and smaller government units may also have data. New Jersey food insecurity data are available here: https://www-doh.state.nj.us/doh-shad/indicator/complete_profile/FoodInsecurity.html

How does food insecurity influence growth and development?

Young children's brains need adequate, nutritious food to optimally develop (Zero to Three). This is especially important for babies and toddlers as most of brain growth occurs during the early years of life. Hungry children do less well in school and on standardized testing. Food insecurity for children less than 4 years of age is associated with fair/poor health and developmental risk (Drennan et al, 2019). For children ages 25 to 36 months, household food insecurity is associated with increased adjusted odds for obesity (Drennan et al, 2019). In an analysis of nationally representative data, household food insecurity for children (2 to 17 years old) was related to worse general health, some acute and chronic health problems such as lifetime asthma diagnosis and depressive symptoms, worse health care access including foregone ('missed') care, and increased emergency department use (Thomas, Miller, & Morrissey, 2019).

What are some examples of tools to screen for food insecurity?

Examples of tools used to screen for food insecurity include: the United States Household Food Security Screening 18-item full and 6-item short form, Childhood Community Hunger Identification Project, WE CARE screener, and WellRx survey. Do note the accuracy of most Social Determinants of Health screening tools is largely unevaluated (Sokol et al, 2019). However, many of the food insecurity-only screening tools do have good metrics behind them adding to their value and usefulness.

The relatively widely used two-question food insecurity screen is 97% sensitive and 83% specific among low-income families with young children making it an excellent or good tool to use (Hager et al, 2010; O’Keefe, 2015). This food insecurity screening tool is recommended for clinical use by the American Academy of Pediatrics. Answering yes to either of the following two questions suggests that a family is struggling with food insecurity:

- Within the past 12 months, we were worried whether our food would run out before we got money to buy more?
- Within the past 12 months, the food we bought just did not last and we did not have money to get more?

Food insecure households are not necessarily food insecure all the time making screening at multiple time points important. For example, the Special Supplemental Assistance Program for Women, Infants, and Children (WIC) may not offer enough infant formula to last the entire month especially for an older and larger infant. As such, the response you get to a food insecurity screening question at the beginning of the month might be quite different from the response that you get to the same question at the end of the same month. Therefore, you should not just screen for food insecurity once, but rather consider screening at every health care encounter including outpatient, inpatient, home, and community.

Overtly displaying and sharing resources that may mitigate food insecurity supports individuals and households who may not wish to acknowledge their food insecurity to their clinician. One study found that adding a ‘referral menu’ with local resources increased by 15% the number of families identified with food insecurity compared to screening alone — hinting that families may under report social problems perhaps due to embarrassment or stigma (Bottino et al, 2017).

Learner should review the following supplemental document

- Social Determinants of Health (SDoH) ‘Screening’ Tools

What are some resources to assist families and individuals experiencing food insecurity?

- Food Banks and Food Pantries <https://www.feedingamerica.org/find-your-local-foodbank>
- Text “findfood” in English or “comida” in Spanish to 888-918-2729, texters will be prompted to give their zip code and will receive responses in their chosen language.
- Government Benefits <https://www.usa.gov/benefits#item-213996>
- ICNA Relief USA (Muslims for Humanity) <https://www.icnarelief.org/>
- Meals on Wheels <https://www.mealsonwheelsamerica.org/>
- Saint Vincent de Paul Society <https://www.svdpusa.org/Assistance-Services>
- Special Supplemental Assistance Program for Women, Infants, and Children (WIC) <https://www.fns.usda.gov/wic/about-wic>
- Supplemental Nutrition Assistance Nutrition Program (SNAP) <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program>

What is a food desert? What is a food swamp?

A food desert is a geographical area that lacks options for purchasing and/or obtaining healthy nutritious food especially fresh vegetables and fruit. Food deserts are typically found in low income urban areas with predominantly Black and Brown residents (Food Empowerment Project). A food swamp is a geographical area overwhelmed with fast food options, corner delis, convenience stores, and often liquor stores that typically offer low-quality, highly processed food choices (Food Empowerment Project). Neither food deserts nor food swamps aid access to foods that support healthy eating patterns.

What are some resources to help ensure access to foods that support healthy eating patterns?

- 2020 Edible Jersey Farmers' Market Guide <https://ediblejersey.ediblecommunities.com/shop/2020-edible-jersey-farmers-market-guide>
- Black Mothers Breastfeeding Association <https://blackmothersbreastfeeding.org/>
- Farmers' Market Coalition <https://farmersmarketcoalition.org/advocacy/snap/>
- WIC Breastfeeding Support <https://wicbreastfeeding.fns.usda.gov/>

What are some examples of the connections between social determinants of health?

- Economic Stability/Neighborhood and Built Environment (food insecurity and lack of access to foods that support healthy eating patterns)
- Education/Social and Community Context (early childhood education and development/incarceration)
- Health and Health Care (access to health care and employment)

Thinking population health, what are some upstream and midstream actions nurses can take to reduce food insecurity and increase access to foods that support healthy eating patterns?

- Determine the population-level prevalence of food insecurity.
- Collaborate with community members, other healthcare professionals, and additional stakeholders to determine if and how food insecurity is prioritized.
- Gather and share evidence about food insecurity and lack of access to foods that support healthy eating to inform and guide clinical practice.
- Pilot test a process to assess for food insecurity and lack of access to healthy foods in the clinical practice setting.
- As appropriate, expand the above process to the practice setting or to the entire health care system. For example, implement universal screening for food insecurity for all new and follow-up individuals including individuals being discharged.
- Create and share food insecurity and lack of access to foods that support healthy eating patterns content for individuals using health literacy principles.
- Advocate with policymakers to allocate additional resources to remediate the lack of access to foods that support healthy eating patterns.

- Support community-based initiatives that reduce food insecurity and support healthy eating patterns by volunteering time and expertise. Check to see if the local food bank may welcome a nurse board member or if the local WIC program might appreciate nurse-led user education sessions in the office waiting area.

Supplemental document

- Social Determinants of Health (SDoH) 'Screening' Tools

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PART 5: WORK, WORK, WORK

Economic stability is a social determinant of health. According to Healthy People 2020 employment is a key influencing factor for economic stability. Employment options may be affected by influencing factors such as enrollment in higher education, high school graduation, incarceration history, language and literacy, and social cohesion. As many households lack 'a safety net' with put aside financial savings, a missed weekly paycheck may plunge them into poverty. Employment for many people goes beyond just the salary aspect, but is also a source of self-respect and self-worth. Healthy People 2030 is now available.



Keywords: *economic stability, employment, poverty*

Learning Objective: Explain how social determinants of health may have a greater impact on target populations

*"A job? I have not worked since Leah was born. Just finding food and shelter for us feels like a more than full time job. But I am looking again."
~Emma (Leah and Jonathan's mother)*

*"A job? Not on a regular basis, but I am looking. Really looking. A lot of employers do not want to hire someone who does not already have a regular job. I get that. My last boss he grew to count on me, trusted me, and then the fire destroyed my work tools. He just cannot use me as much. I do not like talking about it with strangers, but I know talking about it, networking, is the best way to find a job."
~ Andrew (Leah and Jonathan's father)*

Understanding unemployment and underemployment

When thinking about unemployment you may consider not only whether or not someone has a job, but whether the individual receives sufficient work hours and adequate wages to support their household. Workers earning a low wage, even those working full time (approximately 40 hours per week), may not earn sufficient income to adequately support their family. The federal minimum wage for covered nonexempt employees is \$7.25 per hour (but varies by state), which equates to approximately \$15,000 annually. For example, New Jersey's minimum wage is \$11.00 per hour and will increase \$1 each January 1 until it reaches \$15 per hour, or approximately \$30,000 per year. In New York, the 2020 minimum wage ranges from \$11.80 – \$15.00 (\$22,000 – \$30,000 per year) dependent on geographic location of employment.

In 2018–2019 the Caplan Foundation for Early Childhood funded a study (specifically, a systematic review) that revealed the rate of unemployment ranged from 17% to 37% for families screened in pediatric primary care settings (Fleegler et al, 2007; Porter et al, 2019; Zielinski et al, 2017). Unemployment rates are influenced by multiple factors including government policies, spatial

mismatch of job opportunities and potential employees, transportation limitations, and mismatch between employer skills needs and job seeker abilities. Unemployment rates may vary with geography and employment sector.

The Merriam-Webster dictionary defines underemployment as “the condition in which people in a labor force at less than full-time jobs or at jobs inadequate with respect to their training or economic needs”. Underemployment rates are associated with multiple factors, similar to those factors associated with unemployment. Both unemployment and underemployment contribute to household poverty status and poverty rates. Without adequate income, families are unable to purchase what they need and as such, struggle with material hardship. Wage earners who are Black or Latinx face a greater threat of underemployment compared to White wage earners (Nunn et al, 2019).

How does parental unemployment or underemployment affect child health and development?

For many people, job loss or the inability to gain or sustain employment can be devastating with emotional and economic consequences. Family financial challenges affect child health and wellbeing. Health care professionals will also want to consider the emotional impact of unemployment and underemployment on individuals and families. Unemployment is a risk factor for impaired mental health (Zuelke et al, 2018). Parental depression has a negative effect on child development (Barnes & Theule, 2019; Letourneau, Dennis, Cosic, & Linder, 2017; Sweeney & MacBeth, 2016).

Poverty and its associated ills are not uncommon; two out of five children in the United States experience poverty during childhood. Poverty-level income affects the family’s ability to meet basic human needs as well as optimally access health care and education. Childhood poverty is an adverse childhood experience known to negatively affect later adult health. The American Academy of Pediatrics past President Bernard P. Dreyer stresses the need for pediatric clinicians to address poverty stating that “almost half of pediatric patients” experience economic challenges (Korioth, 2016). Yet despite the importance of socio-economic factors to child health and development, socio-economic issues often receive scant attention from pediatric primary care clinicians. Just 36.8% of pediatric primary care clinicians routinely assess for socio-economic concerns as a risk factor for poor health and development (Porter, et al, 2016). Without screening and identification, intervention that may improve household finances is delayed, or never occurs, and children suffer both in the short and long-term.

What question might you ask to screen for unemployment?

- Do you have a job?

When you ask about employment, also consider asking about health insurance status. A lack of regular employment may signal a lack of health insurance.

- Do you have health insurance?

What are some resources available to assist job seekers?

- Government Benefits <https://www.usa.gov/benefits>
- New Jersey Division of Unemployment Insurance <https://myunemployment.nj.gov/>
 - One-stop Career Centers and Training and Education Resources

- Unemployment Help <https://www.usa.gov/unemployment>

Where might you find population-level employment data?

- United States Census Bureau Employment <https://www.census.gov/topics/employment.html>
- U.S. Bureau of Labor Statistics. Labor Force Statistics from the Current Population Survey <https://www.bls.gov/cps/>

What are some programs available to help families and individuals experiencing poverty?

The Earned Income Tax Credit (EITC or EIC) <https://www.irs.gov/credits-deductions/individuals/earned-income-tax-credit> is a benefit for working people with low to moderate income. To qualify, certain requirements must be met, and you must have filed a tax return, even if tax is not owed. EITC reduces the amount of tax owed and some will qualify for a refund.

United States federal poverty guidelines used to determine financial eligibility for certain federal programs are published each year <https://aspe.hhs.gov/poverty-guidelines>. For example, to be eligible for The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), applicants must have income at or below a specific level set by the state agency (or determined automatically income-eligible based on participation in another program). The state agency's income standard must be between 100% and 185% of the federal poverty guidelines.

The federal welfare program Temporary Assistance to Needy Families (TANF) program is designed to help needy families achieve self-sufficiency. States receive block grants to design and operate programs that accomplish one of the purposes of the TANF program.

<https://www.acf.hhs.gov/ofa/programs/tanf>. New Jersey's Temporary Assistance to Needy Families (TANF) program – WorkFirst NJ – is the state's welfare reform program. WorkFirst NJ emphasizes work as the initial step. WorkFirst NJ's goal is to help people get off welfare, secure employment and become self-sufficient through job training, education, and work activities. WorkFirst NJ provides temporary cash assistance and many other support services to families. WorkFirst NJ only helps approximately 15% of families living below the federal poverty level which means many families are not getting the assistance despite meeting eligibility criteria. Insure Kids Now <https://www.insurekidsnow.gov/>

How might collaborating with a social work colleague assist this family?

As the Hall family has many issues of concern, the social worker may help the family prioritize and plan how to approach the issues in a manner that is acceptable to the parents. Families generally do not want an information 'dump' but rather find personalized resource recommendations much more useful.

Learners should read the supplemental document Ten Social Work Practice Facts

How might collaborating with a rehabilitation counseling colleague assist this family?

Rehabilitation counselors help people build skills, cope with feelings of anxiety and depression, and find solutions to problems such as employment, chronic pain, mobility, transportation, and basic care, so that they can obtain or return to gainful employment. Rehabilitation counselors, like other caring professionals, start with a client assessment, develop a treatment plan, and then use therapeutic techniques to create and achieve a better quality of life for the client.

Learners should read the following supplemental document *Rehabilitation Counselors: Hidden Gems in Interprofessional Care*

How might social determinants of health have a greater impact on key target populations compared to the general population?

Individuals and families who are experiencing multiple negative social determinants of health for example, unemployment, poverty, high rates of neighborhood violence, poor housing, and a lack of health insurance) may be especially vulnerable to poor health outcomes (poor physical and/or mental health) as often the effects are cumulative and compounding.

For example, people with a history of incarceration may find it difficult to reintegrate into the community and maintain stable family networks as ex-offenders frequently experience high rates of divorce and relationship problems. Additionally, incarceration makes it extremely difficult to find employment and ex-inmates may only find undesirable jobs with low wages, poor benefits, and no health insurance, further exacerbating the health consequences of incarceration. The challenges of integrating back into society and the stigma around being a felon may increase the likelihood of committing more crimes and rearrests. Transition from the prison health system to one outside of jail or prison may also be a time of exacerbated health issues for former inmates. Beyond the direct effects of incarceration on inmates and ex-offenders, incarceration harms children, families, and the community. Children may experience material hardship when an earner is no longer present to add to the family coffers, a caring parent is no longer readily available to provide emotional support, and an able adult is no longer present to maintain a safe environment. As social determinants of health and their influencing factors are often interrelated, incarceration may affect poverty, employment, and social cohesion.

Thinking population health, how might nurses use upstream and midstream approaches to positively influence employment opportunities in the community?

- Determine the population-level prevalence of unemployment.
- Collaborate with community members, other health care professionals and stakeholders to find out if/how unemployment and employment are prioritized.
- Gather and share evidence about the impact of unemployment on health outcomes to inform and guide clinical practice.
- Pilot test ways to assess for unemployment in the person/family population. Plan a quality improvement project.

- As appropriate, expand the tested process for assessing unemployment to the practice setting or greater health care system. For example, the implementation of universal screening for unemployment for all new and follow-up individuals including individuals being discharged.
- Create and share unemployment and health resource material using health literacy informed principles.
- Advocate for local, state, and national policies that support work opportunities in impoverished communities.
- Advocate with policymakers to allocate additional resources to increase employment opportunities, training, and employment support in the area.
- Advocate for the hire of a rehabilitation counselor to work at local primary care clinics focusing on with people who have physical or behavioral barriers to employment.
- Support quality programs that assist unemployed people through volunteering or board membership.

Supplemental documents

- Rehabilitation Counselors: Hidden Gems in Interprofessional Care
- Ten Social Work Practice Facts

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PART 6: BABIES LIKE BOOKS

Education is considered by many experts the most important social determinant of health. Quality early childhood education and development programs provide an astounding return on investment (The Heckman Equation). Supporting parents to invest in their children's development and participate in early child education and development programs means better health outcomes for the child including into adulthood. Nurses who interact with parents and children during pregnancy, infancy, and early childhood are in an important position to positively affect early childhood education and development.

Keywords: *early childhood education and development, education, language and literacy*

Learning Objective: Illustrate upstream and downstream approaches to population health within a social determinants of health framework

"I try to read to Jonathan and Leah every day using books from the Reach Out and Read program. Are there any other resources I might investigate to support Leah and Jonathan's development?"

~ Emma (Leah and Jonathan's mother)



Developmental monitoring: surveillance and screening

Bright Futures (2017) recommends developmental monitoring at each health supervision/well child visit through age five.

Developmental monitoring incorporates:

- Developmental surveillance and
- Developmental screening.

Developmental surveillance is the on-going assessment of a child's developmental level.

Developmental surveillance helps the nurse recognize a child's developmental risk. Although pediatric primary care providers are responsible for identifying children at risk for and exhibiting developmental delay and ensuring appropriate interventions, other health, education, therapy, and behavioral professionals may also provide developmental monitoring. Professionals may include childcare providers, home visitors including those from the Nurse Family Partnership, preschool teachers, and developmental therapists. Collaboration between professionals is especially important when a developmental concern is noted (Lipkin et al, 2020).

Per the American Academy of Pediatrics (2020), six components of developmental surveillance should be incorporated into every health supervision/well child visit:

1. Ask about and address parents' concerns about their child's development and behavior;
2. Obtain, record, update, and maintain a developmental history;

3. Make accurate and informed observations of the child;
4. Identify child and family risks, strengths, and protective factors;
5. Maintain a detailed record of the what you did and what you found; and
6. Collaborate with other professionals by sharing findings and obtaining opinions.

It is also important to provide education to parents around developmental surveillance findings and intervention options.

Developmental screening uses a validated screening tool at recommended specific time points or whenever a developmental concern arises. Developmental screening is recommended at the 9-month, 18-month, and 30-month well child/health supervision visits. Autism-specific screening is recommended at the 18-month and 24-month well child/health supervision visits.

Discerning developmental monitoring will potentially minimize adverse effects on development and health by acting as a starting point for early intervention. Belated identification of developmental delay negatively impacts the well-being of children and families as opportunity for understanding and intervention is hindered.

Learners should read the supplemental document Low Literacy 'Red Light' Developmental Monitoring

Why is early childhood education and development a key influencing factor?

Per Healthy People 2020, early childhood education and development is a key issue in the education social determinants of health domain (<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/early-childhood-0>). Healthy People 2030 is now available.

Early childhood, especially the first three years of life, affects long-term social, cognitive, emotional, and physical development. Healthy development in early childhood helps ensure that young children are ready to learn at school entrance and prepares children for the educational experiences of kindergarten and beyond. Early childhood education and development opportunities are affected by environmental and social determinants of health such as lead exposure, poverty, housing insecurity, food insecurity, crime and violence, and family and community stressors.

Early childhood development and education also play an important role in reducing risky health behaviors and preventing onset of chronic disease in adulthood (Campbell, et al. 2014). Nobel Prize winning economist, James Heckman, offers multiple resources on the benefits of early childhood education and development. Dr. Heckman's website also includes materials and resources that can be used to enhance early childhood education and development programs (<https://heckmanequation.org/>).

How might you encourage and support Emma and Andrew's parenting skills?

Keep in mind that you want to enhance the family's capacity to parent and support their child's healthy development. Encourage and support parents by:

- Affirming and reinforcing parents' current efforts such as reading books aloud.
- Acknowledging the importance of early childhood education and development experiences.
- Discussing how time and other investments parents make in their child's early development will have a positive impact on their child's development and future.
- Sharing additional resources and programs that support infant and young child development personalized for the family.

What are some early childhood development and education resources to help families?

- Abbott Districts in New Jersey <https://edlawcenter.org/litigation/abbott-v-burke/abbott-v-burke-overview.html>
- Administration for Children and Families <https://www.acf.hhs.gov/help-for-parents>
- Center on the Developing Child. Harvard University. <https://developingchild.harvard.edu/>
- Dolly Parton's Imagination Library <https://imaginationlibrary.com/>
- Early Head Start Programs <https://eclkc.ohs.acf.hhs.gov/programs/article/early-head-start-programs>
- Early Intervention Program <https://www.cdc.gov/ncbddd/actearly/parents/states.html>
- CDC Essentials for Parenting Toddlers and Preschoolers <https://www.cdc.gov/parents/essentials/index.html>
- Head Start <https://www.acf.hhs.gov/ohs>
- Healthy Children <https://www.healthychildren.org/English/Pages/default.aspx>
- Healthy Steps <https://www.healthysteps.org/>
- Khan Academy Kids <https://learn.khanacademy.org/khan-academy-kids/>
- Learn the signs. Act Early. <https://www.cdc.gov/ncbddd/actearly/index.html>
- The Local Library -- example <http://theoceancountylibrary.org/kids>
- The Messages Project <https://themessagesproject.org/>
- Montclair State University Center for Autism and Early Childhood Mental Health <https://www.montclair.edu/center-for-autism-and-early-childhood-mental-health/>
- Nurse-Family Partnership <https://www.nursefamilypartnership.org/>
- Parent Advocacy Groups -- example - SPAN Parent Advocacy Network <https://spanadvocacy.org/>
- Parents as Teachers <https://parentsasteachers.org/>
- Reach Out and Read <https://www.reachoutandread.org/>
- Ready to Learn <https://nj.pbslearningmedia.org/collection/rtl2015/>
- Sesame Street <https://www.sesamestreet.org/>
- Zero to Three <https://www.zerotothree.org/>

What other professional disciplines might be able to assist the family?

There are many professionals who are knowledgeable about early childhood education and development resources including teachers, childcare providers, librarians, social workers, speech and language pathologists, physical therapists, occupational therapists, developmental-behavioral pediatricians, and psychologists. In addition to professionals, other parents can be a great resource as well. Encourage parents to talk to their friends to find out what resources they have found to be helpful. Educate parents about how to identify reputable on-line resources.

What are some upstream and downstream approaches to early childhood education and development?

Upstream approaches to early childhood education and development:

- Fully fund Head Start, Early Head Start, and Early Intervention for all eligible children and families.
- Provide free pre-K for 3 and 4-year-old children through the local school system.
- Mandate that health insurance coverage includes nurse home visits during pregnancy and infancy.

Downstream approaches to early childhood education and development:

- Provide children with developmentally-appropriate books at each well child/health supervision visit. Role model book-reading to children.
- Screen children for developmental delay in childcare centers.
- Provide one-on-one education to parents about their rights under education and special education regulations.

Supplemental document

- Low Literacy 'Red Light' Developmental Monitoring

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PART 7: NO WORDS AND A WORRIED MOTHER

Sometimes, communities and institutions will identify a key or target population on which to concentrate efforts to reduce or eliminate health inequalities. These targeted efforts are still population health germane if the key population is 'large enough'. What population size is exactly 'large enough' depends on multiple factors including percentage of the general population, political expedience and media attention, and the importance of the particular population to a geographic area or community.

Another term used to distinguish target populations is vulnerable. However, individuals who comprise such populations may not wish to be described as vulnerable, as they do not consider themselves as vulnerable, fragile, or weak. Describing groups of people in a manner that is affirming is important. Using autism spectrum disorder as an example, the autistic population does not need 'fixing' or curing, but rather needs societal modifications that support health equity and opportunity.



