TEAM UP™

COMPASSION, COMMUNICATION, COLLABORATION

2019 Poster Presentations

Improving health outcomes will require collaboration across individuals, professions and supporting organizations.

Taking advantage of existing resources and applying a new lens, as a TEAM, is interprofessional collaboration in practice.

Louisiana

National Kidney Foundation™

of Louisiana

Infant Mortality

75% of infant deaths occur in the first week

7000 newborn deaths occur every day

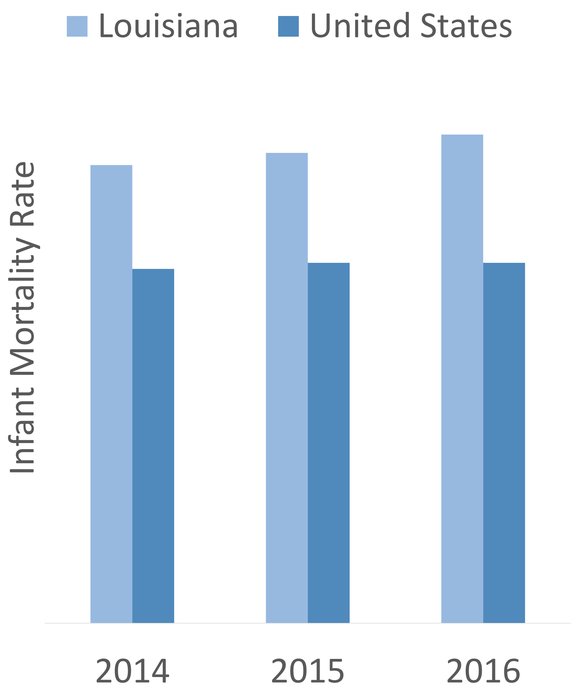
Death in the first 48 hours is due to lack of quality care at birth and treatment in the first days of life

Top 3 Causes of Infant Death in the US:

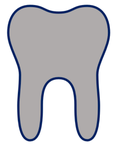
1. Birth Defects
2. Preterm birth and Low birth weight
3. Sudden Infant Death Syndrome

Combat Infant Mortality:

- ✓ Establish care with a pediatrician ASAP
- ✓ Use safe sleep practices
- ✓ Prioritize prenatal care



Infancy Primary Prevention
Birth – 1 Year



- ❑ Perform an intraoral and extraoral exam
- ❑ Educate parents about risk factors for caries
- ❑ Counsel parents about tooth safe diets
- ❑ Perform a prophylactic fluoride application

- ❑ Perform an assessment of reflexes to identify any motor delays
- ❑ Observe the infant's interactions to identify if appropriate or if any delays are present
- ❑ Use the Alberta Infant Motor Scale to determine motor maturation

- ❑ Evaluate developmental milestones to identify developmental delays
- ❑ Track infant growth using growth charts to identify abnormal growth
- ❑ Perform a screening physical exam to identify any anatomic abnormalities

- ❑ Perform an otoacoustic emissions (OAE) screen to evaluate hearing
- ❑ Use Tympanometry to evaluate middle ear and tympanic membrane function

- ❑ Educate about safe sleep practices to help prevent SIDS
- ❑ Evaluate for child physical abuse
- ❑ Educate about safe passenger practices to prevent injuries and accidents

- ❑ Educate about immunizations and start immunization series
- ❑ Teach parents about assessing for and identifying any changes or abnormalities with their infant

Estimated Cost with Medicaid: $537.84

Barrier to Implementation:

- Cost
- Office Locations
- Time Length

Solutions:

- Create one healthcare center including offices of all providers involved
- Develop a universal electronic medical record system to reduce redundancy, decreasing cost
- Schedule infant appointments first thing in the morning to minimize time of appointment as much as possible

IPEC CC8 – Teamwork centered medical care is a necessary part of high quality care. Each providers' expertise is essential in the health and well being of an infant. Teamwork care can reduce redundancy of testing, appointments, and exams. This leads to decreased spending, decreased medical error rates, and improved timeliness, resulting in more inclusive, patient-centered care.