A targeted, or focused, effort may occur when health inequalities are especially large, grievous, or have been successfully brought to the attention of influential policy makers or funders. As an example, the United States has one of the highest maternal mortality rates (defined as deaths occurring within one year post pregnancy end) in the developed world (O'Neill Hayes, & McNeil, 2019). Women at highest risk of maternal mortality include women who have had a C-section; a chronic health condition (e.g., hypertension, diabetes, heart disease, sickle cell disease); hemorrhage or embolism; infection; and women with gestational hypertension-related conditions. We know that women who are uninsured or covered by Medicaid, women who did not have prenatal care, adolescent women, and women over age 35, as well as women who identify as African American and Native American/Alaskan Native are all more likely to die from pregnancy-related issues than other women. As such, efforts to reduce maternal mortality may have the most meaningful impact if they focus on women in these higher risk groups.

Children of color tend to be diagnosed at a later age with autism spectrum disorder compared to non-minority children and as such, begin, at a later age, services that lead to improved outcomes (Hyman et al, 2020). Thus, providing less opportunity for the later diagnosed child to access and receive services. The key population most in need of targeted efforts may vary with jurisdiction. For example, a school district with a large Vietnamese community may wish to focus efforts on that particular population especially if inequalities have been noted (Leigh et al, 2016).

Keywords: *access to health care, discrimination, early childhood education and development, education, health inequity, key population, language and literacy, population health, target population*

Learning Objective: Devise strategies to identify and address priorities of key populations

*“Yes, I do have one more concern. I worry about Jonathan’s development. The little guy has had it really tough. We did not have a regular place to stay most of the last half year and he is not talking at all and much of the time seems in his own world. I am worried especially when I see other kids his same age saying some words and stuff. Jonathan likes dinosaurs a lot so I can always get his attention if I pull out his dinosaur sticker book or show him some dinosaur YouTube videos. We have a dinosaur book, too, that Nurse Billie gave us as a part of the Reach Out and Read program.
~ Emma (Leah and Jonathan’s mother)*

Although, Jonathan is not the focus of today’s health supervision/well child visit, after a discussion with parents, you decide to administer the Modified Checklist for Autism in Toddlers, Revised Follow-Up (M-CHAT-R/F) immediately.

When should developmental surveillance and screening take place?

Developmental surveillance is recommended at every health supervision/well child visit. Developmental screening is recommended at certain visits: 9, 18, and 30 months (general developmental screening) and 18 and 24 months (autism spectrum disorder-specific screening) and also whenever a parent concern is expressed or a concern is noted by the clinician (Hagan et al, 2017; Lipkin et al, 2020). Examples of tools appropriate for general developmental screening include the Ages and Stages Questionnaire and the Survey of Well-being of Young Children. The Modified Checklist for Autism in Toddlers, Revised Follow-Up (M-CHAT-R/F) is an example of an autism spectrum disorder-specific screening tool.

Why might you elect to administer a screening test to a sibling who is not the focus of today’s health supervision/well child visit?

Access to health care is a social determinant of health that is affected by multiple factors including insurance coverage and required co-pays, transportation, parking costs, hours of operation, spatial mismatch, missed work time, and geographical accessibility. Child health and development go hand and hand and there is evidence that earlier identification of autism spectrum disorder and developmental delay leads to improved child outcomes. Early autism spectrum disorder identification and connection to intervention is associated with improved cognitive, communication, and behavioral outcomes (Hyman et al, 2020; Reichow & Volkmar, 2010). By responding to the parent’s concerns and proactively eliminating obstacles to accessing health care, you engender trust, support families, and facilitate potentially improved health outcomes.

What is shared decision-making?

Shared decision-making is a process of reciprocal communication and knowledge transfer, where health care professionals and families share information about treatment options and come to mutual agreement about satisfactory treatment choices. Shared decision-making considers evidence as well as family priorities and values, preferences, and outcome goals (Levy et al, 2016). The shared decision-making process is as follows:

1. Engage families by sharing information and knowledge about options,
2. Families and health care professional express treatment preferences and goals, and
3. Mutual agreement about treatment decisions (Opel, 2018).

Shared decision-making with improved provider-patient/family communication is linked to improved satisfaction, improved adherence, improved health outcomes, less out-of-pocket expense, a reduction in family time coordinating care, and decreased financial stress. Impediments to shared decision-making include:

- Limited knowledge on the part of the health care professional about available treatment options;
- Limited communication between the provider and individual and family due to time constraints or setting restrictions.
- Cultural practices,
- Health literacy deficits,
- Language barriers.

An example of shared decision-making might be the parents of a young child with speech delay who elect to attend outpatient clinic-based speech language therapy rather than in-home therapy services because the head of household works nights and needs to sleep during the day. Or, the parents of a young child agree to replace sugar-sweetened beverages with water but not to eliminate culturally-affirming added sugar treats served on special occasions.

What is the M-CHAT-R/F?

The Modified Checklist for Autism in Toddlers, Revised Follow-Up (M-CHAT-R/F) report is a 2-stage screening tool to assess risk for autism spectrum disorder. The M-CHAT-R/F identifies children 16 to 30 months of age who should receive a more thorough assessment for autism spectrum disorder or Developmental Delay. The M-CHAT-R/F is available in many languages and it is recommended to use the parents preferred language version when screening. The M-CHAT-R/F along with additional explanatory information may be found here: <https://m-chat.org/>

As with many screening tools, the M-CHAT-R/F is imperfect. Per Guthrie et al (2019) 85% of children with a positive M-CHAT-R/F screen end up not to have autism spectrum disorder. However, the recommendation is still to screen. There is a significantly higher false positive result for people of color, girls, and low-income individuals. As 72% of children with a positive M-CHAT-R/F have some sort of developmental disorder; it is a means to identify at risk individuals (Guthrie et al, 2019). This earlier identification helps accelerate early intervention services that support better outcomes.

It is important to screen at both 18 and 24 months of age, even if the child screened negative at 18-months. The M-CHAT-R/F misses many children, so it is important to keep a close eye on all children – using developmental surveillance and/or developmental screening as part of pediatric health supervision. The health care professional should always take parents/caregivers concerns seriously. Many parents of children with autism spectrum disorders say that their concerns were initially ignored or dismissed by their child's pediatric primary care provider.

Jonathan has screened positive on the M-CHAT-R/F – he is at risk for autism spectrum disorder – what are your next steps?

Per Hyman, Levy et al (2020) your next steps should include:

- Provide ongoing support and education for the parents about the importance of developmental assessment and autism spectrum disorder diagnostic evaluation. Ask if they have any questions, provide answers and support as well as additional resources such as parent support groups. Make sure to point out the child's strengths and the parent's strengths.
- Refer for clinical diagnostic evaluation AND early intervention or special education services (as determined by the child's age and eligibility criteria). Jonathan is age two, so he should be referred to early intervention.
- Share development-related resources and reinforce hope and optimism about the child's potential.
- Support the family through the process with navigation assistance and access to any resources the family may need (e.g., taxi, bus vouchers) to minimize barriers to clinical diagnostic evaluation. Sometimes families may be hesitant to ask for help, so it may be helpful to voice assistance rather than wait on the family to request it. Note that low income families, families who speak English as a second language, and children and their caregivers who utilize out-of-home (foster care) care may need additional support especially in complex bureaucracies or multiple systems.

Those at risk for delayed risk identification of autism spectrum disorder include children:

- With milder autism spectrum disorder symptoms
- With average or above-average intelligence,
- Who are female gender,
- With co-occurring attention deficit hyperactivity disorder, and
- Who are African American or Latinx.

Sometimes these risk identification delays are related to cultural barriers, English as a second language, lack of trust in health care and other institutions, health literacy, and reading literacy, but structural discrimination through policy decisions and under investment play an important role as well.

How should you approach parent education?

- Educate at every health care encounter.
- Ask what the parent knows and correct any misinformation.
- Use plain language. Incorporate visual elements. Enlist the assistance of a certified medical interpreter when translation is needed.
- Ask parents how they would explain autism spectrum disorder to a relative, as a way to test their understanding and to role-play.
- Provide verbal and written information. Make sure written information is up to date and aligns with the education offered verbally. Written information should be culturally affirming, health literacy informed, and in the reader's preferred language.
- Collaborate with the interprofessional team to ensure that individuals/families messaging is consistent.

What parent education do you want to provide about autism spectrum disorder evaluation and treatment options?

- Learners should read the supplemental document Autism Spectrum Disorder Diagnosis and Treatment

Why might individuals with autism spectrum disorder be an important target population?

Autism spectrum disorder is a category of neurodevelopmental disorders characterized by social communication impairment and restrictive or repetitive behaviors as well as frequent sensory issues (Centers for Disease Control and Prevention). Autism spectrum disorder is highly variable in presentation, severity, and trajectory. It is estimated that about 1 in 54 children has been identified with autism spectrum disorder (Autism and Developmental Disabilities Monitoring Network). As noted previously, early intervention may improve outcomes for people with autism spectrum disorder.

Health care for people with autism spectrum disorder is often complicated by multiple co-occurring conditions (Hyman et al, 2020), including the following:

- Developmental conditions such as intellectual disabilities, language disorders, gross motor delays, and sensory issues;
- Medical and other conditions including seizures, gastrointestinal symptoms, feeding disorders, obesity, oral health concerns, pica, sleep problems, wandering and elopement, and motor disorders;
- Behavioral health conditions including attention deficit hyperactivity disorder, anxiety disorders, mood disorders, obsessive compulsive disorder-related conditions, and disruptive behavior disorders such as aggression, tantrums, and self-injurious behavior.

Parents of children with autism spectrum disorder often report high levels of stress (Miranda et al, 2019). Financial stressors occur frequently. Children with autism spectrum disorder frequently have challenging care coordination needs across multiple areas – education, financial, medical/dental, social connections, and advocacy – making coordination complex for families as well as health care professionals (Roman et al, 2020).

What are some social determinants of health to consider for people with autism spectrum disorder?

Ensuring social justice for people with disabilities is important. Individuals with autism spectrum disorder experience higher health care utilization, higher health care costs, worse access to health care, and worse access to medical homes (Tregnago & Cheak-Zamora, 2012). Children with autism spectrum disorder experience poverty, food insecurity, housing instability, and parental unemployment and under employment at similar or higher rates than the general population.

Food insecurity may be exacerbated by autism spectrum disorder; this may be aggravated by the fact that co-occurring food preferences and sensitivities are common. Autism spectrum disorder co-occurring sleep disturbances may be further complicated by housing instability and poor quality of

housing. Housing insecurity and poor housing quality may make parents hesitant to invite service providers into their living space. Toilet training delays and gastrointestinal disturbances such as constipation issues can extend diaper need.

Heightened parenting responsibilities associated with having a child with autism spectrum disorder may compel parents to exit the workforce or reduce the parent's ability to accept work hours leading to reduced income and material hardship. Adults with autism spectrum disorder may have difficulty finding and keeping employment. Both adults with autism spectrum disorder and parents with children who have autism spectrum disorder might benefit from the advice and support of a rehabilitation counselor.

Learners should review the supplemental document Rehabilitation Counselors: Hidden Gems in Interprofessional Care

Where might you ascertain the prevalence of developmental disabilities and/or autism spectrum disorder?

- Autism and Developmental Disabilities Monitoring Network <https://www.cdc.gov/ncbddd/autism/addm.html#:~:text=CDC%20estimates%20that%20about%201,the%20United%20States%20during%202016.>
- Developmental disabilities <https://www.cdc.gov/ncbddd/developmentaldisabilities/features/increase-in-developmental-disabilities.html>
- Autism spectrum disorder <https://www.cdc.gov/ncbddd/autism/new-data.html>

Where might you find information and services to support parents of individuals with autism spectrum disorder?

- Autism NJ <https://www.autismnj.org/>
- Autism Speaks <https://www.autismspeaks.org/>
- MyGOAL Autism <https://mygoalautism.org/>
- New Jersey Autism Center of Excellence <https://njace.us/>
- Parents of Autistic Children <https://www.poac.net/about-foundation/>

What are some other key populations that may require a special focus to reduce health inequities?

- Adolescents
- Children in out-of-home care (foster care)
- Chronically ill people especially those with more than one chronic condition
- Immigrants
- Incarcerated individuals and those with a history of incarceration
- Individuals for whom English is a second language
- Individuals with disabilities
- Individuals with emotional and behavioral challenges
- Low-income individuals and households

- Lesbian, gay, bisexual, transgender, queer, intersex, asexual, and pansexual people
- Military service members and their families as well as veterans
- Nursing home or group home residents
- Older aged people
- People of color affected by racism and structural policies that negatively impact their health and well-being
- People who reside in urban or rural areas

What are some strategies to identify and address priorities of key populations?

It is important to learn about the population you serve so that you can develop appropriate strategies to address their specific needs and priorities. Start by asking community members about their health needs and how they think these needs should be met. Community members are often quite clear on their community's priorities. Then include policy makers, funders, and professional experts in your needs assessment. Understanding that some individuals are hesitant to speak up in public, opportunities to provide input in writing or on-line should be provided and then shared with the entire group. Programs that incorporate cultural affirmation elements are essential.

The following websites provide population-level data for smaller populations of concern:

- PLACES: Local Data for Better Health <https://www.cdc.gov/places/index.html>
- County Health Rankings <https://www.countyhealthrankings.org/>
- Kids Count 2021 <https://www.aecf.org/resources/2021-kids-count-data-book>
- Census Bureau <https://www.census.gov/>
- Zero to Three State of Babies Yearbook <https://stateofbabies.org/>

Supplemental documents

- Autism Spectrum Disorder Diagnosis and Treatment
- Rehabilitation Counselors: Hidden Gems in Interprofessional Care

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PART 8: AT HOME AND IN THE COMMUNITY

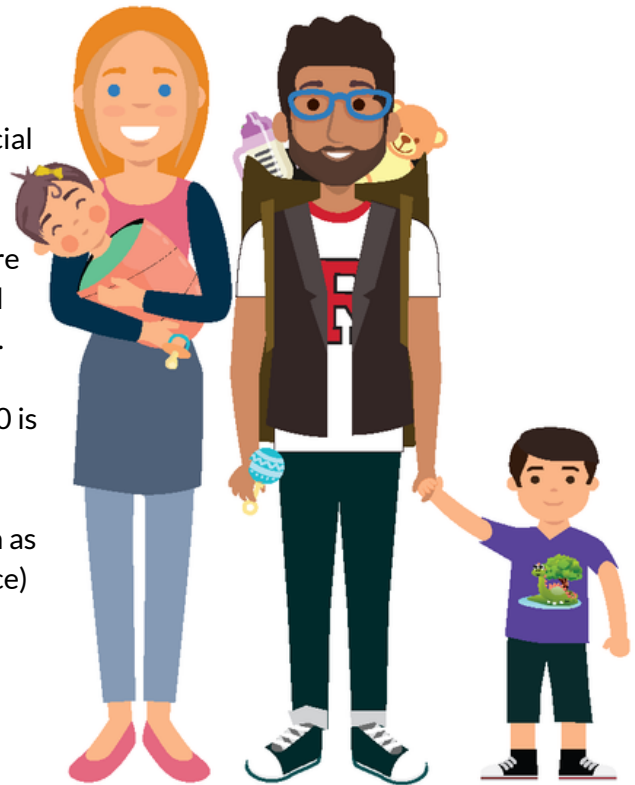
Healthy People 2020 identifies five key social determinants of health. Each social determinant of health has multiple influencing factors. Civic participation, discrimination, incarceration, and social cohesion are influencing factors for the social and community context social determinant of health. Quality of housing and environmental conditions are two of the influencing factors for the neighborhood and built environment social determinant of health. Social determinants of health are interrelated and their effects often cumulative. Healthy People 2030 is now available.

For example, institutional-level discrimination such as structural racism by one system (e.g., criminal justice) weakens individual and community trust in other institutions including health care and education. Another example is how a neighborhood and built environment with poor infrastructure resulting in internet inequity reduces access to health care including telehealth, to online educational resources, or opportunities to work remotely. Limited or lack of access to the internet, due to government policy or corporate priorities that determined who gets best and first access to top of the line services, translates to a lack of access to important avenues for education, health care, and work.

People of color frequently encounter structural barriers when trying to gain employment, ensure education for themselves and their children, access healthcare, and secure quality housing. Racial inequalities permeate the criminal justice system and damage its value and credibility. Systemic racism does not just evidence itself in the criminal justice system, but has been built into multiple systems and government institutions. Present day policies that maintain health inequity are further exacerbated by historical trauma and past unjust governmental and institutional policies. Often people think of discrimination as overt interpersonal behavior, however, not all discrimination is conscious or person against person (Jones, 2000). Discrimination has been built into some institutional policies and practices such as mortgage lending, zoning, eminent domain, and school funding practices.

Discrimination — especially as structural or institutional racism — compounds health inequities. The injustice and inequity experienced by Black and Brown Americans is a human rights and civil rights issue. Nurses have an active role in addressing racism and advocating for needed changes.

Keywords: *access to health care, access to primary care, discrimination, health and health care, health literacy, neighborhood and built environment, quality of housing; social and community context*



Learning Objective: Analyze how governmental and institutional policies affect individuals/families' health and well-being

Emma: Hello Nurse Billie.

Nurse Billie: Good afternoon Mrs. Hall. Is this a good time to talk? I wanted to follow-up on Leah's health supervision visit two weeks ago.

Emma: Sure. Leah is napping. Jonathan is deep into The Land Before Time movie.

Nurse Billie: Great. May I put Social Worker Patricia on the phone call, too?

Emma: Absolutely. Patricia's prioritized "To Do" list is keeping me organized.

Social Worker Patricia: Hello Mrs. Hall. I am glad your individualized priority list is helping keep things moving.

Emma: It absolutely is helping keep all my to-do's from becoming overwhelming. It was a trek but we got some extra diapers for Leah and for Jonathan, too. Leah's diaper area is starting to look so much better and she is definitely less cranky.

Nurse Billie: That is fabulous.

Emma: It is.

Nurse Billie: To start, do you have any questions for us?

Emma: No. Not right now.

Social Worker Patricia: You got the diapers at the food bank?

Emma: Not exactly. When we showed up for food and asked about diapers, they did not have any except in tiny sizes, but when they saw we had a car, the food bank people recommended an organization that primarily supplies diapers to low-income parents. But it was more than 30 minutes away. The folks at the food bank called the people at the diaper bank to make sure they were open and to tell them we were coming. We got 100 diapers for Leah and another 100 diapers for Jonathan and some new toys and books, too. I think the diaper bank people gave us the toys and books after they saw Andrew helping some older church ladies carry their donations inside and helping a grandmother get her items on the town shuttle.

Social Worker Patricia: That is so great. And you got food from the food bank, as well?

Emma: Yes. Mostly pasta but Jonathan loves pasta, so that is okay. Some canned fruits and vegetables, too.

Nurse Billie: How are things going with Jonathan's development?

Emma: The same, but we are trying to limit screen time like you said and Andrew makes sure Jonathan gets to the playground almost every day. I called the early intervention number and we are waiting for an evaluation. In the meantime, we are trying to talk with Jonathan more and encourage eye contact, and of course, read to him. I called the developmental-behavioral clinic, too, but there is a pretty long wait for an appointment.

Social worker Patricia: Sounds like you are busy. I will call the developmental-behavioral clinic to see if there is anything that can speed things along. How are things going with Andrew's job search?

Emma: That's where Andrew is now, at the reentry program. Andrew's case worker is Michele and she promised to reach out to Andrew's old boss to see if there is any chance he might take him back. Andrew is a really good worker. Really good. There is a program that if you have a job offer in writing will give you a micro loan to buy work clothes and tools and the like.

Social worker Patricia: Excellent. Are you planning to go back to the diaper bank and food bank next month?

Emma: The food bank, yes. The diaper bank, I do not know. We got pulled over by the police on the way home from the diaper bank. I still do not know why. I was so scared. Andrew was driving, so they asked for his license, the car registration, and insurance. It took a long time to find the insurance card. All the diapers in the car, the food, the brand-new toys. I was so scared they were going to hurt Andrew. We have gotten stopped by the police before and it was not a good experience. The babies were crying and then Jonathan started screaming. We were kept there in the car for a really long time, on the side of the road with all the cars zipping by, so loud, and people sneering at us. It was so hot. I could not hold my emotions in and started to cry. It was traumatizing. Andrew still will not even talk about it. He has gotten stopped by the police so many times and not just when he is driving. We are never going back there.

Nurse Billie: I am so sorry that happened to you. To all of you.

Social Worker Patricia: That must have been so frightening. Do you want to set up a time for us to talk more about what happened? Your feelings?

Emma: Not now. I just want to stop thinking about it. To stop worrying whenever Andrew goes out alone.

Social Worker Patricia: Can I reach out to you again next week or so? In case you change your mind.

Emma: I guess.

Nurse Billie: Maybe a text before calling?

Emma: Yes. That would be better. I do not want to get emotional in front of Andrew or the babies.

Nurse Billie: You care so much about your family. That is such a strength. You got so much accomplished since Leah's visit. You are a wonderful mother.

Emma: I do appreciate all the help from the two of you. Thank you. I just do not want to talk about it anymore.

Nurse Billie: I understand. Do you have any questions for us before we say goodbye?

What are essential components to quality telehealth?

Telehealth uses telecommunications technology and other electronic data to exchange information for diagnosis, treatment, and care management. Telehealth can assist health care systems and health care professionals to expand access to and improve the quality of remote healthcare. Telehealth can also improve monitoring, timeliness, and communications within the health care system. Using telehealth in underserved communities to deliver and assist with health care services can reduce health care inequalities (Association of American Medical Colleges, 2016), and reduce barriers to healthcare such as transportation challenges and out-of-pocket costs.

To ensure quality telehealth services, consider the following factors:

1. **System design and implementation** that integrates telehealth into everyday practice, and includes a robust data security plan to ensure the safe transmission of Personal Health Information and Personally Identifiable Information.
2. **Health care professional support** including system-wide protocols for telehealth care that provide a standardized high-quality care experience for the person/family as well as enhances fidelity and consistency among health care professionals.
3. **Ascertainment of telehealth person/family need** by engaging individuals, asking them what works, and ensuring the telehealth experience meets these needs and aligns with community priorities.

Individuals need to fully understand that their care, privacy, and safety is important in a telehealth encounter. Keep in mind that:

- Individuals will need to be informed of any required forms and the billing process.
- Some individuals will need assistance to obtain or download the required documents.
- Not all individuals will have access to printers and scanners. Fax access is likely limited as well.
- You will need to inform individuals that they will be treated the same way via telehealth as they would in a face-to-face environment and that person and family-centered care principles are foundational to successful health care encounters, even if those encounters are via telehealth.
- Reviewing the typical telehealth visit process with the individual at the beginning of, or prior to, the formal telehealth encounter supports a positive experience and outcome (Enlund & Vesey, 2019).

How might the Registered Nurse improve telehealth quality?

- Ensure you are calling from a quiet and private space.
- Ask questions one at a time; provide the person/family adequate time to process and completely answer each question.
- Avoid using abbreviations and medical jargon.
- Address non-completion issues, such as missed medical appointments or missed medications.
- Use the call to provide or reinforce health education.
- Ask the individual if they have any questions before ending the call.

How does neighborhood and community level infrastructure affect access to health services?

For most people, reliable and adequate internet service is a necessity for access to education and health care as well as other important services. Poor internet service is often found in situations of already poor quality housing. Disenfranchised neighborhoods tend to have fewer options and poorer access to internet services. Such infrastructure barriers influencing telehealth uptake could worsen health inequities. Research shows lack of infrastructure, such as inadequate internet signal coverage, and limited mobile data plans for low-income and disadvantaged individuals limit technology-based health care delivery (Zha, et al, 2020).

The Census Bureau defines broadband as anything faster than dial-up speed. Per the 2018 American Community Survey (ACS), 18.1 million (or 15%) of households do not have a subscription to any form of “broadband” internet service. Millions of households do not have access to cell phone or internet access with a majority lacking the digital skills or sufficient income to use online services. These social disadvantage gaps persist across entire United States and are especially wide among rural or urban, low-income, and people of color households. Beyond telehealth this ‘digital’ inequality also has implications for remote education. Households who are unable to afford 5G internet and sophisticated hardware may have less opportunity to take advantage of online learning compared to higher-income households.

What are some of the consequences of low health literacy?

The consequences of low health literacy include:

- Less knowledge of chronic conditions (such as poor asthma knowledge, behaviors, and outcomes);
- More likely to use emergency department services;
- More medication errors;
- Poor nutrition knowledge and behaviors;
- Higher obesity rates;
- Less likely to use preventive services;
- More likely to report health status as poor; and
- Higher mortality rates (Morrison, Glick, & Yin, 2019).

Low literacy individuals may struggle to complete basic medical forms, understand diagnoses, appropriately self-administer medications, adhere to recommended behaviors and interventions, and gauge health content accuracy of television shows and websites. Nurses should formally evaluate the individuals/family’s health literacy (Agency for Healthcare Research and Quality). When evaluating health literacy, keep in mind that some individuals may be able to read health-related terms, but may not fully understand the meaning of those terms.

What are some health literacy communication strategies?

1. Ensure verbal and written information is pitched at an appropriate literacy level and provided in the individual’s preferred language.

2. Keep information simple and organized.
 - Limit information to three or fewer messages.
 - Ensure instructions are explicit and action oriented.
 - Present information in small, manageable pieces.
 - Consider scheduling multiple health teaching sessions, conveying information in 'chunks' over time, particularly if you have more than three messages that you want to convey.
3. Use plain language when teaching and counseling.
 - Use simple words in short, simple sentences.
 - Use medical jargon free language.
 - Limit use of abbreviations.
 - Complement demonstration with verbal instruction to improve learning.
4. Ask your individuals/families to teachback/showback that which you have just taught them.
Teachback/show back are considered a top safety practice.
5. Provide written information to accompany the information provided verbally.
 - Ensure written and verbal messages use similar terminology and provide similar content.
 - Written materials should also use lay language and be easy-to-understand.
 - Make sure text is not too small or dense.
 - Do not write in all capitals or all bold font. Lower literacy learners do better when important points are underlined.
 - Make sure written information is up-to-date as there are often old and out-of-date brochures and magazines in waiting areas and exam rooms. Health information changes rapidly.
 - Consider complementing your messages with images. Images add synergy to verbal and written content, but be sure that they add value to and support your message (Morrison, Glick, & Yin, 2019).

Learners should review the supplemental document Health Literacy Tips for Nurses

How does discrimination influence health and well-being?

Race is often presented as a social determinant of health, but it is actually racism that has the disturbing effect on health and well-being. Racism creates stress in individuals and families that negatively affects health. Structural racism impairs access to health care, educational opportunities, and quality housing as well as undermines trust and satisfaction with institutions. Until we prevent and counteract racism in health care and everyday life, we will not achieve health equity.

Discrimination influences health and well-being at individual, community/societal, and institutional/structural levels. Ecological models posit that individual-level factors (behaviors) are shaped by informal societal structures — as well as local, state, and federal policies and laws — that regulate or support healthful actions. Discrimination does not have to be overt as it may be embedded within policies and laws (structural racism). Discrimination at any level jeopardizes the

health and well-being of the besieged individual or group, but has the broadest impact when local, state, and federal laws and policies are manipulated by discrimination. Discrimination has been built into institutional policies and practices such as mortgage lending, zoning, school funding practices, and municipality planning decisions. Health effects are reflected in inequity in life spans, rates of infant mortality, prevalence of chronic diseases and complications, and unequal access to health care, preventive screenings, and even elective procedures (Barr, 2019). The mental health consequences of discrimination among minority groups is also of utmost concern (American Psychological Association, 2015; Wallace et al, 2016).

Krieger (2012) argues that health is shaped by embodiment of the material and social world and that pathways of embodiment are diverse, concurrent, and interacting. Pathways of embodiment involve:

- Adverse exposure to social and economic deprivation (e.g., poverty),
- Environmental hazards (e.g., pollution, toxic substances, pathogens, degradation of ecosystems),
- Social trauma (e.g., discrimination, under representation in media, health care, and academia),
- Targeted marketing of harmful products (e.g., tobacco, alcohol, fast food), and
- Inadequate health care and other systems of care (Krieger, 2012).

Krieger (2012) also posits that the deleterious health effects are cumulative, and the negative effects may be intergenerational. High profile incidents of racism (e.g., police-involved filmed deaths, United States Public Health Syphilis Study at Tuskegee) contribute to the cumulative trauma for people of color (Dastagir, 2020). Intergenerational impact may occur with historical trauma and epigenetic effects.

Adverse childhood experiences affect adult health outcomes (Merrick et al, 2019; Ridout et al, 2018; Sonu et al, 2019). Adverse childhood experiences are potentially traumatic events that occur in childhood (0-17 years); for more on adverse childhood experiences see <https://www.cdc.gov/violenceprevention/acestudy/fastfact.html>.

Supplemental document

- Health Literacy Tips for Nurses

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PART 9: THE NURSE IN THE MIRROR

Nurses who understand the concepts of population health and social determinants of health are well suited to lead, create, implement, and evaluate initiatives that support health equity. These concepts provide the foundation to ascertaining community concerns, assessing community needs and resources, addressing social determinants of health that affect health, and advocating for individuals and communities.



Essential to ensuring health equity is understanding the social and community context as a social determinant of health. The social context is a person's direct experience shaped by family, social support, and social networks. Community context is how an individual interacts with the larger community and institutional systems for good or ill. Healthy People 2020 lists civic participation, discrimination, incarceration, and social cohesion as factors that influence the social and community context social determinant of health. Civic participation refers to community members working together to address an issue of concern in the community. Social cohesion is the willingness of a group of people to work together to achieve common goals. Nurses as board members are important to civic participation and social cohesion. Healthy People 2030 is now available <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>

Keywords: *civic participation, population health, social and community context, social cohesion*

Learning Objective: Reflect on the nurses' role in population health

Nurses – as the most trusted profession in the United States and the largest segment of the health care professional work force – have a meaningful role at the bedside, but an equally significant role curbside in the community and beyond.

I call the meeting to order. I would like to officially welcome our new board member – Billie Coleman. Billie Coleman is a Registered Nurse at the Federally Qualified Health Care Center in Newark. Billie Coleman is an authority on population health, social determinants of health, infant care, and diaper need. You may recall I circulated Billie's Letter to the Editor on diaper need that was published in the Newark Star-Ledger newspaper. They connected with our organization initially to better understand our services, then to volunteer both on-site and by holding several virtual diaper drive fundraisers for us, and most recently to create a partnership between our organization and their place of work. We will be holding a ribbon cutting next month to open our satellite site at the Federally Qualified Health Center in Newark. Believe me, this is a win-win – by setting up a satellite clinic we reach more people who need us the most, we expand our in-person footprint, and we grow our potential funding base. So, welcome Billie our first nurse board member!

~ Board President Denise Harwood

As you move forward in your nurse trajectory – graduation, passing NCLEX, obtaining Registered Nurse Licensure, starting your first nursing job, there will be many opportunities for you to apply your population health and social determinants of health acumen.

Here are some examples shared by nursing students and nurses where knowledge of population health and social determinants of health might make or made a difference:

- A young male individual was discharged from the ICU with several prescriptions for medications. Within a week he was readmitted to the ICU, he had not taken his medications because he could not afford to buy them. No one in the ICU had assessed if he had health insurance or money to pay for his medications.
- An older, primarily Spanish speaking woman was prescribed medication to take ONCE a day but ONCE is also the Spanish word for eleven (11). Even though the woman's preferred language was Spanish, the prescription bottle was in English only.
- An elderly man was discharged home via ambulance on Friday afternoon after a long hospital stay. When the home health care nurse arrived for the first time on Monday, the elderly man was in the same spot where he was left on Friday – no one had investigated if there would be someone to assist him between the time he arrived home and the morning the home care nurse started.
- In a similar situation, an older man still recovering returned home by ambulance after hospitalization, there was no food in his residence and he did not have any relatives or friends available to go to the store for him. Eventually, the police officers involved in the transfer process purchased groceries for the gentleman.
- A young woman was admitted to labor and delivery with premature labor. During her stay she was diagnosed with a urinary tract infection and provided with a prescription for an oral antibiotic upon discharge. During discharge, which took place later at night, she was asked about access to a pharmacy and it was discovered she had no money for her medication co-pay. Nursing staff took up a collection among themselves to make sure the young woman could pay for her medication.
- There was a baby enrolled in Early Head Start that for months had chronic diaper rash. The baby had many siblings, some still in diapers, and family resources were limited. Once the issue of diaper need was assessed, identified, and resources accessed, the diaper rash subsided.

Going beyond those real-life examples, nurses and nursing students want to think about the expanded role of nurses in population health and social determinants of health. This expanded role includes:

- Nursing in non-traditional practice settings such as food banks and libraries,
- Infusing population health and social determinants of health into the acute care setting,
- Joining a nursing association and encouraging population health and social determinants of health initiatives,
- Raising population health and social determinants of health awareness among the community, media, and policy makers,
- Volunteering with organizations that provide resources to address population health and social determinants of health,
- Serving on a board, and
- Running for elected office.

Learners should review the supplemental document Population health/Social determinants of health Glossary

What are some nursing organizations that offer student membership discounts?

- The American Association for Men in Nursing <https://www.aamn.org/individual-memberships>
- Academy of Medical-Surgical Nurses <https://www.amsn.org/membership/membership-overview>
- American Organization for Nurse Leadership <https://www.aonl.org/membership/join>
- Eastern Nursing Research Society <http://communities.enrs-go.org/home>
- Society of Pediatric Nurses <http://www.pedsnurses.org/join>
- National Association of Hispanic Nurses <https://www.nahnnnet.org/>
- National Black Nurses Association <https://www.nbna.org/memapppdf>
- National Student Nurses' Association* <https://www.nсна.org/membership.html>
- Orthodox Jewish Nurses Association* <https://jewishnurses.org/>
- Philippine Nurses Association of America* <https://www.mypnaa.org/>

*= Students eligible for membership but no discount noted

What are some resources that offer guidance for writing a letter to the editor?

- American Nurses Association (ANA) Tips: Writing letters to the editor <https://www.nursingworld.org/practice-policy/advocacy/federal/tips-writing-letters-to-the-editor/#:~:text=Do%20not%20assume%20that%20your,are%20informed%20about%20your%20topic.>
- National Association for the Education of Young Children (NAEYC) Guidelines for writing a compelling letter to the editor <https://www.naeyc.org/our-work/public-policy-advocacy/guidelines-writing-compelling-letter-editor>
- International Society for Technology in Education (ISTE) Letter to the editor/OpEd tips and template <https://id.iste.org/docs/pdfs/iste-advocacy-toolkit---letter-to-the-editor.pdf>

What are some examples of population health initiatives?

- All of Us research program <https://allofus.nih.gov/>
- Association of American Medical Colleges. Teaching hospitals' commitment to addressing social determinants of health <https://www.aamc.org/system/files/c/2/480618-aamc-teaching-hospitals-addressing-sdoh.pdf>
- Children's Health-Making Life Better for Children <https://www.childrens.com/wps/wcm/connect/childrenspublic/01bb7035-f884-43d9-8555-a3ffb9badc90/Fact+Sheets.pdf?MOD=AJPERES>
- Children's Hospital of Orange County <https://www.choc.org/news/orange-county-hospitals-working-to-improve-population-health/>
- Jersey City Medical System Community Health Needs Assessment <https://www.rwjbh.org/documents/jersey%20city%20medical%20center/RWJBarnabas-CHNA-JCMC-12-2016.pdf>
- Newark Beth Israel Medical Center Asian Health Program <https://www.rwjbh.org/newark-beth-israel-medical-center/treatment-care/asian-health/>

- New York City to give air conditioners to low-income seniors
<https://nynmedia.com/content/new-york-city-give-air-conditioners-low-income-seniors>
- Safer Childbirth Cities <https://www.merck.com/about/featured-stories/creating-safer-childbirth-cities-leaning-into-our-values-of-diversity-and-inclusion.html>
- University Hospital Newark Community Health Needs Assessment
http://www.uhnj.org/patients/docs/UH_CHNA-2014.pdf

Supplemental document

- Population Health/Social Determinants of Health Glossary

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https://cawp.rutgers.edu/education_training/ready_to_run/overview

SUPPLEMENTAL DOCUMENTS

AUTISM SPECTRUM DISORDER DIAGNOSIS AND TREATMENT

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Autism spectrum disorder (ASD) is a clinical diagnosis based on Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5) criteria that requires a synthesis of historical information from multiple settings, caregiver rating scales, and observation by a skilled professional. The diagnostic evaluation is typically performed by a medical specialist (e.g. developmental pediatrician, neurologist, psychiatrist) or child psychologist. However, in some areas such professionals are limited, so the evaluation may be conducted by a primary care professional.

At the diagnostic evaluation, the provider will elicit from the caregiver(s) a detailed history of the child's development, including a comprehensive review of milestones and whether the child exhibited regression of developmental skills. As part of a structured observation, the child may be asked to participate in a series of tasks (e.g. rolling a ball or tapping on a desk in a similar manner as the provider) that provide insight into the child's interaction and engagement, joint attention, imitation skills and overall social-communication. The provider may ask parents to complete a rating scale; and the provider will complete one of several ASD observation scales, such as the Autism Diagnostic Observation Schedule or the Childhood Autism Rating Scale. It is important to note that these observation scales are used to support a diagnosis and are not diagnostic in and of themselves.

If the provider makes a diagnosis of ASD, they may refer the child to one or multiple therapies with the goal of promoting optimal functional outcomes and reducing behaviors that may cause impairment. Such therapies may include applied behavior analysis (ABA), developmental and combined approaches (e.g. Floortime, Early Start Denver Model, etc.), occupational therapy (OT), physical therapy (PT), and speech and language pathology (SLP). Prior to referral, employing parent engagement strategies such as family centered care principles including shared decision-making may improve treatment adherence and family satisfaction.

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DIAPER NEED WORKSHEET

Using the resources noted below complete the 6-question worksheet.

Question	Your Answer	Resource(s) Used to Determine Answer
Define diaper need.		
Review the table found in the Social Determinants of Health section. Which key area and which influencing factor best fits with diaper need? Why?		
How many diapers does a baby typically use each day?		
How much does a month's supply of diapers typically cost?		
What is the level of unmet diaper need in your state?		
Identify a resource in your locale that provides diapers to families in need.		

Resources

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TEN HEALTH LITERACY PROMOTION TIPS FOR NURSES

Health literacy can be defined as the degree to which an individual has the capacity to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions (Institute of Medicine, 2004). Only 12% of the United States population has a high level of health literacy (Kutner et al., 2006). Low health literacy leads to poor healthcare decision-making skills, lack of adherence to treatment regimen, and has been associated with poor health outcomes. Nurses play a key role in promoting health literacy for persons/families and improving the health outcomes of populations.

Identify persons/families with low health literacy

Be aware of risk factors for low health literacy such as low socioeconomic status, immigrants, and those with limited-English-proficiency, the unemployed, those who did not graduate high school or have a GED, and people with chronic mental or physical health conditions. Also, be aware of red flags for low health literacy, such as the following:

- Nonadherence with treatment plans
- Frequently missed appointments
- Incomplete patient registration forms
- Unable to name medications, explain their purpose or dosing
- Identification of pills by looking at them rather than reading the label
- Unable to give coherent, sequential health history
- Asks few or no questions or asks a lot of questions
- Does not follow-through on tests or referrals
- Often has excuses for not having their reading glasses

Create a supportive environment

Establish trust with persons/families to create an atmosphere that can aid in identifying health literacy issues. Persons/families are more likely to voice concerns and lack of understanding of health information in an environment that is nonjudgmental and supportive.

Implement a universal approach to health literacy

Never assume that a person — based on race, education, or occupation — has high health literacy. Persons that have a high IQ or high level of education may still have difficulty understanding health information.

Avoid medical jargon

Nurses should speak in basic terms, without being condescending, and avoid the use of medical jargon when communicating with persons/families. Avoid abbreviations. Verbal and written information should be presented in a clear manner, using plain language that addresses the unique needs of each individual.

Provide easy-to-read handouts in a variety of languages

Handouts on medical information should be written at a fifth-grade or lower level. The information provided should be a combination of words and illustrations to facilitate understanding. This is an effective strategy to minimize misunderstanding and enhance knowledge. For multi-lingual individuals, ask what language they prefer.

Provide an interpreter for persons with limited-English proficiency

Health information is difficult for people to understand. This is more challenging for persons with limited English proficiency. Nurses should be cognizant of the role that culture plays in the communication process. Always use a certified interpreter or language line when communicating with persons who have a limited understanding of English.

Confirm comprehension of the health information provided

Utilize strategies such as teach-back, return demonstration, and questioning to evaluate understanding of the health information provided. Clarify any concepts that were poorly understood and reeducate the person as needed.

Incorporate the use of technology

People often use the internet as a source of health information, which can lead to misinformation. Nurses should screen the sources of health information and recommend appropriate websites, mobile apps, and resources that will provide evidence-based information and strategies to promote health. The use of a patient portal is also an efficient way to provide simple health information. However, keep in mind that individuals who are not good readers may not have access to the internet, even if they do, they may not be able to navigate the complexities of a patient portal. Patient portals that are only infrequently accessed by the individual may be especially challenging.

Encourage individual and family self-management and empowerment

Individuals that are empowered to advocate for their health, understand their health conditions, and be proactive in their health care goals will have better health outcomes. Nurses can empower individuals/families to reach their full health potential by supporting self-management. Health literacy underpins self-management.

Build community partnerships

Nurses play a crucial role in improving health literacy beyond our contact with individuals in the health care setting. Build partnerships with community organizations to disseminate health information to create a community network and increase access to healthcare resources.

Tools for health literacy:

- Health Measurement Literacy Tools (Revised) <https://www.ahrq.gov/health-literacy/quality-resources/tools/literacy/index.html>
- The Newest Vital Sign <https://www.pfizer.com/health/literacy/public-policy-researchers/nvs-toolkit>

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DEAR NURSING STUDENT: LETTER FROM THE NATIONAL DIAPER BANK NETWORK



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CEO, National Diaper Bank Network

Founding Sponsor



Dear Nursing Student:

Industry studies consistently show that one in three US families cannot afford an adequate supply of diapers for their babies. That means that virtually every pediatric setting in the country will see families experiencing diaper need. Every practice should be asking, "Are you able to buy enough diapers for your baby all month long?"

Ask because it directly affects your patients' health. When families do not have enough diapers, children are changed less frequently, which creates a risk of diaper rash and even more serious infection. Because childcare providers generally require families to supply disposables, diaper need can cut off opportunities for early childhood education.

Also ask because diaper need affects the whole household. My colleagues and I found that diaper need is a risk factor for maternal depression, something that harms moms and babies alike. When adults cannot access childcare, they miss work and school and families sink deeper into poverty.

Clinicians may hesitate to inquire about a problem that they feel they cannot solve, such as diaper need. But there are things that you can do. Find out if there is a diaper bank in your community and if so refer families there. Do a diaper drive in your practice setting. Ask your administrators to add diapers and other basic needs to your budgets. Talk to neighbors, friends and policymakers about diaper need and the urgency to address it.

Even if you cannot provide diapers, asking helps. Over and over, I've spoken with moms who believed that they were "the only one" who could not provide diapers for their babies. After all, there are places to get help with housing, food, and other basic needs. Nobody talks about diapers. Some of these mothers thought they were unique failures – which clearly they were not.

When you discuss diaper need, it shows them that they are not alone and that you are someone they can talk with about how material resources, and lack of them, affect their children. It shows you care.

Joanne Samuel Goldblum, LCSW
CEO National Diaper Bank Network

LOW LITERACY 'RED LIGHT' DEVELOPMENTAL MONITORING

Cognitive red lights

Expected before age	Question
2 months	Does your baby focus on things with their eyes?
4 months	Does your baby follow things with their eyes?
6 months	Does your baby turn their head to sounds and voices?
9 months	Does your child babble sounds like dada and baba?
24 months	Does your child say single words?
36 months	Does your child use three-word sentences?
At all ages	Has your child stopped doing anything they could do before today?

Gross motor red lights

Expected before age	Question
4 months	Does your baby hold their head steady when sitting?
9 months	Does your baby sit all on their own?
18 months	Does your child walk all by themselves?
At all ages	Has your child stopped doing anything they could do before today?

Social emotional red lights

Expected before age	Question
6 months	Does your baby smile or show they are happy in other ways?
9 months	Does your baby use smiles or sounds to play back and forth with you?
12 months	Does your baby respond to their name?
12 months	Does your baby babble with sounds like baba and dada?
12 months	Does your baby wave bye-bye back at you?
15 months	Does your child point to show you something?

15months	Does your child say single words?
18 months	Does your child pretend play?
18 months	Does your child combine words with gestures?
24 months	Does your child use two-word phrases all on their own?
At all ages	Has your child lost any skills like babbling or talking, or pointing to show you things?

Gross motor red lights

To use: Parent/caregiver should review questions appropriate to their child's age or clinician may read questions to parent. If parent responds no to one or more of the questions, clinician should stop (**red light**), slow down to discuss concerns using shared-decision making process (**yellow light**), and provide referrals and resources for early intervention options (**green light**).

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REHABILITATION COUNSELORS: HIDDEN GEMS IN INTERPROFESSIONAL CARE

Tameika D. Minor, PhD, CRC, Rutgers School of Health Professions

1. What is a rehabilitation counselor?

One of the most common questions rehabilitation counselors are asked is “What is a rehabilitation counselor?” It is as if we are the counseling profession’s best-kept secret. Rehabilitation counselors work with persons with physical, intellectual, mental, cognitive, developmental, and emotional disabilities. Rehabilitation counselors assist persons with disabilities achieve their personal, educational, and/or career goals. Rehabilitation counselors possess a master’s degree and most rehabilitation counseling professionals possess the certified rehabilitation counselor (CRC) credential. Due to our training and education in the counseling process, many rehabilitation counselors go on to obtain state licensure as professional counselors.

2. Disability experts

Rehabilitation counseling is a unique specialty within the counseling profession. While rehabilitation counselors are trained in areas of the counseling process such as counseling theories, techniques, diagnosis, and treatment planning, we are the only discipline with specialized training and education in working with persons with disabilities. Rehabilitation professionals possess knowledge on the medical and psychosocial aspects of disabilities. We also possess knowledge on employment laws, assistive technology, and the importance of the case management process.

3. Commitment to holistic care

Disability can happen at any point in a person’s life, and will often lead to many changes. Rehabilitation counselors are committed to working with persons with disabilities from a holistic approach, meaning that we look at the whole person. We also see each individual as unique, meaning that there is not a “one size fits all” approach in assisting our clients. This approach also is important in seeking the supports and services our clients will need to achieve their goals. Our commitment to holistic care also includes working with other disciplines as well as our client’s family and community.