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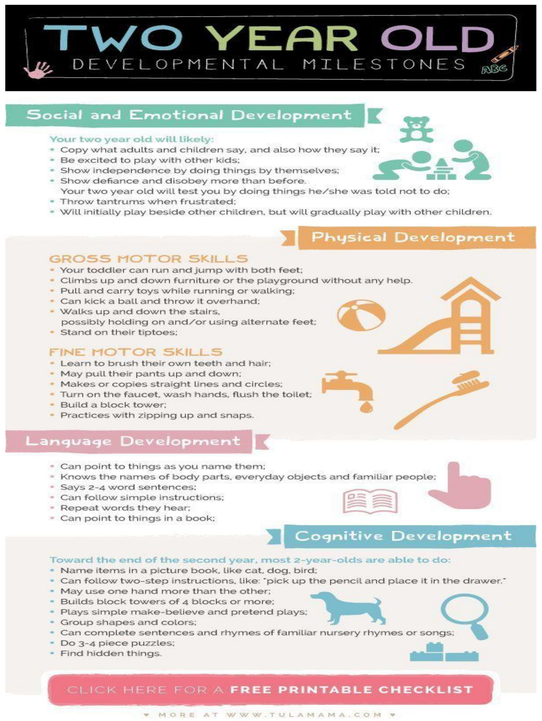
https://www.who.int/news-room/fact-sheets/detail/newborns-reducing-mortality
https://www.cdc.gov/nchs/pressroom/states/louisiana/louisiana.htm
https://www.lamedicaid.com/provweb1/fee_schedules/feeschedulesindex.htm

NORMAL DEVELOPMENT

Developmental disabilities involve impairments in language , cognitive, physical and behavioral areas. Developmental delays may affect all racial, ethnic and socioeconomic groups. Each child develops at his or her own pace, but developmental milestones lend a general idea of what to expect as the child ages. Doctors utilize developmental monitoring to identify developmental delays or problems during each well visit. Developmental screening helps determine if a child meets certain developmental criteria and is usually used when and abnormality is noticed during developmental monitoring. It is important to monitor and screen for developmental delays and disabilities, because early identification and intervention can improve the child's abilities and prevent later costly interventions.



- The United States has seen a 17% increase in the amount of developmental disabilities that have been diagnosed in children since 2000.
- 1 in 4 people with a developmental disability will not graduate from high school.
- 64% of the children that are maltreated every year have at least one developmental disability. There is a direct correlation between the severity of the disability and the likelihood of abuse occurring
- Low birthweight, premature birth, multiple birth, and infections during pregnancy are associated with an increased risk for many developmental disabilities.

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https://www.cdc.gov/growthcharts/data/set1clinical/cj41c020.pdf

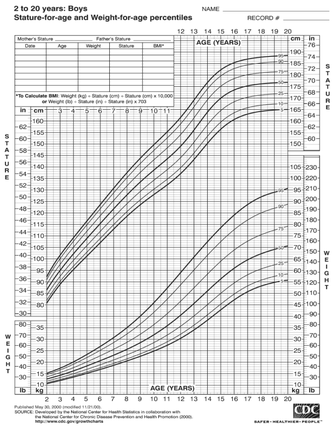
DEVELOPMENTAL MILESTONES OF THE 2-3 YEAR OLD'S

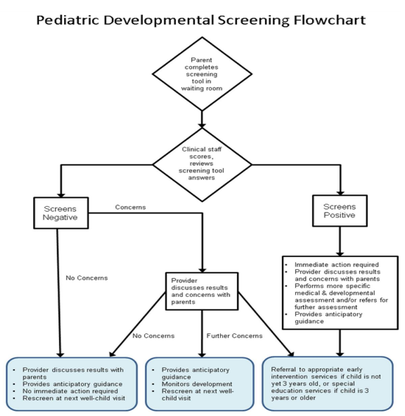
RISK FACTORS FOR DEVELOPMENTAL DELAY

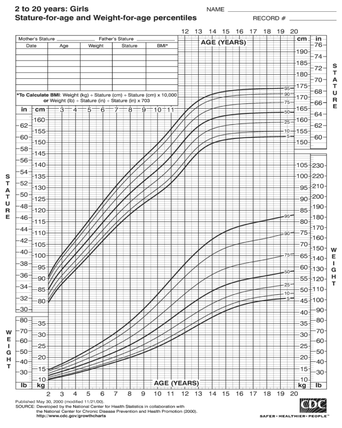
Maternal Infections During pregnancy	Genetics	Trauma/ Illness	Economics	Teratogen Exposure during Pregnancy
• Cytomegalovirus-hearing loss • Chorioamnionitis	• Chromosomal Disorders • Metabolic Disturbances • Single Gene Disorders	• Traumatic Brain Injury • Spinal Cord Injury • Adverse Childhood Event • Chronic Ear infections	• Low level of parental education • Impeded access to health care	• Alcohol • Drug abuse • Environmental pollutants • Lead