4. Counseling process

So, rehabilitation counselors are experts in disability and provide a variety of services to assist persons with disabilities reach their goals, but do they actually provide counseling services? The answer is, “Yes we do!” Rehabilitation counselors provide individual and group counseling, along with assessments, diagnosis, and treatment planning. It is important to note that we work with our clients to help them reach their goals, we are not advice givers. We establish and maintain a working alliance; with our help, clients make choices to best fit their needs.

5. Case management

Rehabilitation counselors often provide case management services. We work with other professionals to find resources to best meet our client’s needs. Case management also entails coordinating services, monitoring progress, and follow up

6. Removing barriers

Persons with disabilities often face many barriers to reaching their goals. These barriers may be physical, environmental, and most often attitudinal. Rehabilitation counselors serve as educators and advocates to remove those barriers. Rehabilitation counselors serve as consultants in assistive technology to help our clients live more independently. We serve as consultants with employers to educate them on employment laws, assistive technology, and looking at other ways to become more accessible. Not only do we advocate for our clients, we also equip them with the knowledge and tools to be self-advocates as well.

7. Diversity and inclusion

Rehabilitation counselors respect and are committed to cultural diversity. We understand that cultural aspects such as race, ethnicity, gender, religion, language, and socioeconomic status have an impact on disability and the counseling relationship and process. In providing holistic care, rehabilitation counselors are equipped with the knowledge and skills to deliver culturally appropriate services and resources. Additionally, rehabilitation counselors have an ethical responsibility to deliver culturally competent services.

8. Where can you find us?

We work in a variety of settings including community rehabilitation centers, Veteran's Administration, substance abuse and mental health treatment programs, independent living facilities, nonprofit agencies; however, most rehabilitation counselors work in state vocational rehabilitation agencies. State vocational rehabilitation (VR) agencies are located in every state. State VR agencies assist persons with disabilities to obtain, maintain, or regain employment. State VR agencies offer services such as vocational counseling, skills training, job placement and training, assistive technology, accommodations, and services for transition age youth. Most clients are often referred to state VR agencies by other professionals.

9. The value of rehabilitation counselors on your interprofessional team

The world of work is important in our lives and has been shown to be essential in treatment and recovery. Persons with disabilities want to work and be integrated in their communities. Also, rehabilitation counselors want to work with you to help persons with disabilities meet those goals. As noted, one of our core values is working from a holistic approach, and interprofessional practice is at that core. We are trained and educated to work with other disciplines, and appreciate the many ways other disciplines help us work with our clients.

10. Rehabilitation counseling case study: Ken

Emily is a rehabilitation counselor working at a community behavioral health care center. Emily recently started working with her client, Ken. Ken is eager to return to work especially since he currently does not have any income and his wife, Marilyn, was recently laid off from her job as a factory worker.

Background: Ken is a 52-year-old Dominican male; he lives with his wife Marilyn, and their two children aged 10 and 8 years old. Two years ago, Ken was diagnosed with COPD. Ken also has a history of depression and cigarette smoking. After his diagnosis of COPD, Ken stopped working due to reoccurring hospitalizations related to his COPD. He worked as a baker at a large family bakery for over 15 years. He has an associate's degree in culinary and pastry arts, and has continued to bake when he can for people in the community.

In working with Emily, Ken expressed that he gets short of breath very easily, has trouble lifting, and has to take frequent breaks. He also stated that sometimes the cleaning products used at the bakery irritate him. Ken also reports that he still smokes and noticed that his smoking has increased since his wife lost her job.

Vocational rehabilitation services: Emily and Ken have been working on an employment plan. Ken would like to stay in the baking and culinary field. Emily and Ken have worked together on building his resume. Ken was recently called back for an interview at a local donut shop for a part time position that is opening in the next few weeks. He has expressed to Emily that he is very nervous since he has not been interviewed in quite some time and what if the interviewer notices his constant shortness of breath? To build his confidence, Ken and Emily have worked on his interviewing skills by conducting mock interviews.

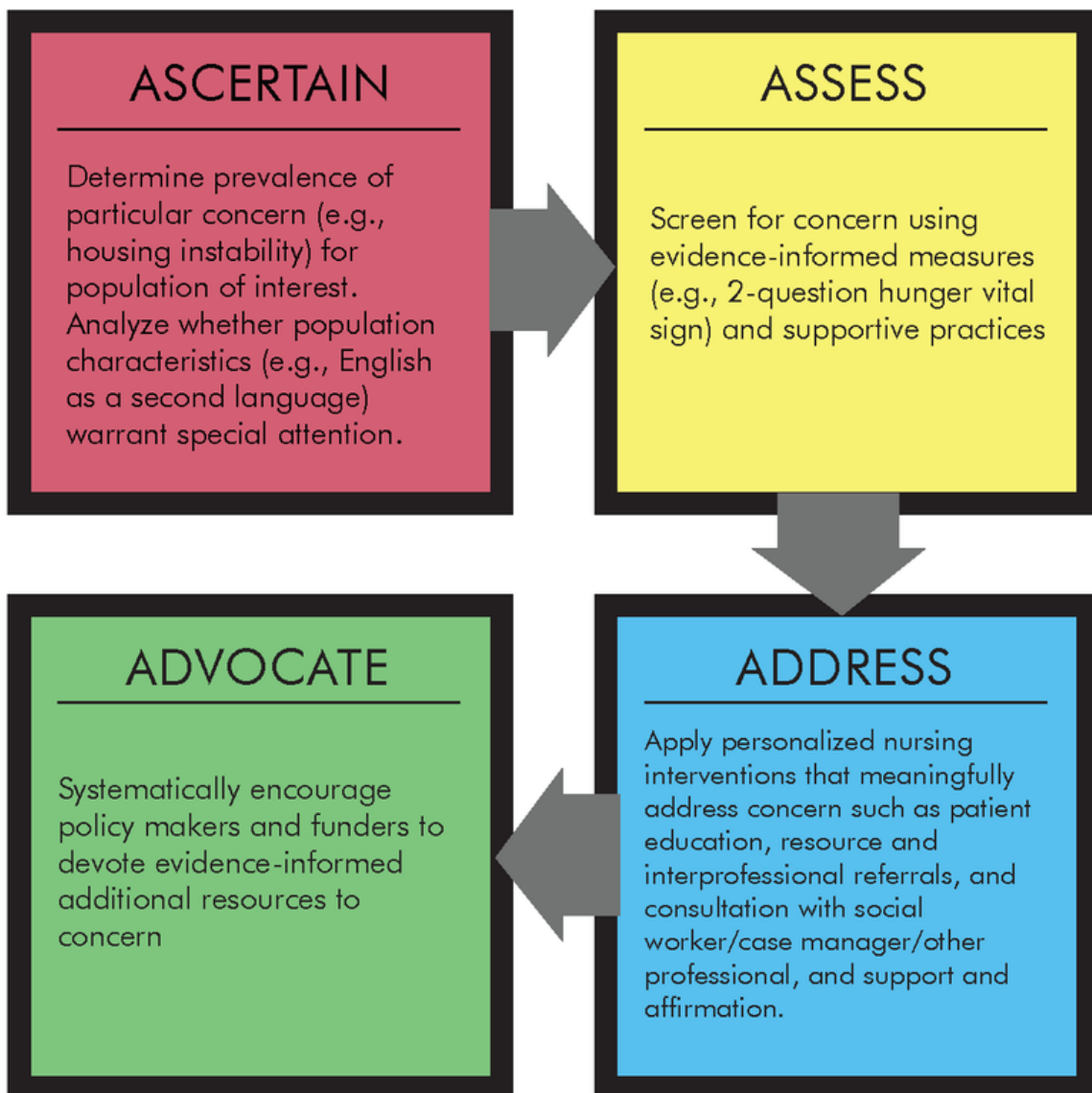
Counseling: Through their relationship, Emily and Ken have been working on ways to manage his stress. Ken knows that his smoking is not helping his health. Emily has supported Ken to adapt healthier ways to manage his stress and Emily has been using motivational interviewing techniques to help Ken stop smoking. The recent stress of Marilyn losing her job has also put strain on Ken's marriage and family life. Emily has helped Ken find a licensed marriage and family therapist in the area and has referred the family for counseling.

Interprofessional care: Emily works with many other professionals that are apart of Ken's interprofessional team. Recently, Emily has been working with a social worker in the office to help Ken and his family apply for SNAP benefits, find local food banks, vouchers for transportation, and a local nonprofit program that provides career clothing for his Ken's upcoming interview. Ken also attends a local support group for smoking cessation. Emily also works closely with Ken's treatment team, which includes his primary care physician, pulmonologist, and respiratory therapist. By working with these professionals, Emily is more educated on Ken's disability and treatment. This information can be very useful in consulting with potential employers for accommodations.

SOCIAL DETERMINANTS OF HEALTH NURSING CLINICAL PRACTICE PROCESS

Sallie Porter, DNP PhD APN, Rutgers School of Nursing

SOCIAL DETERMINANTS OF HEALTH NURSING CLINICAL PRACTICE PROCESS



SOCIAL DETERMINANTS OF HEALTH (SDOH) 'SCREENING' TOOLS

Healthcare agencies and individual nurses interested in assessing a person or family's social determinants of health as a first step towards meeting unmet social needs, will find multiple tools available to them, including those listed below. Do note the accuracy of Social Determinants of Health screening tools is largely unevaluated (Sokol et al, 2019).

1. The Accountable Health Communities Health-Related Social Needs Screening Tool
2. Children's HealthWatch survey
3. Health Leads survey
4. IHELLP (Income Housing Education Legal status Literacy Personal safety)
5. iScreen
6. Medical-Legal Advocacy Screening Questionnaire (MASQ)
7. The Online Advocate (Help Steps Tool)
8. Single question Hunger Screen
9. Social Behavioral Determinants of Health Screening Bundle
10. Social Determinants of Health Assessment Tool
11. Social Environment Inventory (SEI)
12. Social History Template
13. Survey of Wellbeing of Young Children (SWYC) Family questions
14. Two-item Food Security Screen
15. US Food Security Scale
16. US Household Food Security Survey Model 6-item short form
17. Well Child Care Evaluation Community Resources Advocacy Referral Education (WE CARE) survey
18. WellRx

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TEN FACTS ABOUT SOCIAL WORK

Patricia A. Findley, DrPH, MSW, LCSW Rutgers School of Social Work

1. Not all social workers are created equal

A social worker is a person with a graduate degree — a Master of Social Work (MSW). In graduate school, social work students have a choice of whether they want to be a clinical social worker or one that specializes in management and policy/administration. Social workers who specialize in management and policy might work in governmental advocating to change policies on, for example, homelessness or substance abuse treatment. The clinical social worker is typically licensed as a Licensed Clinical Social Worker (LCSW). Clinical social workers are more likely to work in hospitals, where they counsel persons and assist with discharge planning. LCSWs might also work in community clinics or private practice, they can independently bill insurance, Medicare, or Medicaid for their counseling services.

2. Social welfare is a dirty word

Social welfare in the United States is rooted in the English Poor Laws of the 1600s, which required that those who could work and contribute to society (i.e. were able-bodied) did work, and those who refused to work were punished or told to leave the community. The Poor Laws ensured that towns and communities were productive, that residents contributed to the betterment of society, and that welfare was directed to those most needy. The fear that someone will take advantage of the system is still very present, leading to restrictions on resources (for example, limiting access to WIC) and a distrust of welfare recipients. (The fact that the term is “recipients”, rather than “beneficiaries”, reinforces the distaste of welfare.) Social workers treat recipients with respect; they provide counseling; they assist with finding housing and other social services, employment, as well as opportunities for education and training.

3. Evidence-based practice

As with other disciplines, social workers are taught to refer to the evidence base when providing treatment or interventions to clients. Social workers read research from a variety of overlapping disciplines, including nursing and psychology, in addition to social work literature. Social work students learn to be critical consumers of research. As with all disciplines, learning to practice is a life-long process and LCSWs are required to take continuing education courses to maintain their licensure.

4. Social justice

Social workers receive training on diversity and oppression; they are trained to advocate for change of unfair practices. When social workers work with clients, they serve as advocates to ensure individuals, families, and communities are treated with respect and dignity — whether it be equal access to health care at the hospital or equal protection under the law.

5. Look for signs of stress

Social workers look at both behaviors and resources when undertaking an assessment. Are the parents eating less to allow children to eat? Are parents keeping babies in wet diapers longer than necessary because there are not enough diapers? Is the house cluttered? Why are appointments missed? Why do the kids miss school? Why is a client chronically late for work? Is there a lack of access to transportation? Is it because the responsible family member is ill? Social workers identify the underlying causes, provide counseling and education to address them, and teach strategies to manage stress. Many times, social workers turn to nurses or other team members to compare notes on observations. We all bring a different perspective and the collaboration helps to build a more complete picture.

6. Know the laws

Social workers need to be aware of the laws as they pertain to protecting children and vulnerable adults, including those with disabilities. For example, they need to be aware of laws that govern housing if they are to intervene in a landlord-tenant disagreement over a rodent infestation or lead-based paint.

7. Specialty population expertise

Social workers are trained to work with specific populations. For example, one social worker might be an expert with children, another with older adults. Ask a social worker if they have the expertise you need, if not, they can provide a referral.

8. Self-empowerment and self-determination

Social workers set goals with their clients to help them see the next steps to help themselves. People will not change if they are not invested in the outcome. Social workers have a strong belief in self-empowerment and self-determination; they try to educate and motivate clients to make the best choices possible, even if they feel that choice may not be in the client's best interest.

9. No magic wands: resources are limited

As much as we would like to have one, social workers do not possess magic wands. We cannot create resources to meet all client needs. Social workers work with other professionals to find creative ways to meet client needs. Social workers are excellent at bartering to obtain services and at extending resources for their clients, but programs and funding are limited.

10. Social workers like to work with others

As a profession, social workers are frequently referred to as the “glue” that holds a team together. Social workers advocate for clients in schools, hospitals, community agencies, prisons, nursing homes, government agencies, and substance abuse treatment centers. In hospitals, social workers may rely on nurses to act as a conduit for communication with family members. Social workers help teachers and parents intervene with anxious children to enhance educational outcomes. Often social workers are the “voice” of clients unable to communicate their needs. Social workers also appreciate when other disciplines explain technical matters, like medical issues, to better help our clients.

WHAT IS DIAPER RASH?

Rubab Qureshi MD PhD Rutgers School of Nursing

Diaper rash or diaper dermatitis is a non-specific term that describes inflammation of the skin in the diaper area. The general term does not specify the underlying etiology, which may be due to inflammatory dermatoses (e.g. psoriasis and atopic dermatitis, infections, metabolic diseases, autoimmune diseases to neoplasias) (Fölster-Holst, 2018).

Diaper dermatitis is a type of irritant contact dermatitis that is common and affects children universally, particularly between 9–12 months of age, before toilet training typically occurs (Cohen, 2017; Reich, Psomadakis, & Buka, 2017). Diaper dermatitis may result from a combination of factors including prolonged exposure to urine and feces, maceration, friction and plastic diaper covers (McCance & Huether, 2018). All these factors compromise the barrier function of the skin.

Prolonged exposure to urine and feces increases the pH of the skin. Increased pH of the skin leads to increased fecal enzyme (i.e., fecal proteases and lipases) activity which decreases protection from natural skin flora (Reich et al., 2017). Commonly, ammonia from the urine was thought to be the trigger, but recent studies report that prolonged contact with fecal matter is the primary cause of diaper rash (Cohen, 2017). The risk of developing the rash is greater if:

- The child has diarrhea, as the frequency and quantity of fecal matter may increase.
- Prolonged exposure to urine or excessive hydration, which can lead to maceration of the skin. Macerated skin feels soft, wet, or soggy to the touch and is susceptible to damage (Reich et al., 2017).
- Friction from wet diapers and cleansing wipes can damage the skin.
- Tight plastic diaper covers, which restrict air and exacerbates the factors described (Reich et al., 2017).

Presentation

Mild cases usually present as erythema (i.e., general redness in the area). However, as the severity increases, red scaly patches and raised papules appear. The erythematous papules appear as confluent macules and generally affect the buttocks, upper thighs, lower abdomen, and genitalia sparing the creases, areas that are not in direct contact with the diaper (McCance & Huether, 2018). The raised papules can become pustules if left untreated. In addition, satellite pustules may develop. The pustules can become eroded with friction from the wet diaper and wipes and can peel and weep (Reich et al., 2017).

Damaged and compromised skin can become infected by bacteria and fungi secondarily, especially if left untreated. Bacterial (Staphylococci and Streptococci) or fungal (Candida Albans) secondary infections may complicate the rash.

Types of Diaper Rash

Some common are as follows

Type	Etiological factors	Presentation
Contact Dermatitis Allergic	Allergy to materials that compose diapers, fragrances, preservatives, and emulsifiers or emollients. Common emulsifiers include alcohols present in petrolatum or moisturizers.	<ul style="list-style-type: none"> A 1–3-week period of sensitization after the initial exposure. The rash can involve other areas of contact. Once identified and the trigger is removed, the rash resolves in 2–4-weeks (Cohen, 2017). Redness in the contact area. Scaly vesicles may also appear (Fölster-Holst, 2018).
Contact Dermatitis Irritative	Irritation from wet diapers, urine, and fecal matter.	<ul style="list-style-type: none"> Redness and raised papules on convex areas e.g. buttocks, upper thighs, lower abdomen and genitalia. Creases and skin folds are not involved (Fölster-Holst, 2018).
Seborrheic Dermatitis and Psoriasis	Unclear	<ul style="list-style-type: none"> Rash usually appears as greasy scales on the scalp. However, it may involve the face, ears, neck and may involve the diaper area as well. Psoriatic lesions appear as persistent (persist beyond the first year of life) red scaly plaques with well-defined borders (Cohen, 2017).
Infections	Secondary bacterial or fungal infection	<ul style="list-style-type: none"> Staphylococcal infection presents as pustules with a thin wall that can rupture easily with a red base (Cohen, 2017). Candidal infections appear beefy, angry red with pustules and involve the creases as well as the surrounding areas (McCance & Huether, 2018). Satellite pustules are common. Other fungal infections include Tinea infections which present as an annular, itchy rash (Cohen, 2017).
Atopic dermatitis	Genetic and environmental	<ul style="list-style-type: none"> Eczematous lesions, which are itchy, may involve other parts of the body (Fölster-Holst, 2018).
Autoimmune Lichen sclerosus, Kawasaki disease	Unknown	<ul style="list-style-type: none"> Uncommon. Generally, area appears red, lesions may be hemorrhagic and around the peri-anal region. Kawasaki disease has an acute onset with fever and generalized rash, more severe in the diaper area (Fölster-Holst, 2018).
Neoplasia Langerhans cell histiocytosis	Unknown	<ul style="list-style-type: none"> Rare. Axillary and inguinal fold impetigo-like lesions.

Observations and key questions for parents

1. How long has the diaper rash persisted?
2. Which areas are mainly involved?
3. What is the cleansing routine? Soap and water? Baby wipes? How often?
4. Which type of diapers are used? Disposable or cloth diapers? Which emollient creams are used?
5. Is the rash preceded by introduction of new foods? Weaning?
6. Is there a history of diarrhea? Gastroenteritis or other bowel diseases?
7. Was the child taking antibiotics recently? (Fölster-Holst, 2018)

Prevention of diaper rash

1. Remove wet or dirty diapers promptly. If the diaper has not been changed for two or three hours, check the diaper area, and change if wet or soiled.
2. Use cotton balls dipped in warm tap water to gently cleanse the area (from front to back if your baby is a girl). Baby wipes are not needed! They may be convenient if you are going out, but not necessary and a waste of money if you are home. Do not use soaps or cleansers. If you do use wipes (for example, if you are going out), make sure that there is no alcohol, fragrance, preservatives, dyes, aloe (yes, aloe allergies are common) or other irritants in them. (Mayo Clinic, 2020)
3. Apply a thick layer of ointment that contains zinc oxide or petroleum jelly each time the diaper is changed. Avoid creams that contain antibacterial, antifungal agents or steroids in any combination.
4. Expose the area to air when possible.
5. Babies and children in diapers should be bathed daily using warm water and gentle soap.

Treatment of diaper rash

Fungal infections can be treated with antifungal ointments. Some allergic type of rashes may be treated with topical steroid creams. Irritant diaper dermatitis with secondary bacterial infections should be treated with topical antibiotics until the rash resolves.

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INSTRUCTOR RESOURCES

INSTRUCTORS GUIDE

In March 2019, the Campaign for Action published the report *Nursing Education and the Path to Population Health*. After survey and discussion with population health thought leaders and select site visits to schools of nursing, the report described how population health content was being delivered in schools of nursing. Foundational to the report is the recommendation that population health principles be taught to all levels of nursing students as an on-going curriculum element and that assessment of social determinants of health by nursing students at all levels should be introduced early in the curriculum. The report stated that population health content should be integrated into economics of health care, epidemiology/biostatistics, health equity, interprofessional teambuilding and skills, leadership, policy, social determinants of health, and systems thinking areas of the curriculum. Site visits revealed multiple teaching methods used to impart population health content including active learning strategies, case studies, integration of population health across care settings, interprofessional education experiences, intentional academic-practice partnerships, service learning, and simulation.

This case study supports the implementation of population health and social determinants of health content in the nursing curriculum. Our case study begins with foundational content introducing the concepts of population health and social determinants of health. We then offer content on one of the most important social determinants of health – economic stability, and per Healthy People 2020, its key influencing factors of employment, food insecurity, housing instability, and poverty. For each key factor, we offer content to ascertain, assess, address, and advocate with people and populations experiencing a key social determinant of health concern or concerns. The social determinants of health assessment questions suggested are evidence-informed using findings from our 2019 systematic review *National Best Practices: Screening Tools for Economic Instability in Pediatric Primary Care Report to Caplan Foundation for Early Childhood*.

We have developed the social determinants of health nursing clinical process to guide nursing students. A mnemonic – the four As serve as a prompt for nursing students to use when thinking about population health and the social determinants of health with an individual, family, community, or larger population of interest. The mnemonic AAAA equals ascertain, assess, address, and advocate.

For each case study section, we provide supplemental documents for learners to read and assignment ideas for instructors to consider.

The case study was designed as a single unit, but we understand that many schools will have limited time and may choose to implement just one or two of the sections. Each section of the case study has significant detail that may lend itself to lecture or discussion or, having students work through the content in guided small groups. The included slide set may be useful for instructors who only have a few class sessions available to incorporate the content. For instructors with even less time, we suggest the sections on food insecurity and/or housing instability as standalone units.

Learning Aim

Learner will understand the concepts of population health and social determinants of health as the foundation to ascertaining community concerns, assessing person, family, and community needs, addressing social determinants of health through nursing intervention, and advocating for persons and communities to improve health outcomes.

LEARNING OBJECTIVES

1. Describe the concept of population health
2. Summarize the concept of social determinants of health
3. Cite social determinants of health and the key influencing factors per Healthy People 2020.
Please note that Healthy People 2030 is now available <https://health.gov/healthypeople>
4. Articulate how social determinants of health may precede and exacerbate health conditions
5. Demonstrate how population data informs clinical practice
6. Relate how social determinants of health are connected
7. Explain how social determinants of health may have a greater impact on target populations than on the general population
8. Illustrate upstream, midstream, and downstream approaches to population health within a social determinants of health framework
9. Devise strategies to identify and address priorities of key populations
10. Analyze how governmental and institutional policies affect individuals health and well being
11. Reflect on the nurse's role in population health

TO GET STARTED – POPULATION HEALTH AND SOCIAL DETERMINANTS OF HEALTH

Supplemental Documents

- Introduction: Population Health
- Population Health/Social Determinants of Health Glossary
- Population Health/Social Determinants of Health Quiz

Notes to instructors

Ask learners to read

- Greetings!
- Learning Aim and Learning Objectives
- Introduction: Population Health
- Population Health/Social Determinants of Health Glossary

Discussion

Identify a population of interest to you:

- How would you define population health within the context of this population using one denominator of population health?
- How large is the population you defined?
- Describe the factors that may influence health outcomes in the selected population.
 - Introduction: Social Determinants of Health
 - Population Health/Social Determinants of Health Glossary (supplemental document).

- Learners then record and keep answers to the discussion questions found in the **Introduction: Population Health** document. As an alternative this could be done as a discussion board or in-person discussion. Learners will want to keep their answers to compare their knowledge after they move through the nine parts of the case study.
- Learners complete **Population Health and Social Determinants of Health Quiz** (supplemental document). We envisioned the quiz as open document; it took ‘testers’ up to 30 minutes to complete.
- Reinforce the importance of understanding how non ‘medical’ factors contribute to or exacerbate medical conditions.
- Reinforce the idea that changing the environment for groups of people may have an impact on overall population health.

Upon conclusion of this section, check in with learners to gauge their uptake.

- What is the most important thing you learned?
- What would you like to learn more about?
- Questions or comments?

PART 1: MEET THE HALL FAMILY

Notes to instructors

Learners should read **Case Study Part 1: Meet the Hall Family**. The same description of the Hall family also appears in the PowerPoint slide set.

- For some learners, the ‘facts’ of life for the Hall family will be surprising. While for other learners the Hall’s circumstances may evoke similarities to their own family and community. Support and affirm your learner’s personal experiences. Encourage learners to think (and empathize) beyond their own individual experience.

Part 1 Discussion

The discussion of **Case Study Part 1: Meet the Hall Family** should transpire in-person. However, as an alternative this could be done as a discussion board. We suggest three key questions to initiate discussion:

1. Why is addressing the role of social determinants of health important for this family?
2. Identify the social determinants of health – both positive and negative – that may influence the health of Emma and her family – Andrew, Jonathan, and Leah. Refer to the table found in the **Introduction: Social Determinants of Health** section for prompts/hints. What sort of education and supports might you offer?

The answers are found in the brackets at the end of each paragraph.

I step through the pediatric clinic doors. I am holding Leah and my husband Andrew’s got Jonathan along with our giant backpack full of baby paraphernalia. We are here for Leah’s 6-month well visit. I wave at Billie – they’re the nurse we usually see. I really like them. “Them” and “they” are Billie’s preferred pronouns. I know that from the button they usually wear on their lab coat. I like Billie, they treat us nice, not condescending, or fake. **[discrimination]**

Sometimes, when you are on Medicaid, health care people are not so nice. Some nurses and doctors get all judgmental or act like you are stealing from them because you have government-funded health insurance. But I do not care, it is really important my babies go to the doctor to stay healthy and get their immunizations and stuff. **[access to health care, access to primary care, discrimination]**

In New Jersey, there are programs for low-income families, we get help through the WorkFirst NJ (New Jersey’s Temporary Assistance for Needy Families – TANF). Andrew lost a lot of work hours after our home burnt down in a fire. I waitressed as much as I could until Leah was born. But, finding and affording childcare for two small children is tough and expensive. **[employment, poverty]**

I am Emma and I am 25 years old. Andrew is my husband and he is 23 years old. We have two babies – Jonathan who is 2 years old and Leah who is almost 7 months old. I want you to understand how important my family is to me, to us, we love each other and it is super important we stay together. I was in foster care for a long time and kids need real permanent families. My parents were drug users, off the chart drinkers. I totally get that substance misuse is a disease, but I am going to do better for my babies. **[housing instability]**

I have been breastfeeding Leah since she was born. It is not easy but with all our moving around, it ended up as really the most sensible thing and now I am proud that I have stuck with it. Lots of mothers cannot do the breastfeeding thing but breast is best! Nurse Billie has a button that says that, too. When I was in the hospital the post-partum and nursery nurse really pushed breastfeeding. A lactation counselor came in too to help with 'latching on', so that was good. But the person who really got me started and kept me on track was the unit housekeeper, encouraging me and giving me tips while she cleaned and even coming back in twice to make sure I was doing okay. My mother is not around and I did not breastfeed Jonathan, so having an experienced 'cheerleader' this time around really helped. **[access to foods that support healthy eating patterns, housing instability]**

We lost our home right after Leah was born. One of our downstairs neighbors fell asleep smoking. Our building was old and not all the smoke alarms were working. We lost everything – furniture, clothes, all the baby stuff, our cooking pans, even Andrew's work tools. It has been tough. You accumulate stuff little by little and then whoosh, it is all gone. We did not have a regular place to stay most of the last half year. Without his work gear, Andrew could not get enough work. **[employment, housing instability, quality of housing]**

It is not easy eating healthy when you do not have a regular place to stay. I know it is super important for Jonathan to eat fresh healthy food, but he is so picky. With breastfeeding, I need a healthy diet, too, for Leah's sake. But sometimes, McDonalds is the only option and sometimes, we only have enough money to feed Jonathan. **[access to foods that support healthy eating patterns, food insecurity]**

Jonathan is not talking at all and much of the time seems in his own world. I am a bit worried especially when I see other kids his same age saying some words and stuff. Jonathan likes dinosaurs a lot so I can always get his attention if I pull out his dinosaur sticker book or show him some dinosaur YouTube videos. We have another dinosaur book that Billie gave us as a part of the Reach Out and Read program at the clinic. I try to read to Jonathan and Leah every day. **[early childhood education and development, housing instability]**

We missed Leah's originally scheduled 6-month well visit because we did not have bus fare. It takes two buses plus walking on both ends to get to the pediatric clinic from where we were staying – my friend Betsy's couch. But this time Andrew's grandmother lent us her car; we are staying with her right now, and then we walked about 12 blocks so we did not have to pay for parking. The pediatric clinic neighborhood is kind of dodgy. There was a stabbing in the employee parking lot and there are lots of people hanging out – cursing or yelling, drinking, too. Some of the people are intimidating, so I feel like we have to be on guard all the time. Things are not so great in the different places we have been staying, usually there is at least one or two abandoned houses nearby where people are taking or selling drugs, passed out or sleeping, and having sex for drugs. It used to bother me seeing the used condoms, but now I just focus on walking fast and keeping Jonathan's little hands and feet away from anything dangerous. **[access to primary care, crime and violence, housing instability, neighborhood and built environment]**

There is a parking lot right across from the clinic, but it is \$13 to park for 4 hours and usually we are here close to that amount of time. Most of the time we are in the waiting room; it takes a long time to check in, then they weigh and measure the baby, then we wait more time in the exam room, and finally, we see the doctor, the doctor doesn't usually take very long with us, but then it takes a while for us to check out and schedule our next appointment. With two babies, there are lots of 'well visits' or as Dr. Peggy calls them 'health supervision visits'. [access to primary care]

Our 'Doctor' is Dr. Peggy who is a pediatric nurse practitioner and she is a cool lady, except sometimes she talks too fast and uses words I do not completely understand. I try to remember the words and look them up later on my phone, But those phone minutes are not cheap. I know I should stop Dr. Peggy and question exactly what she means, but I never finished high school and well, she seems so busy all the time, and it is embarrassing not to know stuff. Like I said health professionals can be judgmental. [discrimination, health literacy, high school graduation, poverty]

Part 1 Discussion continued

3. As the pediatric clinic nurse, what three questions might you ask to find out more about the social determinants of health you identified above?

Learner should record their responses to the above three discussion questions so that they can compare their perspective now with that upon completion of case study part 9.

Throughout the discussion, reinforce the importance of thinking holistically when assessing families and individuals.

PART 2: WHEN IT IS MORE THAN JUST A DIAPER RASH

Supplemental documents

- What is Diaper Rash?
- Diaper Need Worksheet
- Dear Nursing Student: A letter from the National Diaper Bank Network

Notes to instructor

Learner should read part 2 of the case study and all supplemental documents. Case Study Part 2 is included in the slide set.

- Refer students to the supplemental document – **What is Diaper Rash?**
- Instructor may wish to direct students to photographs of various types of diaper dermatitis.
- Instructor may wish to tie this case study into learning on skin integrity or infant care.
- There is a worksheet for students to complete – **Diaper Need Worksheet**
- There is a letter for students to read **Dear Nursing Student: A letter from the National Diaper Bank Network**

Be prepared to address some student opinions such as:

- ‘You should not have children if you cannot afford them’. If it does come up, invite students to discuss this issue. Familiarize yourself with the arguments in advance by searching this topic online.
- ‘They could just use cloth diapers.’ Many low-income people have limited access to a washer and dryer in the home and must use laundromats or may not be able to acquire sufficient cloth diapers.
- Preference for early toilet training and a ‘no diaper/bare bottom’ parenting philosophy instead of diapers. This may be family preference or culturally endorsed.
- Bulk purchase. Although bulk diaper purchases (with a lower cost per diaper) saves money in the long-term, this option may not be possible for low-income families who cannot afford the up-front cost.

Plan to reinforce the concept that medical conditions may be caused or exacerbated by a social reason. **You want learners always thinking – is there a social determinant ‘causing’ this ‘medical’ problem?**

Upon conclusion of this section, check in with learners to gauge their uptake.

- What is the most important thing you learned?
- What would you like to learn more about?
- Questions or comments?

Assignment ideas

Each of the following assignment ideas supports social determinants of health and population health competencies for baccalaureate-prepared nurses. Other population health competencies for baccalaureate-prepared nurses reinforced by the assignment are noted in parentheses. Assignment ideas that include service learning and interprofessional learning are also noted.

1. Discussion Board: What upstream, midstream, and downstream population health interventions may reduce diaper need? Reflect on which intervention might be most meaningful in a particular community. How should nurses assess for diaper need? (POLICY & ADVOCACY, COMMUNICATION)
2. Assignment: Ask students to complete the 'Diaper Need Worksheet.' Students should compare their findings with a few classmates. Have them report back answers to the entire class. (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION)
3. Assignment: Ask students to create education materials for diaper need and available resources using health literacy principles. Consider consultation with a social worker to integrate interprofessional education using the institution's social work faculty or staff at a local nonprofit organization. The education material might take the form of a bulletin board, poster, brochure, video, or live presentation. (COMMUNICATION, COLLABORATION, INTERPROFESSIONAL)
4. Assignment: Using the Sadler and Wallace articles cited in the references/resources section as a starting point, explore policy questions related to diaper need. Develop a Letter to the Editor advocating a diaper-related policy position. (COMMUNICATION, POLICY & ADVOCACY)
5. Set up student debate teams. The instructor acts as the health commissioner who is interested in developing a policy that addresses diaper need in the community. Each group of students tries to convince the 'health commissioner' that their proposed plan is preferred. (COMMUNICATION, POLICY & ADVOCACY)
6. Organize a diaper drive project for a local diaper bank. Student should publicize their efforts on social media or in a Letter to the Editor to a local newspaper to raise awareness of diaper need. (SERVICE LEARNING, COMMUNICATION, POLICY & ADVOCACY)

PART 3: HOME SAFE HOME

Supplemental documents

- Social Determinants of Health (SDoH) 'Screening' Tools

Notes to instructors

Learner should read part 3 of the case study and all supplemental documents. Case Study Part 3 is included in the slide set. Case Study Part 3 may be taught as a stand-alone piece. This is especially true for places that have seen an uptick in housing instability due to a recent natural disaster. Or, as part of your overall disaster preparedness content.

Upon conclusion of this section, check in with learners to gauge their uptake.

- What is the most important thing you learned?
- What would you like to learn more about?
- Questions or comments?

Assignment ideas

Each of the following assignment ideas supports social determinants of health and population health competencies for baccalaureate-prepared nurses. Other population health competencies for baccalaureate-prepared nurses reinforced by the assignment are noted in parentheses. Assignment ideas that include service learning and interprofessional learning are also noted.

1. Assignment: Ask students to select a resource that provides population level data. What type of data is available? What population level of data is provided – national, state, census tract, city, other? What type of housing data (if any) is available? Ask students to discuss their findings with classmates. (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION)
2. Assignment: Ask students to identify a nonprofit organization or governmental program assisting people who experience housing instability in the area. What services are provided? How is eligibility determined? (POLICY & ADVOCACY)
3. Organize a collection for individuals and families experiencing homelessness. What might be most needed items to collect and why? How would you determine what items to ask for? (SERVICE LEARNING, COLLABORATION, POLICY & ADVOCACY)
4. Write a letter to the editor that discusses the issue of homelessness or housing insecurity in general. Include state or local population numbers of those affected. Endorse the use of an upstream policy approach to reduce housing insecurity. (COMMUNICATION, POLICY & ADVOCACY)

PART 4: THE HUNGER GAME

Supplemental documents

Students should review the following supplemental document:

- Social Determinants of Health (SDoH) 'Screening' Tools

Notes to instructors

Learner should read part 4 of the case study and all supplemental documents. Case Study Part 4 is included in the slide set. Like Case Study Part 3, this is the other section of the case study that may lend itself to a stand-alone piece. Food insecurity screening along with provision of nutrition classes for the community is often the first social determinants of health influencing factor that hospital systems chose to assess and address.

Upon conclusion of this section, check in with learners to gauge their uptake.

- What is the most important thing you learned?
- What would you like to learn more about?
- Questions or comments?

Assignment ideas

Each of the following assignment ideas supports social determinants of health and population health competencies for baccalaureate-prepared nurses. Other population health competencies for baccalaureate-prepared nurses reinforced by the assignment are noted in parentheses. Assignment ideas that include service learning and interprofessional learning are also noted.

1. Assignment: Ask students to determine the food insecurity rate in the community. Extrapolate the number of individuals impacted. Use the information as a basis for a letter to the editor to raise food insecurity awareness. (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION, POLICY & ADVOCACY)
2. Assignment: Ask students to determine if a clinical site placement screens for food insecurity. If so, what questions do they ask or what tool do they use? How 'good' is the tool? What are its sensitivity and specificity metrics? Create a quality improvement plan to address findings. (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, POLICY & ADVOCACY)
3. Assignment: Ask students to identify a local food insecurity resource (e.g., food bank, SNAP, WIC). Report back on the eligibility requirements including any potential barriers to obtaining assistance such as documentation (e.g., laboratory results), fees, language, and transportation. Detail the specific assistance (e.g., monetary assistance or food packages), including restrictions, and education provided. Determine how the assistance form may encourage or discourage client participation. (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION, POLICY & ADVOCACY)

4. Assignment: Ask students to create education material for food insecurity using health literacy principles. Consider consulting with a dietician using institution's Registered Dietician faculty or accessing community support such as from a grocery store <https://www.shoprite.com/shoprite-dietitian-program>. The education material might take the form of a bulletin board, poster, brochure, video, or live presentation. (COMMUNICATION, COLLABORATION, INTERPROFESSIONAL)
5. Organize a food collection project for a nearby food pantry. Share information to potential donors about what type of food is most needed, what foods are not currently needed, which foods provide the most nutritional benefit. Publicize the efforts on social media or in a letter to the editor of a local newspaper to raise awareness of food insecurity. Do note that many college students and other learners experience food insecurity, so this assignment could be upsetting or stigmatizing for some. (SERVICE LEARNING, ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION)

PART 5: WORK, WORK, WORK

Supplemental documents

- Rehabilitation Counselors: Hidden Gems in Interprofessional Care
- Ten Social Work Practice Facts

Notes to instructors

Learner should read part 5 of the case study and all supplemental documents. Case Study Part 5 is included in the slide set.

Upon conclusion of this section, check in with learners to gauge their uptake.

- What is the most important thing you learned?
- What would you like to learn more about?
- Questions or comments?

Assignment ideas

Each of the following assignment ideas supports social determinants of health and population health competencies for baccalaureate-prepared nurses. Other population health competencies for baccalaureate-prepared nurses reinforced by the assignment are noted in parentheses. Assignment ideas that include service learning and interprofessional learning are also noted.

1. Assignment: Ask students to access 211 by phone or computer. What sort of assistance is available for persons seeking employment? For individuals and families experiencing poverty? For ex-offenders seeking employment? What do individuals need to do to access the assistance? What if the person in need does not speak English? What if the individual seeking information does not have a smart phone or computer? (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION)
2. Assignment: Ask students to work in groups to create a poster display, using health literacy principles, to promote healthy practices in the workplace. (COMMUNICATION)
3. Assignment: Ask students to create a search strategy to investigate the question ‘how does parental unemployment affect child health and development?’ or ‘how does a history of incarceration affect employment options?’ They should write a 1–2-page paper on their findings and report their findings back to the class. (COMMUNICATION)
4. Assignment: Ask students to interview and/or shadow a social worker and write a 1–2-page paper on their experience. What assessment or screening tools does the social worker use? Reflect on how nurses and social workers may best collaborate. What expertise does the nurse and social worker each bring? Students should report their experience and reflection back to the class. Students may find the supplemental document, Ten Social Work Practice Facts, helpful for this assignment. (ASSESSMENT, COLLABORATION, INTERPROFESSIONAL).

PART 6: BABIES LIKE BOOKS

Supplemental documents

- Low Literacy Developmental Monitoring

Notes to instructors

Learners should read part 6 of the case study and the supplemental document. The content of this case study may lend itself to integration with child development and behavior aspects of your curriculum.

Upon conclusion of this section, check in with learners to gauge their uptake.

- What is the most important thing you learned?
- What would you like to learn more about?
- Questions or comments?

Assignment ideas

Each of the following assignment ideas supports social determinants of health and population health competencies for baccalaureate-prepared nurses. Other population health competencies for baccalaureate-prepared nurses reinforced by the assignment are noted in parentheses. Assignment ideas that include service learning and interprofessional learning are also noted.

1. Assignment: Ask students to conduct a gap analysis to determine what early childhood education and development programs are available on campus for the young children of nursing students. Collate a resource list and discuss what resources are missing. Advocate with campus leadership to address deficits. (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION, POLICY & ADVOCACY)
2. Clinical visit: Students visit local early childhood education and development program. They should observe a child development screening; ask about parent education opportunities, and consider the actual/potential role for nurses in the program. Review immunization status of each child or provide developmental screening for enrollees and siblings. (INTERPROFESSIONAL, COLLABORATION)
3. Partner with the local library: Students develop parent education (either a written brochure or oral presentation) on the importance of reading to very young children (or another important health promotion topic) using health literacy principles. Students present – or pilot test if the education is written – the education at the library. Alternative modalities include poster or YouTube video. (SERVICE LEARNING, COMMUNICATION, COLLABORATION)

PART 7: NO WORDS AND A WORRIED MOTHER

Supplemental documents

- Autism Spectrum Disorder Diagnosis and Treatment
- Rehabilitation Counselors: Hidden Gems in Interprofessional Care

Notes to instructors

Learners should read part 6 of the case study and the supplemental document. The content of this case study may lend itself to integration with child development and behavior aspects of your curriculum.

Upon conclusion of this section, check in with learners to gauge their uptake.

- What is the most important thing you learned?
- What would you like to learn more about?
- Questions or comments?

Assignment ideas

Each of the following assignment ideas supports social determinants of health and population health competencies for baccalaureate-prepared nurses. Other population health competencies for baccalaureate-prepared nurses reinforced by the assignment are noted in parentheses. Assignment ideas that include service learning and interprofessional learning are also noted.

1. Assignment: Ask students to determine one or two smaller populations of interest in a geographic area. Document how the determination was made. Collate available resources that address the needs of the populations selected. (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA)
2. Assignment: Ask students to develop a parent education plan explaining autism spectrum disorder Diagnosis and Treatment. Ensure the plan is culturally affirming and health literacy principles informed. (COMMUNICATION)

PART 8: AT HOME AND IN THE COMMUNITY

Supplemental documents

- Ten Health Literacy Promotion Tips for Nurses

Notes to instructors

Learners should read part 8 of the case study and the supplemental document listed above. The content of this case study may lend itself to integration with racial equity and health equity aspects of your curriculum.

Upon conclusion of this section, check in with learners to gauge their uptake.

- What is the most important thing you learned?
- What would you like to learn more about?
- Questions or comments?

Assignment ideas

Each of the following assignment ideas supports social determinants of health and population health competencies for baccalaureate-prepared nurses. Other population health competencies for baccalaureate-prepared nurses reinforced by the assignment are noted in parentheses. Assignment ideas that include service learning and interprofessional learning are also noted.

1. Assignment: Ask students to read the Dr. Camara Jones article on levels of racism: A theoretic framework and a gardener's tale listed in the references/resources section. Ask students to reflect in writing how nurses may act as gardeners to address racism. Invite them to creatively interpret their reflection with art, music, drama, poetry, or dance. (COMMUNICATION)
2. Assignment: Invite students to read the American Nurses Association 2018 position statement: The nurses role in addressing discrimination: Protecting and promoting inclusive strategies in practice settings, policy, and advocacy. Devise a complementary strategy to promote inclusivity at the school of nursing. (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION, COLLABORATION, POLICY & ADVOCACY)
3. Assignment: Ask students to create a storyboard presentation. Divide students into groups to research and develop a storyboard for presentation to the class on one of the following: the built environment, crime and violence, discrimination, environmental conditions, quality of housing, neighborhood, or social and community context. How does it impact health? What are the implications of the most relevant related policies and programs? (ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION, COLLABORATION, POLICY & ADVOCACY)

PART 9: THE NURSE IN THE MIRROR

Supplemental documents

- Population Health/Social Determinants of Health Glossary

Notes to instructors

Learner should read part 9 of the case study and re-review the supplemental document listed above. The content of this case study may lend itself to integration with policy and advocacy as well as leadership aspects of your curriculum.

Ask learner to review and update their answers to the Introduction: Population Health discussion in the introduction and Case Study Part 1 sections.

Reflection Questions

- How will you incorporate population health/social determinants of health into your professional practice?
- What is your population of interest? Why?
- Is there a particular social determinant of health or key influencing factor that intrigues you? Why?
- Identify 1-3 next steps on your journey to learning more about population health and social determinants of health.

Assignment ideas

Each of the following assignment ideas supports social determinants of health and population health competencies for baccalaureate-prepared nurses. Other population health competencies for baccalaureate-prepared nurses reinforced by the assignment are noted in parentheses. Assignment ideas that include service learning and interprofessional learning are also noted.