INTERPROFESSIONAL ASSESSMENT

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Audiology	Pure Tone Screening Only	Pure Tone and Tympanometry	OAE screening only	OAE screening and Tympanometry	Pediatric hearing assessment	92587; 92558; 92567	No reimbursement for screening DPOAE; $15.50 tymps imdepance
Nursing	BMI plot; Length/Height and Weight, Vital signs	Head circumference plot	Lab Blood Screening: CBC w/ diff, lead, lipid profile		Growth metrics; screening for anemia, lead poisoning, familial hyperlipidemia	99392; 85027; 83655; 80061	$60.50; $6.44; $12.04; $11.88
Medicine	General: ASQ3 and ASQ: SE-2	Autism: MCHAT (free)	Environmental: Whole Child Assessment: Years 1-2	Parents' Evaluation of Developmental Status (PEDS) ($300)	Overall pediatric development assessment	96110, 96113	$10.09; $130.10
Dentistry	Oral Examination	Dental X-rays	Fluoride Varnish		Basic pediatric dental screening	D0191; D1206	$10.40; $24.29
Occupational Therapy	Early Steps referral	PDMS	BOT		Neuromuscular development screening	96110, 96113	$10.09; $130.10







Picture 1: Growth Chart for Boys ages 2-10
Picture 2: Recommended steps to screen a child for developmental delays
Picture 3: Growth Chart for Females ages 2-20

IPCE CORE COMPETENCY CC8

"Communicate the importance of teamwork in patient-centered care and population health programs and polices"

Group 2 demonstrated the core competency CC8 by collaborating as a team to produce the 45-minute assessment tool. The team payed close attention to the services that are available for a 2-year-old child in order to maximize their chances of achieving optimal development. All the topics in the assessment tool were discussed and confirmed to be the most up-to-date evidence based supported practice for this age group
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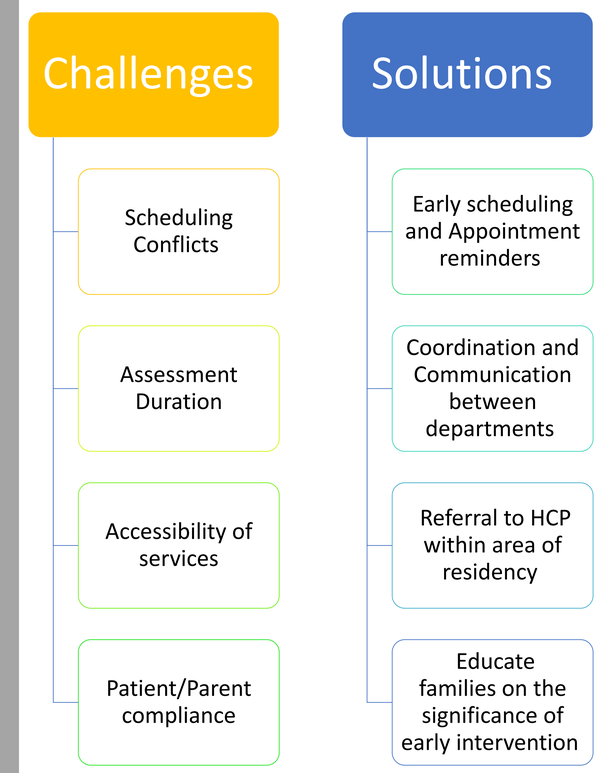


- The average two-year-old adds around five new words to their vocabulary every day.
- Most 1-year-olds are ambidextrous, meaning they use both their hands equally. Your toddler will most likely start showing a preference for his left or right hand by age 2 or 3. In about 90% of children, this will be the right hand.
- Most 2-year-olds engage in parallel play with other children and have trouble learning to share, but should start having friendships by age 3.

Group 2 Members:

Nursing: Courtney Duhe, Lauren Daigle, Myla Martin
Medical: Brad Powers, Ibrahim Samarr'a, Tori Thibodaux
Audiology : Kaila Howard
Dentistry: Conner Labon

Health Screening in 4-6 Year-Old Children

Background

Medicine, Nursing, and Audiology

Physical/Wellness Exam:

- Weight and height
- Vitals:
  - Temperature (Tympanic)
  - Respiratory Rate
  - Heart Rate (Radial Pulse)
  - Blood Pressure
- Full Physical Exam
- ***Audiology Assessment Recommendations for Screening***
  - Case history that includes:
    - Birth history
    - Medical history (ear infections)
    - Developmental milestones
    - Assessment of vestibular functions
  - *Tympanometry* to assess middle ear function
  - *Pure-tone play or standard behavioral audiometric screening* at 20 dB for 500 Hz, 1000 Hz, 2000 Hz, 4000 Hz to assess whether the child has sufficient hearing for communication needs
- Review vaccination schedules and administer required vaccines

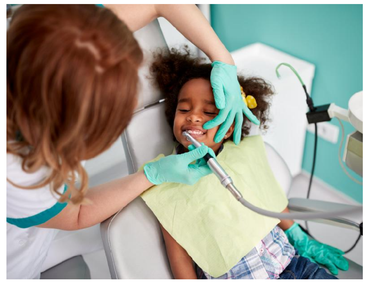
Ages and Stages Questionnaire

- Screening tool to track developmental milestones up to 5 ½ years old
- Can be completed by parents within 10-15 minutes
- Benefits:
  - Cost-effective
  - Educational for parents
  - Easy to administer and score

Dentistry

Preventative Dental Care (Biannual)

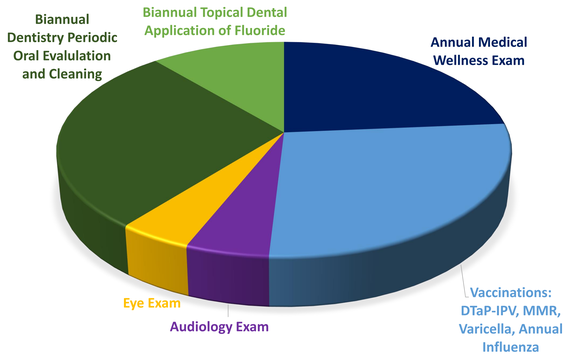
1. Prophy (Cleaning)
2. Fluoride
   - Topical application of fluoride at visits
   - Toothpaste with fluoride
   - Stress importance of fluoridated water



Comprehensive Oral Exam (Biannual)

- Clinical oral examination
  - First exam at the eruption of first tooth (no later than 12 months)
  - Repeat every 6 months or as indicated by child's risk status/susceptibility to disease
- Caries-Risk Assessment
- Radiographic Assessment
- Plaque and inflammation
  - *No plaque + no inflammation* = compliance in oral hygiene and diet
  - *Plaque + no inflammation* = dietary guidance required for child
  - *No plaque + inflammation* = review oral hygiene instruction and demonstrate proper flossing technique (Parent assistance might be required)
  - *Plaque + inflammation* = non-compliance in oral hygiene and diet
    - Review oral hygiene instruction, diet instruction, and more frequent recall visits

Cost



Code	Item	Price	Quantity	Total
99382	Annual Medical Wellness Exam @ 4 y/o	83.24	1	83.24
99383	Annual Medical Wellness Exam (5-11)	82.67	2	165.34
90696	Diphtheria tetanus toxoids acellular pertussis and poliovirus inactivated (DTaP-IPV)	50.54	1	50.54
90707	Measles, Mumps, and Rubella (MMR)	67.03	1	67.03
90686	Annual Influenza Vaccine	17.97	3	53.91
D0150	Comprehensive Oral Evaluation @ 4 y/o	47.37	1	47.37
D0120	Biannual Periodic Oral Evaulation after Initial Visit (4.5-6 y/o)	27.24	4	108.96
D1120	Biannual Prophylaxis Cleaning for Pediatric Patrient	35.02	4	140.08
D1208	Biannual Topical Application of Fluoride	19.5	5	97.5
92004	Eye Examination and Evaluation	48.32	1	48.32
92550	Tympanometry and Reflex Threshold Development	21.96	1	21.96
92552	Pure Tone Audiometry	32.4	1	32.4
Total				**916.65**

Team Collaboration

- By working as a team, developmental delays and health problems can be caught at an early age to provide an opportunity for early assessment, intervention, and treatment.
- Our health tool is a comprehensive strategy to screen children in a primary care setting and then refer them to other health professionals as needed.