1. Assignment: Ask student to compare recorded answers to discussion questions in the case study introduction sections of population health and social determinants of health to knowledge and opinions now. Report the most important points learned and continued gaps in knowledge. (COMMUNICATION)
2. Assignment: Ask students to develop a virtual or physical VISION BOARD. The purpose of this vision board is to provide a space or place for the learner to collate a nursing career vision board with an emphasis on population health and social determinants of health. What aspect of population health is most compelling? Which social determinant of health and key influencing factors is most meaningful? What are the future roles for nurses in population health and social determinants of health? Be creative! There is no completely right or completely wrong way to do this. Except not doing it at all. Upload the vision board as an URL or digital photo. Make sure submission is clear enough to easily read. (COMMUNICATION, COLLABORATION, POLICY & ADVOCACY)

3. Assignment: Identify a population health initiative in the community. Describe the population health initiative to classmates. Who is the key or target population of interest? How 'significant' a population is this? What social determinants of health and key influencing factors are addressed? What nurse involvement does the initiative include? What is the nurse's role in the initiative with regards to ascertaining, assessing, addressing, and advocating? Is the initiative missing a nurse presence or enhanced nursing role? What might be enhanced or improved? As a group, classmates propose and determine by vote, a population health project to implement. (SERVICE LEARNING, ASSESSMENT, ANALYSIS, UNDERSTANDING DATA, COMMUNICATION)
4. Assignment: Ask students to interview a nurse serving on a board. Reflect on the interview and report back to class. An alternative assignment is for the instructor to invite a nurse or nurses serving on a board(s) to address students. Learners reflect on the most important thing they learned from the panelist(s). (COMMUNICATION, POLICY & ADVOCACY)
5. Assignment: Ask students to explore a nursing membership association or organization of interest. How does the organization or association address population health and social determinants of health? (POLICY & ADVOCACY)
6. Assignment: Invite students to write a letter to the editor on a population health or social determinants of health topic. Submit letter to local newspaper. Extra points if it gets published. (COMMUNICATION, POLICY & ADVOCACY)

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POPULATION HEALTH AND SOCIAL DETERMINANTS OF HEALTH QUIZ

Multiple choice

1. A population health approach focuses on the health outcomes of
 - a. Groups of people
 - b. Individuals
 - c. Extended family
 - d. Self-isolating household
2. Data reporting on population health is
 - a. Aggregate data
 - b. Individual level data
 - c. Counting each person
 - d. Splitting the population
3. The key components of population health include which of the following? Please select all that apply.
 - a. Health determinants
 - b. Health outcomes
 - c. Policy development
 - d. Research development
4. Which of the following are social determinants that influence health and health care? (Select all that apply)
 - a. Access to health care
 - b. Age of individual
 - c. Access to primary care
 - d. Number of co-morbidities
 - e. Health literacy
 - f. Genetic pre-disposition to illness

Matching Questions

5. Match the social determinants of health to its key influencing factor

Social Determinant	Key Influencing Factor
Economic stability	Employment
Education	Language and literacy
Health and health care	Access to health care
Neighborhood and built environment	Crime and violence
Social and community context	Incarceration

Short answer

6. List the three elements of Population Health (*health determinants, health outcomes, and policy development). Include specific examples of each element as they apply to the care of individuals and their families.

7. What was the most important thing you learned from the three documents you were required to read?

LEARNER ASSESSMENT WITH RUBRIC

Notes to instructors:

You may customize this to your course learning objectives. For example, if your course focus is care of the older adult, assign an older adult population. If your focus is nutrition, choose food insecurity option. Works as an individual or group project.

Instructor assigns population of interest or learner self-selects population of interest.

[Examples: Families with children under age three in Newark; homeless veterans in Illinois; individuals with mental illness in the United States]

Instructor assigns concern of interest or learner self-selects concern of interest. [Options: employment, food insecurity, housing instability, poverty]

Learner answers six questions. Completes each social determinants of health nursing clinical process area and summarizes three key points gleaned from learner assessment activity. Note ASCERTAIN section has two parts.

ASCERTAIN:

Learner states, defines, and describes population of interest. Cites source(s) of information to include data base(s) used. Learner describes any special considerations that the population may require. Citations and references.

Learner states, defines, and describes concern of interest. Definition is authoritative. Evidence-informed description that includes extent of concern in population of interest. Any 'special' considerations for population noted (e.g., health literacy, language and literacy, natural disaster, economic downturn). Citations and references.

ASSESS:

Learner identifies evidence-informed assessment tool or question(s) to assess for concern in population of interest. Learner provides evidence supporting chosen option. Describes strengths and weaknesses of chosen option. Citations and references.

ADDRESS:

Learner identifies and details three nursing interventions to address the concern in the population. Learner provides at least one community-based resource. Describes any barriers to intervention. Learner incorporates interprofessional collaboration. Citations and references.

ADVOCATE:

Learner creates three-point advocacy plan for concern in the population of interest. Learner identifies key stakeholders, policy makers, and funders who may be interested in the issue. Citations and references.

Summary

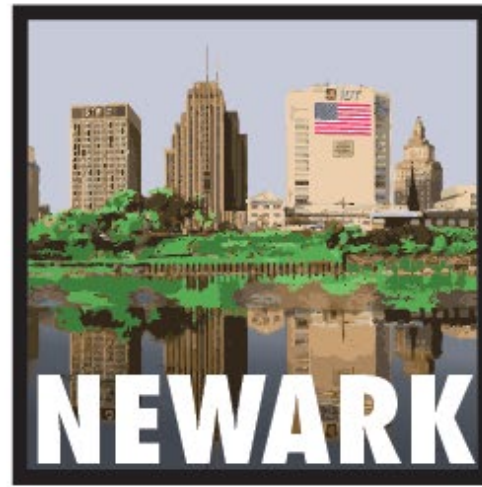
Learner lists three key points elucidated through completion of the assignment.

Learner Assessment Rubric				
Criterion	Exceeds (3)	Meets (2)	Approaches (1)	Is Not Included (0)
Ascertain What is the population of interest?	States, defines, and describes population of interest. Cites source(s) of information to include data base(s) used. Describes any special considerations that the population may require. Citations and references.	States, defines, and describes population of interest. Cites source(s) of information to include data base(s) used. Citations and references	States and defines population of interest but does not cite source of information.	Does not state and define population of interest.
Ascertain What is the issue of concern?	State, defines, and describes concern of interest. Authoritative definition. Evidence-informed description that includes extent of concern in population of interest. Any 'special' considerations noted. Citations and references.	States, defines, and describes concern of interest. Authoritative definition. Evidence-informed description that includes extent of concern in population of interest. Citations and references.	States, defines, and describes concern of interest but does not provide authoritative definition.	Does not state and define or describe concern of interest.
Assess What tool or question(s) is the best option to assess for issue of concern in the population of interest?	Identifies evidence-informed assessment tool or question(s) to assess for concern in population of interest. Provides evidence supporting chosen option. Describes strengths and weaknesses of chosen option. Citations and references.	Identifies evidence-informed assessment tool or question(s) to assess for concern in population of interest. Provides evidence supporting chosen option. Citations and references.	Identifies assessment tool or questions but does not provide evidence behind the chosen option.	Does not identify assessment tool or questions.
Address What nursing interventions may be used to address the identified concern in the population of interest?	Identifies and details three nursing interventions to address the concern in the population. Provides at least one community-based resource. Describes any barriers to intervention. Incorporates interprofessional collaboration. Citations and references.	Identifies and details two nursing interventions to address the concern in the population. Provides at least one community-based resource. Describes any barriers to intervention. Incorporates interprofessional collaboration. Citations and references.	Identifies and details one nursing intervention to address the concern in the population. Provides at least one community-based resource. Describes any barriers to intervention. Incorporates interprofessional collaboration. Citations and references.	Fails to identify or detail any nursing intervention to address the concern in the population.

Learner Assessment Rubric				
Criterion	Exceeds (3)	Meets (2)	Approaches (1)	Is Not Included (0)
<p>Address What nursing interventions may be used to address the identified concern in the population of interest?</p>	Identifies and details three nursing interventions to address the concern in the population. Provides at least one community-based resource. Describes any barriers to intervention. Incorporates interprofessional collaboration. Citations and references.	Identifies and details two nursing interventions to address the concern in the population. Provides at least one community-based resource. Describes any barriers to intervention. Incorporates interprofessional collaboration. Citations and references.	Identifies and details one nursing intervention to address the concern in the population. Provides at least one community-based resource. Describes any barriers to intervention. Incorporates interprofessional collaboration. Citations and references.	Fails to identify or detail any nursing intervention to address the concern in the population.
<p>Advocate What advocacy measures may be taken to focus resources on the issue of concern in the population of interest?</p>	Creates three-point advocacy plan for concern in the population of interest. Identifies key stakeholders, policy makers, and funders who may be interested in the issue. Citations and references.	Creates two-point advocacy plan for concern in the population of interest. Identifies key stakeholders, policy makers, and funders who may be interested in the issue. Citations and references.	Creates one-point advocacy plan for concern in the population of interest. Identifies key stakeholders, policy makers, and funders who may be interested in the issue. Citations and references.	Fails to create advocacy plan.
<p>Summary What are three key points elucidated through completion of this assignment?</p>	Lists three key points elucidated through completion of the assignment.	Lists two key points elucidated through completion of the assignment.	Lists one through completion of the assignment.	Fails to list any key points.

Just a diaper rash?

A Population Health/Social Determinants of Health Case Study



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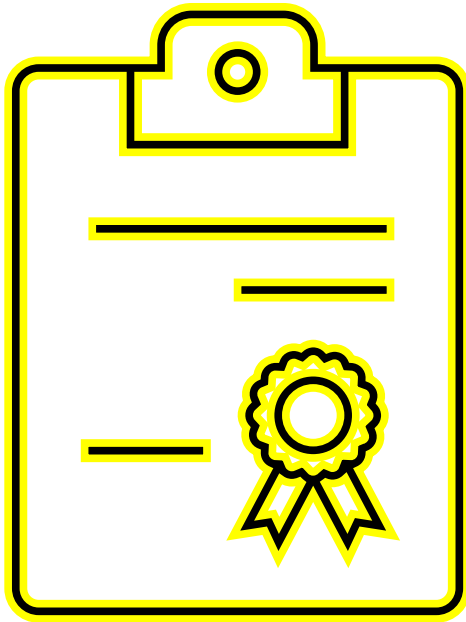
Learning Objectives

- Describe the concept of population health
- Summarize the concept of social determinants of health
- Cite social determinants of health and the key influencing factors per Healthy People 2020*
- Detail foundational aspects of economic stability
- Analyze the Social Determinants of Health Nursing Clinical Process
 - Explore the key influencing factor of housing instability
 - Explore the key influencing factor of food insecurity
 - Explore the key influencing factor of employment
- Reflect on how you will integrate population health/social determinants of health into your professional practice
- Do note Healthy People 2030 is now available <https://health.gov/healthypeople>



Population Health

- At its core, population health is about achieving the best possible health outcomes for a group of individuals, a community, or a nation. Nash et al (2021) defined population health as the distribution of health outcomes within a population, the determinants that influence distribution, and the policies and interventions that affect the determinants.



To do: Read

- Learner should read the supplemental document
 - Introduction: Population Health

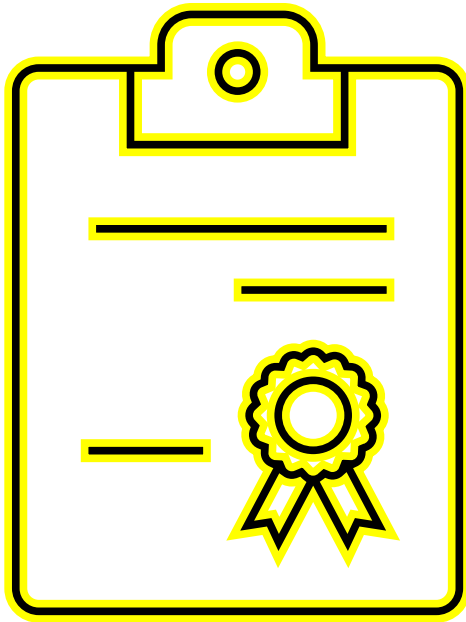
Social Determinants of Health Definition

- Social Determinants of Health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.



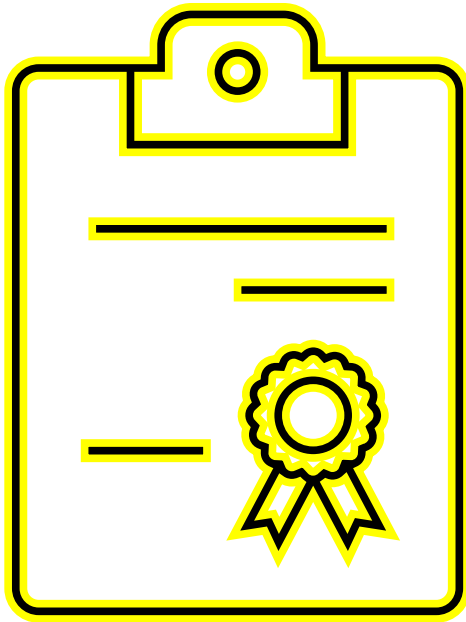
Social Determinants of Health

Key Areas/ Social Determinants of Health	Influencing Factors
Economic Stability	<ul style="list-style-type: none"> • Employment • Food insecurity • Housing instability • Poverty
Education	<ul style="list-style-type: none"> • Early childhood education and development • Enrollment in higher education • High school graduation • Language and literacy
Health and Health Care	<ul style="list-style-type: none"> • Access to health care • Access to primary care • Health literacy
Neighborhood and Built Environment	<ul style="list-style-type: none"> • Access to foods that support healthy eating patterns • Crime and violence • Environmental conditions • Quality of housing
Social and Community Context	<ul style="list-style-type: none"> • Civic participation • Discrimination • Incarceration • Social cohesion
<p>There are determinants beyond the social factors listed above that may drive health. These factors include genetics and biology, the physical environment, and lifestyle behaviors.</p>	



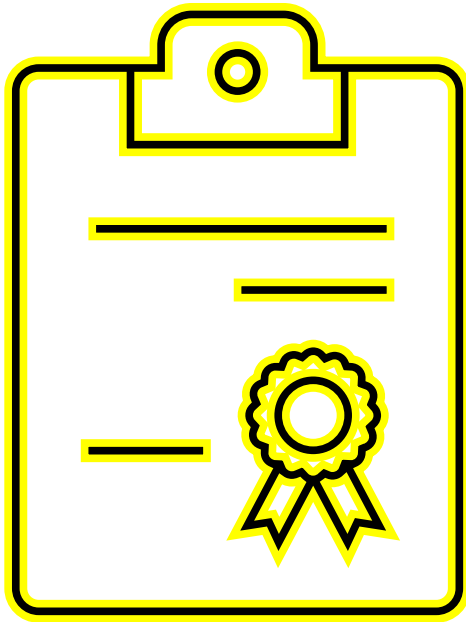
To do: Read

- Learner should read the supplemental document
 - Introduction: Social Determinants of Health



To do: Read

- Learner should review the supplemental document
 - Population Health/Social Determinants of Health Glossary



To do: Complete

- Learner should complete the
 - Population Health/Social Determinants of Health Quiz

Economic Stability

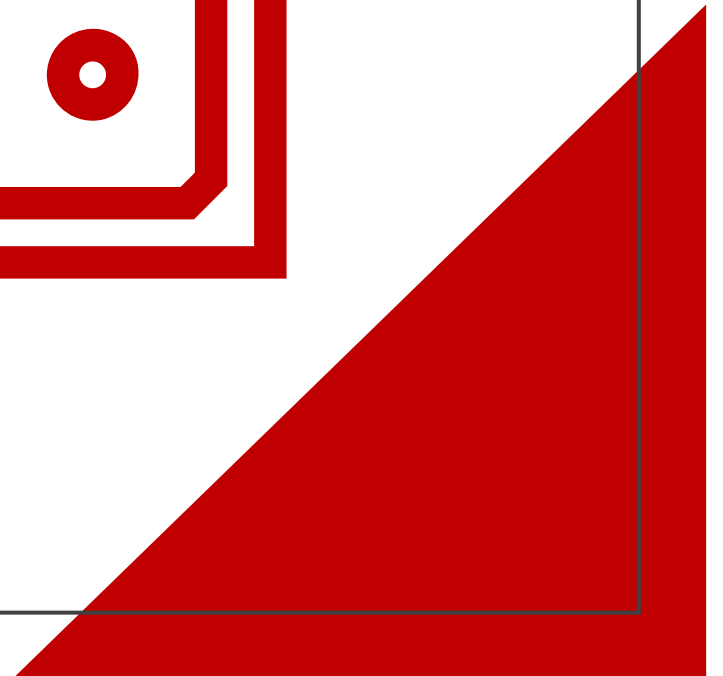
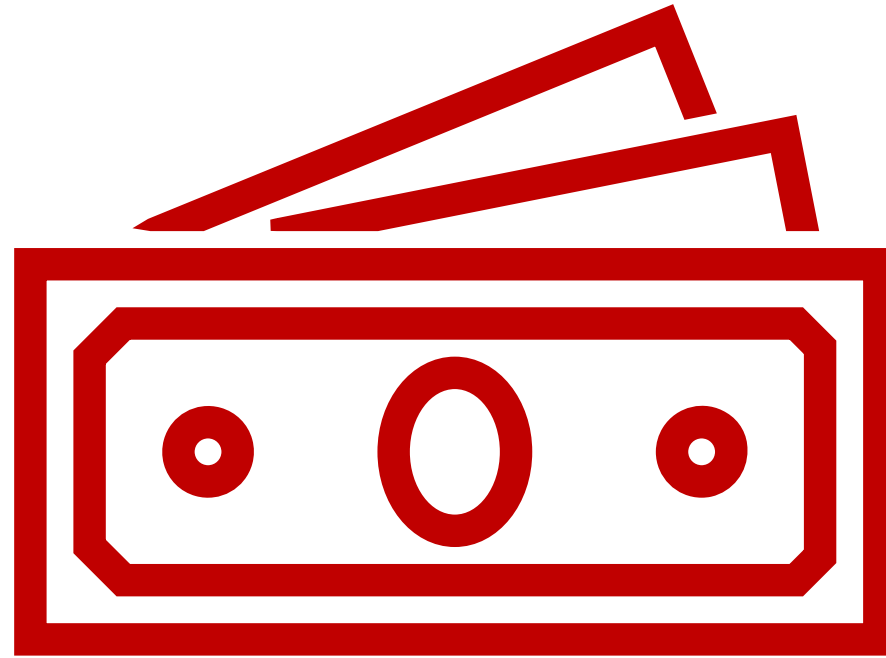
- Household income and financial stability that supports overall health and well-being.
- The most important social determinant of health for the developing child and their family may be economic stability.



Economic Stability

- Per Healthy People 2020 the key influencing factors for economic stability are:
 - Employment
 - Food Insecurity
 - Housing Instability
 - Poverty

Poverty



Poverty

- Poverty frequently equates to material hardship.
- Poor people tend to have poorer health compared to non-poor individuals.
- Poverty and its associated challenges are not uncommon.

Poverty

- Almost 12% of individuals live in poverty in the United States (U.S. Census, 2019).
- Population-level data reveals that almost half of families with infants and very young children live at or below 200% of the federal poverty level (Jiang et al, 2017).
- The United States federal poverty guidelines are used to determine financial eligibility for certain federal programs.

What programs help those experiencing poverty?

- United States federal poverty guidelines used to determine financial eligibility for certain federal programs are published each year <https://aspe.hhs.gov/poverty-guidelines>.
 - For example, to be eligible for The Special Supplemental Nutrition Program for Women, Infants, and Children (*WIC*), applicants must have income at or below a specific level set by the state agency (or determined automatically income-eligible based on participation in another program).
 - The state agency's income standard must be between 100% and 185% of the federal poverty guidelines.

What programs help those experiencing poverty?

- The Earned Income Tax Credit (EITC or EIC) <https://www.irs.gov/credits-deductions/individuals/earned-income-tax-credit> is a benefit for working people with low to moderate income.
- To qualify, certain requirements must be met, and you must have filed a tax return, even if tax is not owed. EITC reduces the amount of tax owed and some will qualify for a refund.



What programs help those experiencing poverty?

- The federal welfare program Temporary Assistance to Needy Families (TANF) program is designed to help needy families achieve self-sufficiency.
- States receive block grants to design and operate programs that accomplish one of the purposes of the TANF program.

<https://www.acf.hhs.gov/ofa/programs/tanf>

What programs help those experiencing poverty?

- New Jersey's Temporary Assistance to Needy Families (TANF) program — WorkFirst NJ — is the state's welfare reform program.
- WorkFirst NJ emphasizes work as the initial step.
- WorkFirst NJ's goal is to help people get off welfare, secure employment and become self-sufficient through job training, education, and work activities.
- WorkFirst NJ provides temporary cash assistance and many other support services to families.
- WorkFirst NJ only helps approximately 15% of families living below the federal poverty level which means many families are not getting the assistance despite meeting eligibility criteria.
- Insure Kids Now <https://www.insurekidsnow.gov/>

Meet the Halls



Emma Hall

- I step through the pediatric clinic doors. I am holding Leah and my husband Andrew's got Jonathan along with our giant backpack full of baby paraphernalia. We are here for Leah's 6-month well visit. I wave at Billie — they're the nurse we usually see. I really like them. "Them" and "they" are Billie's preferred pronouns. I know that from the button they usually wear on their lab coat. I like Billie, they treat us nice, not condescending, or fake.
- Sometimes, when you are on Medicaid, health care people are not so nice. Some nurses and doctors get all judgmental or act like you are stealing from them because you have government-funded health insurance. But I do not care, it is really important my babies go to the doctor to stay healthy and get their immunizations and stuff.



Emma Hall

- In New Jersey, there are programs for low-income families, we get help through the WorkFirst NJ. Andrew lost a lot of work hours after our home burnt down in a fire.
- I waitressed as much as I could until Leah was born. But, finding and affording childcare for two small children is tough and expensive.
- I am Emma and I am 25 years old. Andrew is my husband and he is 23 years old.
- We have two babies – Jonathan who is 2 years old and Leah who is almost 7 months old. I want you to understand how important my family is to me, to us, we love each other and it is super important we stay together. I was in foster care for a long time and kids need real permanent families.
- My parents were drug users, off the chart drinkers. I totally get that substance misuse is a disease, but I am going to do better for my babies.

Emma Hall

- Leah is a really wonderful baby but fussy, sometimes, too. Leah's bottom gets red and that seems to bother her especially when she is trying to fall asleep. But most of the time she gives me big smiles and loves cuddles. I think she would have me hold her all of the time if she could.
- I have been breastfeeding Leah since she was born. It is not easy but with all our moving around, it ended up as the most sensible thing and now I am proud that I have stuck with it. Lots of mothers cannot do the breastfeeding thing but breast is best! Nurse Billie has a button that says that, too.
- When I was in the hospital the post-partum and nursery nurse really pushed breastfeeding. A lactation counselor came in too to help with 'latching on', so that was good. But the person who really got me started and kept me on track was the unit housekeeper, encouraging me and giving me tips while she cleaned and even coming back in twice to make sure I was doing okay. My mother is not around and I did not breastfeed Jonathan, so having an experienced 'cheerleader' this time around really helped.



Emma Hall

- We lost our home right after Leah was born. One of our downstairs neighbors fell asleep smoking. Our building was old and not all the smoke alarms were working. We lost everything – furniture, clothes, all the baby stuff, our cooking pans, even Andrew’s work tools. It has been tough. You accumulate stuff little by little and then whoosh, it is all gone.
- We did not have a regular place to stay most of the last half year. Without his work gear, Andrew could not get enough work.
- It is not easy eating healthy when you do not have a regular place to stay. I know it is super important for Jonathan to eat fresh healthy food, but he is so picky. With breastfeeding, I need a healthy diet, too, for Leah’s sake. But sometimes, McDonalds is the only option and sometimes, we only have enough money to feed Jonathan.

Emma Hall

- Jonathan is not talking at all and much of the time seems in his own world. I am worried especially when I see other kids his same age saying some words and stuff. Could it be all the moving around or having a new baby sister?
- Jonathan likes dinosaurs a lot so I can always get his attention if I pull out his dinosaur sticker book or show him some dinosaur YouTube videos. We have another dinosaur book that Billie gave us as a part of the Reach Out and Read program at the clinic.
- I try to read to Jonathan and Leah every day.



Emma Hall

- We missed Leah's originally scheduled 6-month well visit because we did not have bus fare. It takes two buses plus walking on both ends to get to the pediatric clinic from where we were staying – my friend Betsy's couch.
- But this time Andrew's grandmother lent us her car; we are staying with her right now, and then we walked about 12 blocks, so we did not have to pay for parking.
- The pediatric clinic neighborhood is kind of dodgy. There was a stabbing in the employee parking lot and there are lots of people hanging out — cursing or yelling, drinking, too. Some of the people are intimidating, so I feel like we have to be on guard all the time.
- Things are not so great in the different places we have been staying, usually there is at least one or two abandoned houses nearby where people are taking or selling drugs, passed out or sleeping, and having sex for drugs. It used to bother me seeing the used condoms, but now I just focus on walking fast and keeping Jonathan's little hands and feet away from anything dangerous.

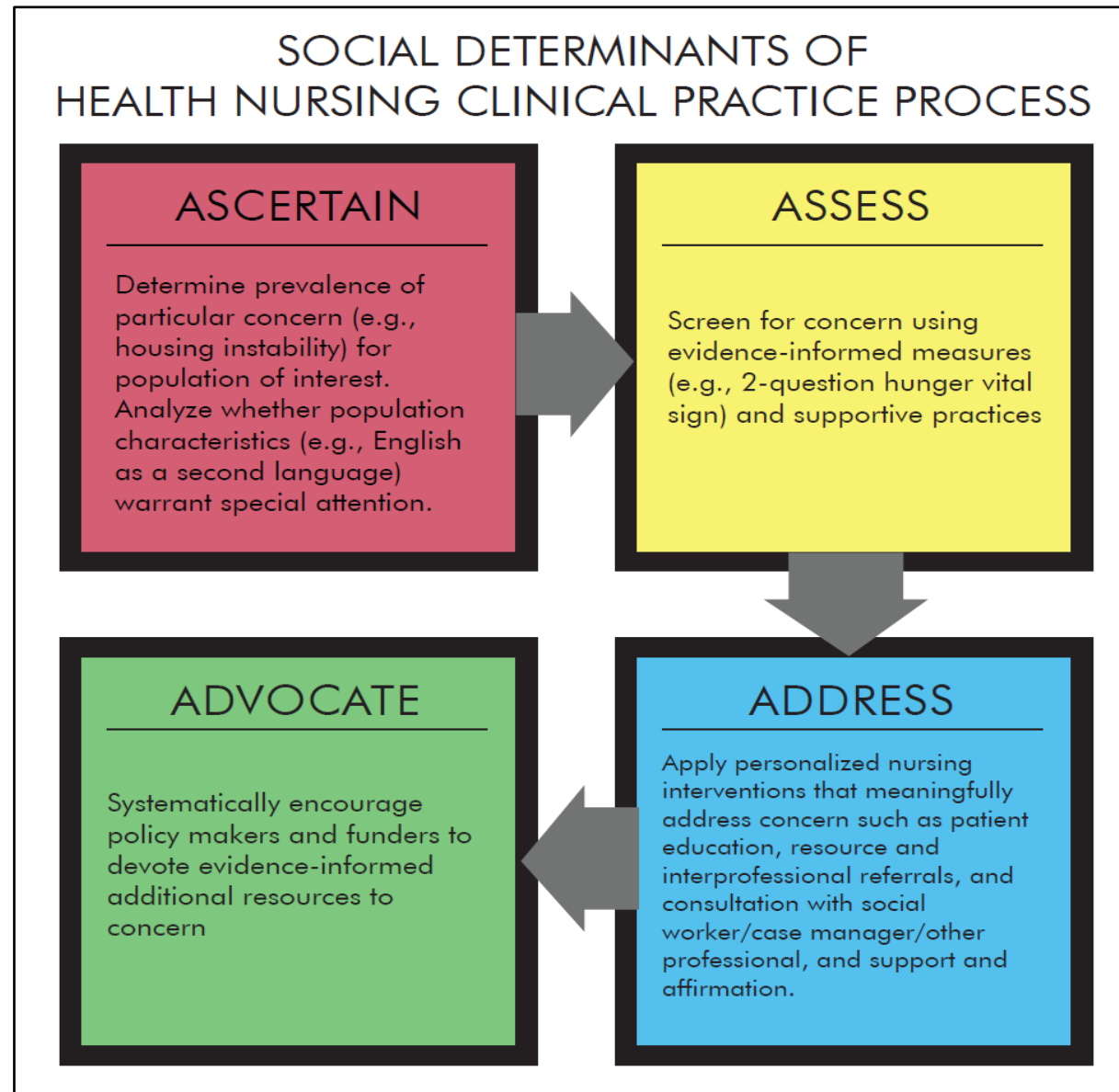
Emma Hall

- There is a parking lot right across from the clinic, but it is \$13 to park for 4 hours and usually we are here close to that amount of time.
- Most of the time we are in the waiting room; it takes a long time to check in, then they weigh and measure the baby, then we wait more time in the exam room, and finally, we see the doctor, the doctor doesn't usually take very long with us, but then it takes a while for us to check out and schedule our next appointment.
- With two babies, there are lots of 'well visits' or as Dr. Peggy calls them 'health supervision visits'. Our 'Doctor' is Dr. Peggy who is a pediatric nurse practitioner and she is a cool lady, except sometimes she talks too fast and uses words I do not completely understand. I try to remember the words and look them up later on my phone, But those phone minutes are not cheap. I know I should stop Dr. Peggy and question exactly what she means, but I never finished high school and well, she seems so busy all the time, and it is embarrassing not to know stuff. Like I said health professionals can be judgmental.

Emma (Leah and Jonathan's mother)

- “We’re here for Leah’s 6-month well check-up. Leah still has a pretty bad diaper rash that is even worse than when we were here the last time.
- The skin on her bottom, lower tummy, and upper thighs is red and shiny. Is there any prescription cream we can get?
- Jonathan is still in diapers, too. It is hard to always have enough diapers on hand for the both of them. Jonathan goes ballistic when his diaper is wet or dirty. But I do not think he is ready for toilet training.”

Social Determinants of Health Nursing Clinical Practice Process (Porter, 2020)

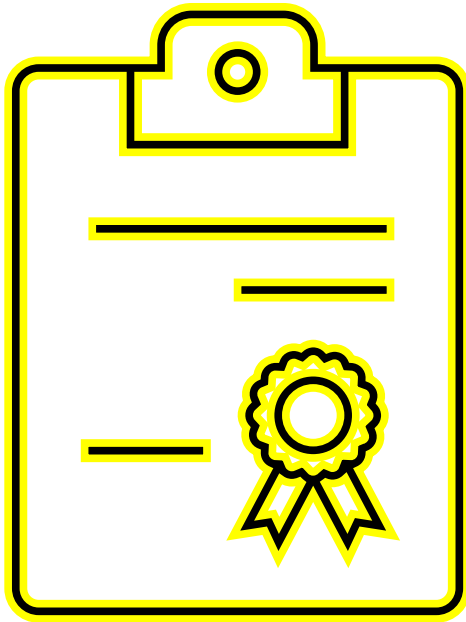


Ascertain

- Determine prevalence of particular concern (e.g., housing instability) for population of interest.
- Analyze whether population characteristics (e.g., English as a second language) warrant special attention.

The following websites provide population-level data for smaller populations of concern

- PLACES: Local Data for Better Health <https://www.cdc.gov/places/index.html>
- County Health Rankings <https://www.countyhealthrankings.org/>
- Kids Count 2021 <https://www.aecf.org/resources/2021-kids-count-data-book>
- Census Bureau <https://www.census.gov/>
- Zero to Three State of Babies Yearbook <https://stateofbabies.org/>



To do: Read

- Learner should read the supplemental document
 - Ten Health Literacy Promotion Tips for Nurses

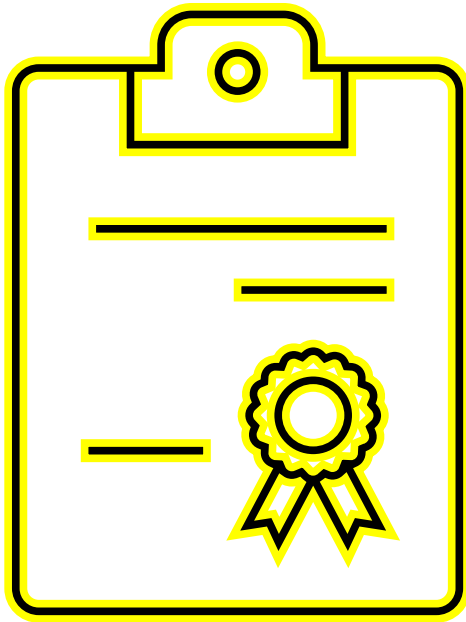


Assess

- Screen for concern using evidence-informed measures (e.g., 2-question hunger vital sign and supportive associated practices).
-

Do note!

- The suggested assessment questions for housing instability, food insecurity, and employment were determined by a systematic review funded by the Caplan Foundation for Early Childhood:
 - Porter, S., Qureshi, R., Echevarria, M., Mahat, G., & Watkins, A.V. (2019). National Best Practices: Screening Tools for Economic Instability in Pediatric Primary Care. Report to Caplan Foundation for Early Childhood.
- There may be other questions that are more suitable for your population's needs.



To do: Review and Investigate

- Learner should review supplemental document
 - Social Determinants of Health (SDoH) 'Screening' Tools
- Learner should investigate at least one of the tools noted

Address

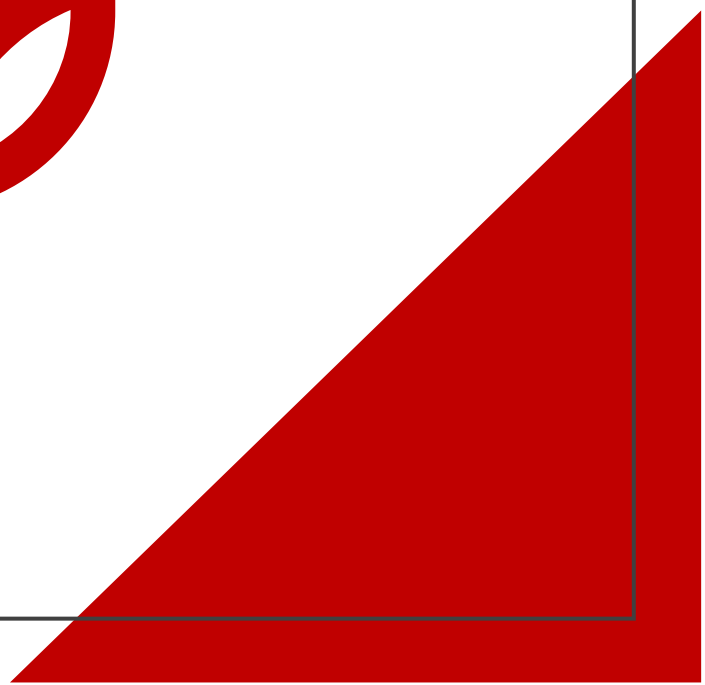
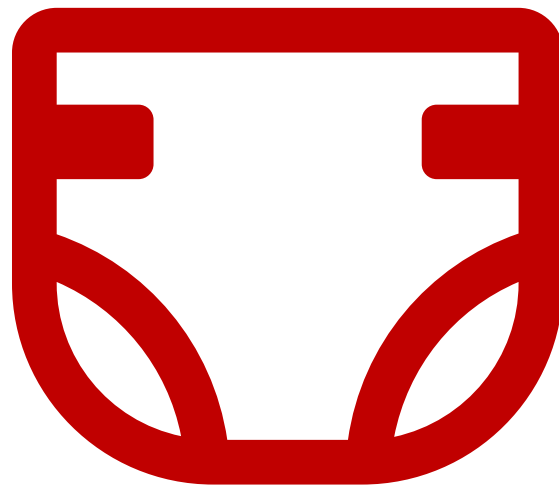
- Apply personalized nursing interventions that meaningfully address identified concern.
- These interventions may include care coordination, individual/family education, resource and interprofessional referrals, and consultation with social worker or certified rehabilitation counselor, and support and affirmation.



Advocate

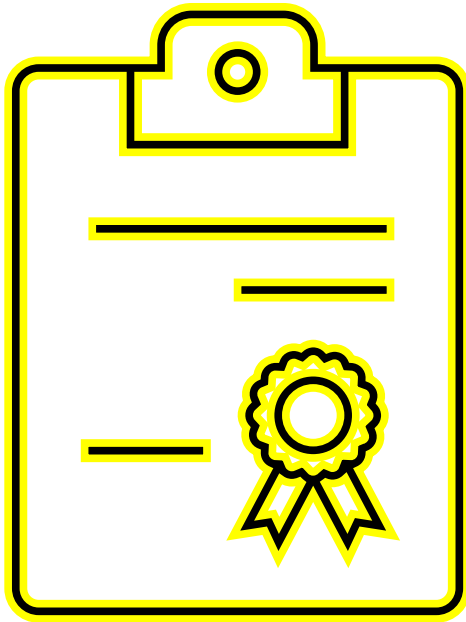
- Systematically encourage policy makers and funders to devote additional evidence-informed resources to the concern.
-

Diaper
Need and
Material
Hardship



Ascertain

- Diaper need is when a family cannot afford sufficient diapers to keep their child clean, dry, comfortable, and healthy.
- Diaper need in the form of incontinence supplies also exists for certain older individuals or certain individuals with disabilities. Diaper need may be an issue for children with Autism Spectrum Disorder, as these children may experience delayed toilet training or gastrointestinal issues.



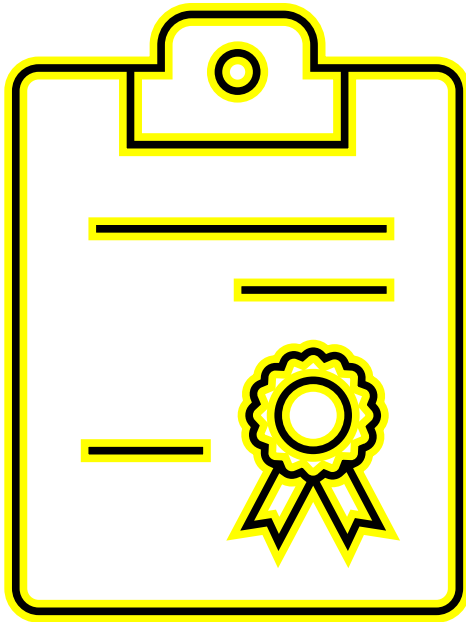
To do: Complete

- Learner should complete the supplemental document
 - Diaper Need Worksheet.



Assess

- “Are you able to buy enough diapers for your baby all month long?”
(National Diaper Bank Network)
 - “If you have a child in diapers, do you ever feel that you do not have enough diapers to change them as often as you would like? If yes, what do you do when you don’t have enough diapers?” (Austin & Smith, 2017)
-



To do: Read

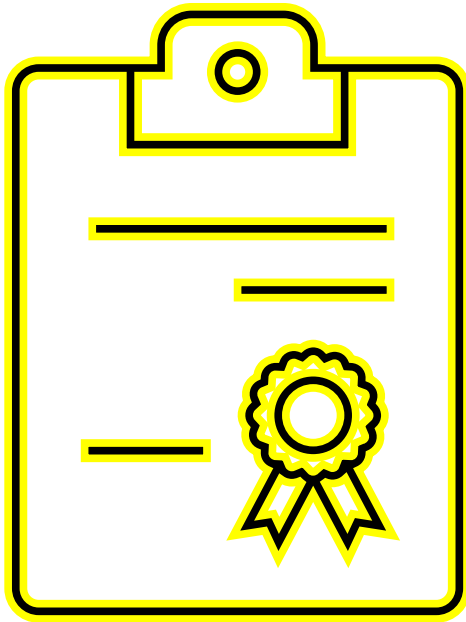
- Learner should read the supplemental document
 - Dear Nursing Student: A letter from the National Diaper Bank Network.

Address

- **Diaper Banks.** There are more than 300 diaper banks in the United States. In addition to no-cost to end user caregiver and baby diaper distribution, diaper banks may also supply feminine hygiene products, education, and other resources. Here are some examples:
 - Central Jersey Diaper Bank <https://www.aecdc.org/central-jersey-diaper-bank>
 - CNY Diaper Bank <http://www.cnydiaperbank.org/>
 - Houston Diaper Bank <https://houstondiaperbank.org/>
 - Moms Helping Moms <https://momshelpingmomsfoundation.org/>
 - National Diaper Bank Network <https://nationaldiaperbanknetwork.org/>
 - San Francisco Diaper Bank <http://www.sfdiaperbank.org/>
 - Western Pennsylvania Diaper Bank <https://www.wpadiaperbank.org/>

Address

- Other potential resources to assist with diaper need include:
 - Food Banks/Pantries and local faith-based organizations may also assist with diaper need.
 - Girl Scouts Baby Bundles
<https://www.wanaqueps.org/cms/lib/NJ01912976/Centricity/Domain/145/BABY%20BUNDLE%20-%20Girl%20Scouts.pdf>
 - Temporary Assistance to Needy Families (TANF) <https://www.benefits.gov/benefit/613> TANF provides financial assistance to eligible families and does not directly provide diapers



To do: Complete

- Learner should determine a local resource that assists parents and others with diaper need



Advocate

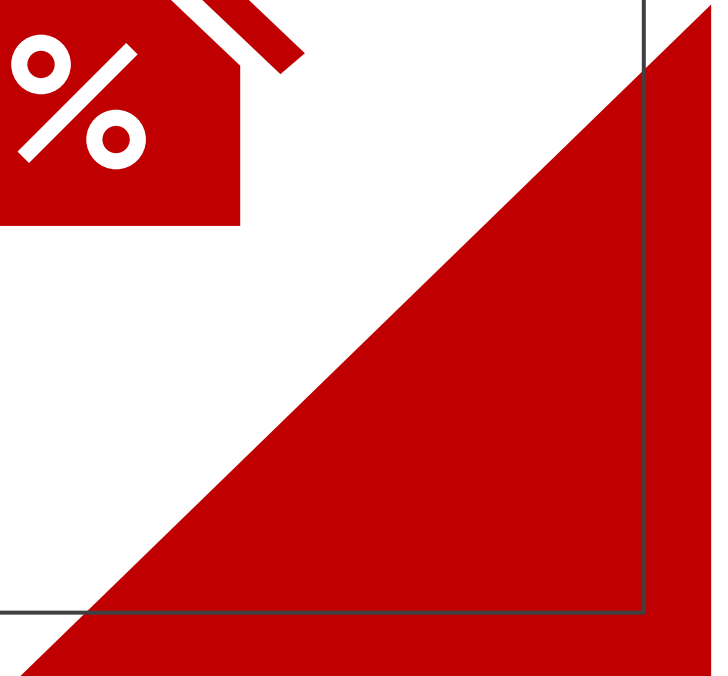
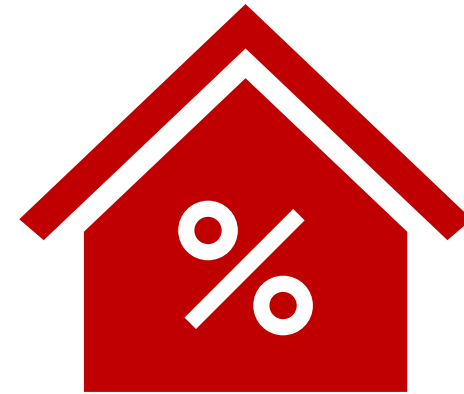
- Determine the population level prevalence of diaper need.
 - Collaborate with community members, other healthcare professionals, and additional stakeholders if/how diaper need is prioritized.
 - Gather evidence about diaper need to inform and guide clinical practice.
 - Pilot test process to assess for diaper need and share helpful resources in the clinical practice site.
-



Advocate

- As appropriate, expand successful process to additional practice sites both community and hospital based.
 - Create and share diaper need related education and resource material.
 - Advocate with policymakers to allocate additional resources diaper need.
 - Support quality diaper need resource options through volunteering time and nurse expertise.
-

Housing Instability



Housing Instability

- Per Healthy People 2020, housing instability is a key influencing factor for economic stability.
- The United States Department of Health and Human Services (DHHS) defines housing insecurity as high housing costs in proportion to income, poor housing quality, unstable neighborhoods, overcrowding, or homelessness.

Housing Stability

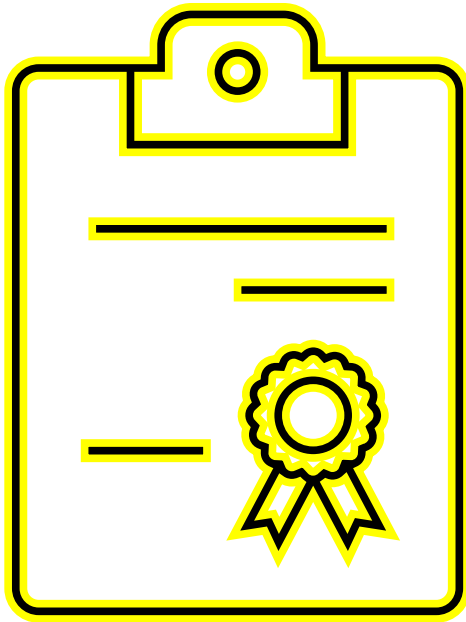
- The DHHS definition combines the Healthy People 2020 social determinants of health key influencing factors of housing instability and quality of housing.
- Quality of housing as an influencing factor is found within the key area neighborhood and built environment social determinant of health.

Emma (Leah and Jonathan's mother)

- “Our living situation? It has been challenging. We had a place, an apartment, but the building was condemned after the fire. We lost everything. We still have not gotten back our security deposit.
- At first, we got help with a motel but since then we have been moving around a lot: friends places, relatives, people's couches, a couple of times we slept in the park, it all is really hard. Scary.
- We could have gone to a homeless shelter. I stayed in a few after I aged out of foster care. But at best most are loud and not so clean. Leah is just so new. Jonathan is just so set in his ways.
- Just thinking about not having a permanent place to stay gets me stressed and emotional. For the last week or so we have been staying with Andrew's grandmother. Her house is small.
- Yes, this is a big worry for us. So no, we do not really have a regular place to call home.”


Ascertain

- The rate of housing insecurity when screened in pediatric primary care ranges from 2% (homelessness only) through 14–56% for more comprehensive screening tools that ask about housing problems such as crowding (41%) and multiple moves (5%) (Cutts et al, 2011; Fleepler et al, 2007; Porter et al, 2019; Zielinski et al, 2017).
- Often, housing insecurity screening tools do not address high housing costs in proportion to income, poor housing quality in general, or unstable neighborhoods.



To do: Complete

- Learner should determine the state of homelessness in their state or county
<https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness-2020/>
- Using Kids Count 2020 data search for the terms housing and homelessness
 - What type of information is available?

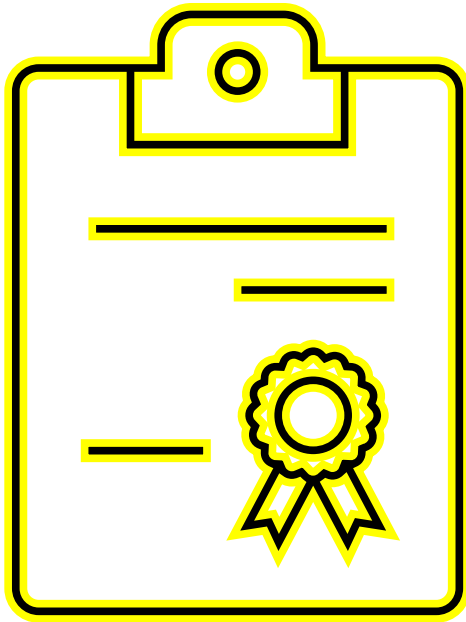


Assess (Porter et al, 2019)

- Are you homeless or worried you might be in the future?
 - Do you think you are at risk for becoming homeless?
 - Do more than two people share a bedroom in your residence?
 - Does more than one family live in your residence?
 - Have you moved two or more times in the past year?
-

Address

- Here are some federal resources that assist with housing instability
 - Centers for Disease Control and Prevention https://www.cdc.gov/nceh/information/healthy_homes_lead.htm
 - Healthy Choice Vouchers Fact Sheet https://www.hud.gov/topics/housing_choice_voucher_program_section_8
 - Housing and Urban Development https://www.hud.gov/program_offices/healthy_homes/hhi
 - National Center for Healthy Housing <https://nchh.org/>
 - United States Department of Agriculture National Institute of Food and Agriculture <https://nifa.usda.gov/healthy-homes-initiative>
 - Healthy Homes Portal <https://extensionhealthyhomes.org/>



To do: Complete

- Identify a local resource that assists people who are experiencing housing instability.



Advocate

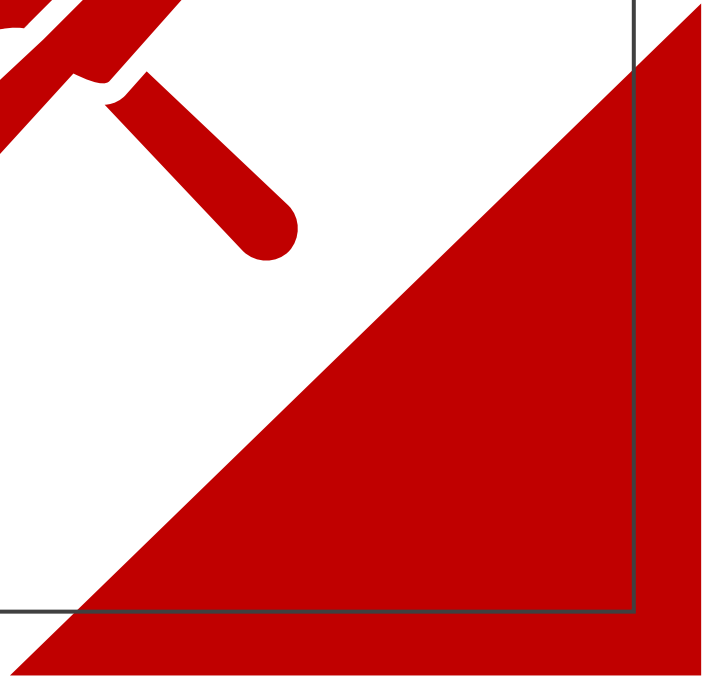
- Ascertain the population level prevalence of a particular condition of interest.
 - Collaborate with community members, other healthcare professionals, and additional stakeholders to determine priorities and issues of concern.
 - Gather evidence to inform and guide clinical practice.
 - Pilot test a process that can be used in the clinical setting to assess for housing insecurity and quality of housing.
-



Advocate

- As appropriate, expand the above process to the practice setting or to the entire health care system. For example, implement universal screening for housing insecurity and quality of housing during all new and follow-up health encounters including patients being discharged from the hospital.
 - Create and share related education and resource materials.
 - Advocate with policymakers to allocate additional resources to the prioritized issues of concern.
 - Support quality housing instability resource options through volunteering time and expertise.
-

Food Insecurity



Food Insecurity

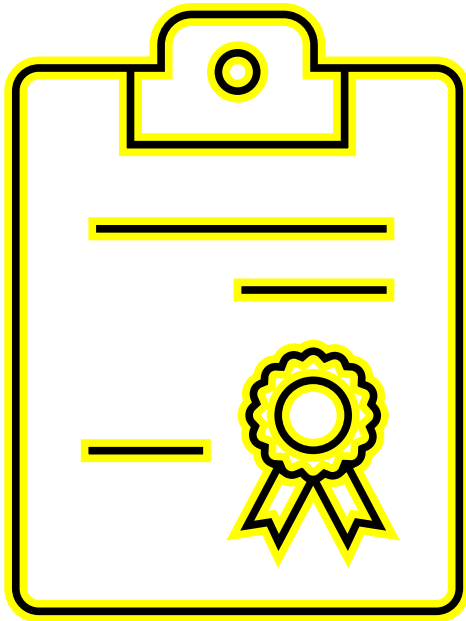
- Food insecurity is defined by the United States Department of Agriculture as a “household-level economic and social condition of limited or uncertain access to nutritionally adequate food” (Food Insecurity, 2016).
- Food insecurity has implications through-out the life span but is especially concerning for infants and young children.

Food Insecurity

- Connected to food insecurity is the neighborhood and built environment social determinants of health key influencing factor 'access to foods that support healthy eating patterns.'
- Some communities do not have fresh fruits and vegetables, or other healthy food options available for purchase (food deserts); some communities are overwhelmed with fast food choices, convenience stores, and liquor stores (food swamps).
- Neither food deserts nor food swamps aid access to foods that support healthy eating patterns. Ideally, everyone should have sufficient economic resources and reasonable access to healthy and nutritious food.

Emma (Leah and Jonathan's Mother)

- “Within the last 12 months have we worried about food running out and not having the money to buy more?”
- Sure, almost every day, that is one of the reasons why I am breastfeeding Leah. So yes, we need help to get enough food.
- We do get help from SNAP and WIC, but it is really not enough especially toward the end of the month.
- There was a big food store just up the road from Andrew's grandmother's place, but it closed down. Now fruit and vegetable choices are even more limited. It is unreal, but McDonalds, Wendys, and Checkers are all closer to us than any place selling healthy food.
- The hospital across from the closed big food store has a farmers' market but only on Tuesdays during the summer. We can use SNAP benefits there. I wish it were open all the time.
- I want my babies to be healthy and never hungry. My parents, they spent money on drugs and alcohol, not food for us kids.”



To do: Review and Investigate

- Review:
 - Special Supplemental Assistance Program for Women, Infants, and Children (WIC)
<https://www.fns.usda.gov/wic/about-wic>
 - Supplemental Nutrition Assistance Nutrition Program (SNAP)
<https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program>
- Investigate:
 - Determine the nearest WIC location

Ascertain



- The rate of food insecurity identified in the pediatric primary care setting ranges from 10–39% (Porter et al, 2019).
- Of note, food insecurity rates may vary with setting as well as by key population and geographic area.
- Economic downturns, pandemics, and other disasters may push formerly food secure individuals and households into food insecurity.

Ascertain

- **How might the rate of hunger or food insecurity be estimated for a state or other locale?**
- The nonprofit, Feeding America, offers an interactive map that reports population-level food insecurity and poverty metrics <https://map.feedingamerica.org/>.
- Individual states and smaller government units may also have data. New Jersey food insecurity data are available here: https://www-doh.state.nj.us/doh-shad/indicator/complete_profile/FoodInsecurity.html



Assess

- Food insecure households are not necessarily food insecure all the time making screening at multiple time points important.
 - For example, the Special Supplemental Assistance Program for Women, Infants, and Children (WIC) may not offer enough infant formula to last the entire month especially for an older and larger infant.
 - As such, the response you get to a food insecurity screening question at the beginning of the month might be quite different from the response that you get to the same question at the end of the same month.
 - Therefore, you should not just screen for food insecurity once, but rather consider screening at every health care encounter including outpatient, inpatient, home, and community.
-



Assess

- Examples of tools used to screen for food insecurity include: the United States Household Food Security Screening 18-item full and 6-item short form, Childhood Community Hunger Identification Project, WE CARE screener, and WellRx survey.
 - Do note the accuracy of most Social Determinants of Health screening tools is largely unevaluated (Sokol et al, 2019). However, many of the food insecurity-only screening tools do have good metrics behind them adding to their value and usefulness.
-

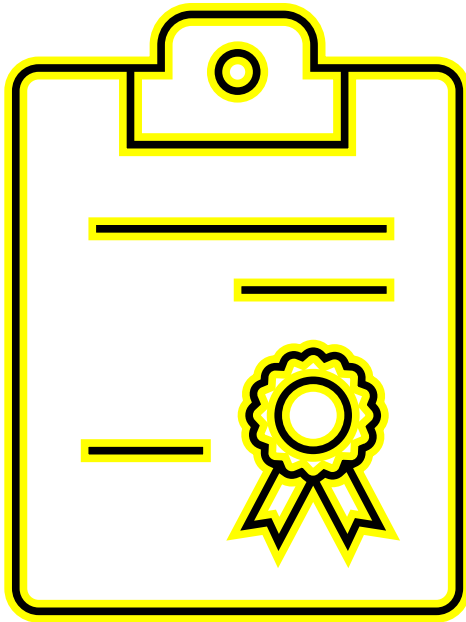


Assess

- The relatively widely used two-question food insecurity screen is 97% sensitive and 83% specific among low-income families with young children making it an excellent or good tool to use (Hager et al, 2010; O’Keefe, 2015). This food insecurity screening tool is recommended for clinical use by the American Academy of Pediatrics. Answering yes to either of the following two questions suggests that a family is struggling with food insecurity:
 - Within the past 12 months, we were worried whether our food would run out before we got money to buy more?
 - Within the past 12 months, the food we bought just did not last and we did not have money to get more?
-

Address

- Food Banks and Food Pantries <https://www.feedingamerica.org/find-your-local-foodbank>
- Text “findfood” in English or “comida” in Spanish to 888-918-2729, texters will be prompted to give their zip code and will receive responses in their chosen language.
- Government Benefits <https://www.usa.gov/benefits#item-213996>
- ICNA Relief USA (Muslims for Humanity) <https://www.icnarelief.org/>
- Meals on Wheels <https://www.mealsonwheelsamerica.org/>
- Saint Vincent de Paul Society <https://www.svdpusa.org/Assistance-Services>
- Special Supplemental Assistance Program for Women, Infants, and Children (WIC) <https://www.fns.usda.gov/wic/about-wic>
- Supplemental Nutrition Assistance Nutrition Program (SNAP) <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program>



To do: Complete

- Learner should determine how their clinical practice setting or University/College assesses and addresses food insecurity.



Advocate

- Determine the population-level prevalence of food insecurity.
 - Collaborate with community members, other healthcare professionals, and additional stakeholders to determine if and how food insecurity is prioritized.
 - Gather and share evidence about food insecurity and lack of access to foods that support healthy eating to inform and guide clinical practice.
 - Pilot test a process to assess for food insecurity and lack of access to healthy foods in the clinical practice setting.
-



Advocate

- As appropriate, expand the above process to the practice setting or to the entire health care system. For example, implement universal screening for food insecurity for all new and follow-up health encounters including patients being discharged from the hospital.
 - Create and share food insecurity and lack of access to foods that support healthy eating patterns content for individuals/families using health literacy principles.
 - Advocate with policymakers to allocate additional resources to remediate the lack of access to foods that support healthy eating patterns.
 - Support community-based initiatives that reduce food insecurity and support healthy eating patterns by volunteering time and expertise. Check to see if the local food bank may welcome a nurse board member or if the local WIC program might appreciate nurse-led user education sessions in the office waiting area.
-

Employment



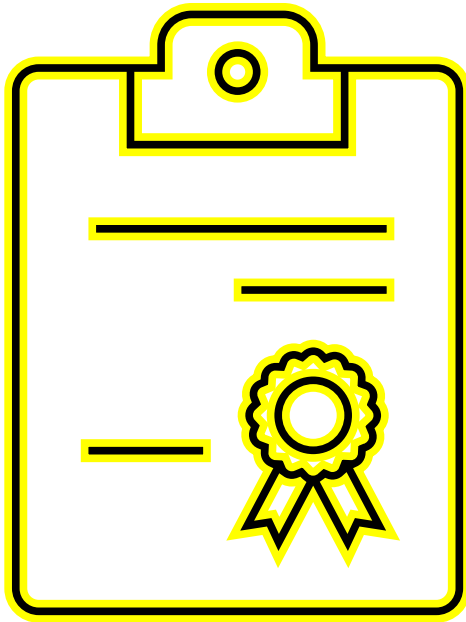
Emma and Andrew (Leah and Jonathan's parents)

- Emma: “A job? I have not worked since Leah was born. Just finding food and shelter for us feels like a more than full time job. But I am looking again.”
- Andrew: “A job? Not on a regular basis, but I am looking. Really looking. A lot of employers do not want to hire someone who does not already have a regular job. I get that. My last boss he grew to count on me, trusted me, and then the fire destroyed my work tools. He just cannot use me as much. I do not like talking about it with strangers, but I know talking about it, networking, is the best way to find a job.”




Ascertain

- **Where might you find population-level employment data?**
 - United States Census Bureau Employment <https://www.census.gov/topics/employment.html>
 - U.S. Bureau of Labor Statistics. Labor Force Statistics from the Current Population Survey <https://www.bls.gov/cps/>



To do: Complete

- Learner should determine the unemployment rate in their community.



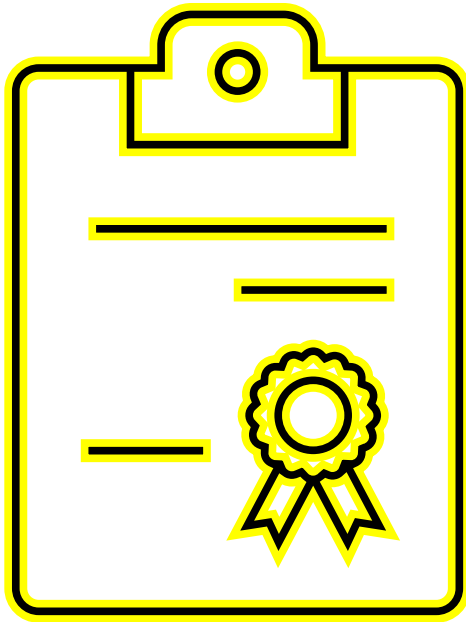
Assess

(Porter et al, 2019)

- What question might you ask to screen for unemployment?
 - Do you have a job?
 - When you ask about employment, also consider asking about health insurance status. A lack of regular employment may signal a lack of health insurance.
 - Do you have health insurance?
-

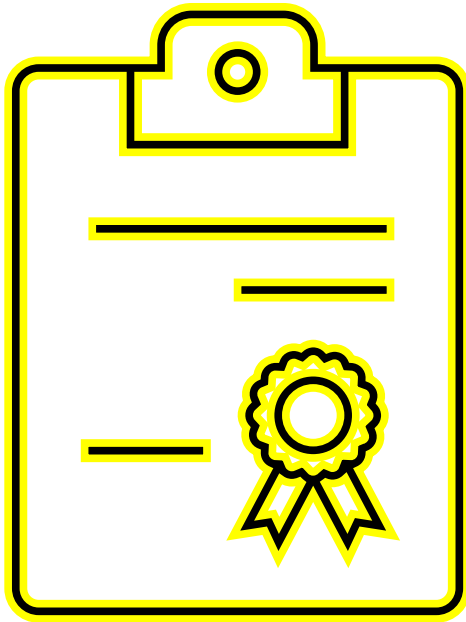
Address

- **What are some resources available to assist job seekers?**
 - Government Benefits <https://www.usa.gov/benefits>
 - New Jersey Division of Unemployment Insurance <https://myunemployment.nj.gov/>
 - One-stop Career Centers and Training and Education Resources
 - Unemployment Help <https://www.usa.gov/unemployment>



To do: Read

- Learner should read the supplemental documents
 - Rehabilitation Counselors: Hidden Gems in Interprofessional Care
 - Ten Social Work Practice Facts



To do: Complete

- Learners should discuss in small groups how referral or consultation with a social worker and/or rehabilitation counselor might assist job seeking individuals.



Advocate

- Determine the population-level prevalence of unemployment.
 - Collaborate with community members, other health care professionals and stakeholders to find out if/how unemployment and employment are prioritized.
 - Gather and share evidence about the impact of unemployment on health outcomes to inform and guide clinical practice.
 - Pilot test ways to assess for unemployment in the practice population. Plan a quality improvement project.
-



Advocate

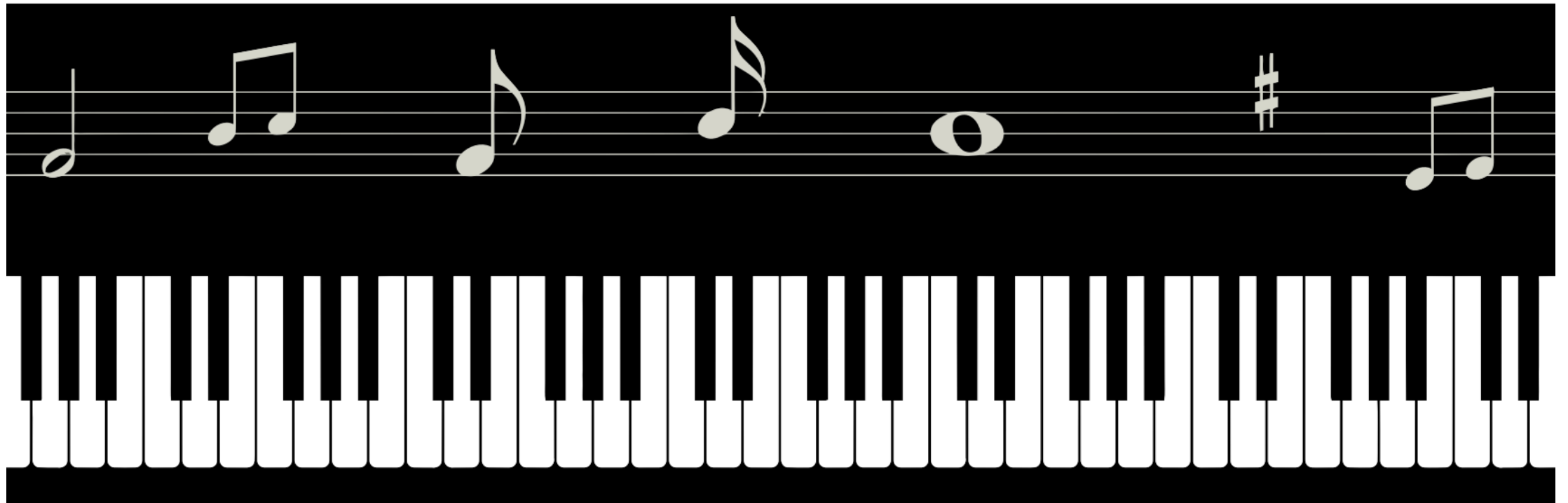
- As appropriate, expand the tested process for assessing unemployment to the practice setting or greater health care system. For example, the implementation of universal screening for unemployment for all new and follow-up health encounters including patients being discharged from the hospital.
 - Create and share unemployment and health resource material using health literacy informed principles.
 - Advocate for local, state, and national policies that support work opportunities in impoverished communities.
-



Advocate

- Advocate with policymakers to allocate additional resources to increase employment opportunities, training, and employment support in the area.
 - Advocate for the hire of a rehabilitation counselor to work at local primary care clinics focusing on with people who have physical or behavioral barriers to employment.
 - Support quality programs that assist unemployed people through volunteering or board membership.
-

Key Points

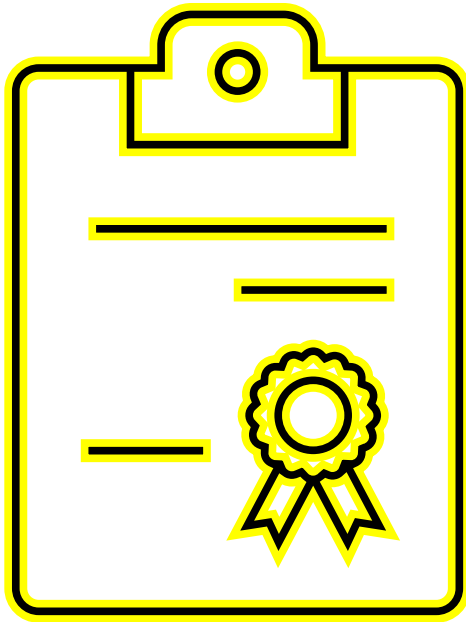


Key Points

- Population health's primary aim is to improve health outcomes.
- Social determinants of health are an often underrecognized contributor to health conditions.
- Per Healthy People 2020 the key social determinants of health are economic stability, education, health and health care, neighborhood and built environment, and social and community context.

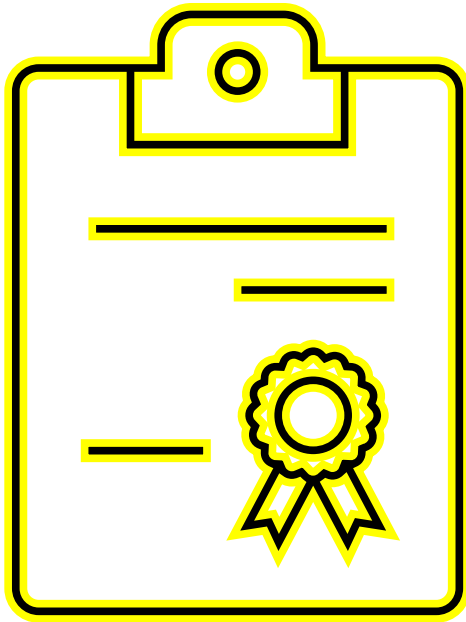
Key Points

- The key influencing factors of economic stability are employment, food insecurity, housing instability, and poverty.
- Using evidence-informed data, ascertain, assess, address, and advocate for population level and practice level social determinants of health challenges
- Nurses have a meaningful role at the bedside, but an equally significant role curbside in population health/social determinants of health in the community and beyond.



To do: Reflect

- How will you incorporate population health/social determinants of health into your professional practice?
- What is your population of interest?
- Is there a particular social determinant of health or key influencing factor that intrigues you?
- Identify 1–3 next steps on your journey to learning more about population health and social determinants of health.



To do: Learner Assessment

- Learner should complete
 - Learner Assessment
 - Check with your instructor for additional guidance



References

- May be found in the detailed introduction pieces, case study sections, and supplemental documents supporting this slide set.