Barriers to Health Screening

- *Language barrier*
  - Solution: Provide a translator
- *Failure to follow up with referrals or other services*
  - Solution: Send reminder notifications (telephone, mail, e-mail) of upcoming appointments and services

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Preventing downstream effects: intervening in changeable parameters of childhood obesity in the 7-10 y/o range

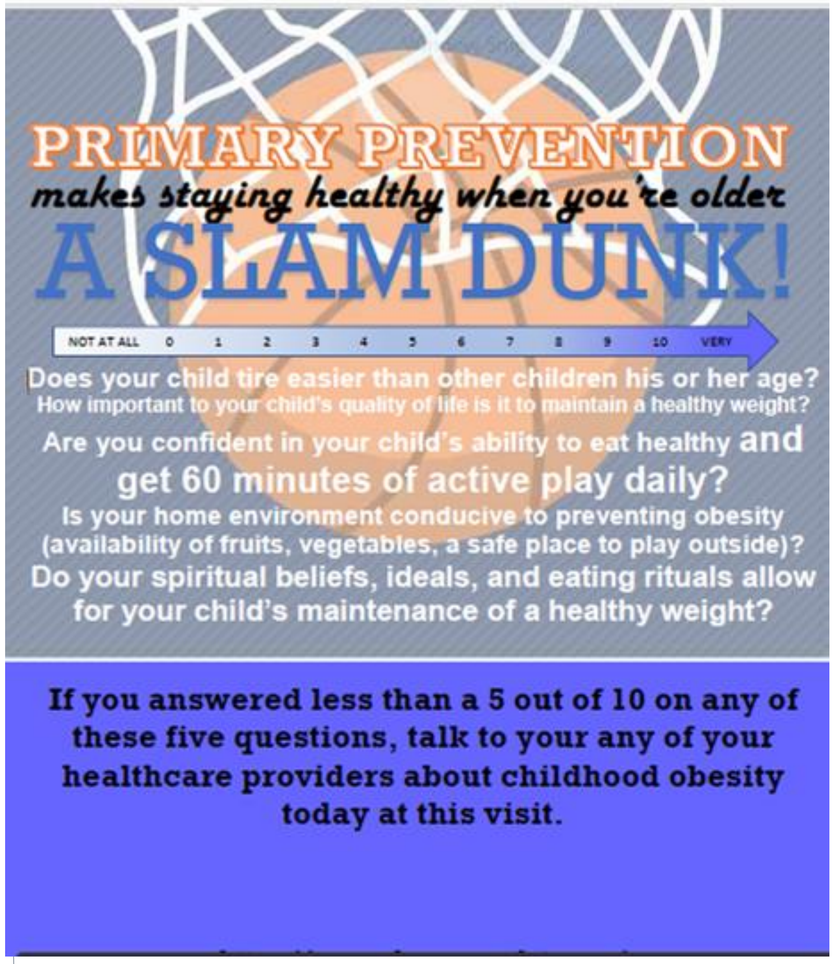
I. Background

Demographics: Obesity is the most prevalent nutritional disorder among children and adolescents in the United States. Using body mass index (BMI) criteria, the most recent national surveys demonstrate that 21-24% of American children and adolescents are overweight and that another 16-18% are obese. A 2012 study noted a 16.9% prevalence of obesity in children and adolescents in 2009-2010, which is comparable to the prevalence rates reported in 2007-2008.These findings indicate that the prevalence of overweight (BMI ≥ 85th percentile) children and adolescents in the US has increased by 50-60% in a single generation, and the prevalence of obesity has doubled. The prevalence of obesity in American Indians, Hawaiians, Hispanics, and blacks is 10-40% higher than in whites.

- African Americans, Hispanics and American Indians have been experiencing the highest rates of increase in childhood obesity. On average, 25 percent of children in these ethnic groups are affected by obesity.
- Children now spend more than seven and a half hours a day in front of a screen (e.g., TV, videogames, computer)
- More than 23 million Americans, including 6.5 million children, live in food deserts – areas that are more than a mile away from a supermarket

II. Sample of the assessment tool

Our tool sought to be as inexpensive as possible and to take advantage of an existing time when the patient is unoccupied while minimizing providers' time. Patients often spend 45 minutes or more in the exam room waiting or in the P.I.C.U. looking around the walls. When a patient and/or their parent enters their pediatrician's office, their literacy and English fluency should be confirmed (otherwise assistance will be provided). They will be encouraged to use the assessment tool while waiting for their next health care provider. All healthcare providers will be equipped to answer questions pertaining to any of the five questions on the assessment tool poster. Options for prevention and treatment of obesity will be listed. Options for children include support groups such as the Obesity Action Community which can encourage a child to focus on changing bad habits by exposing them to others who are in the same situation as them. A child can be referred to a nutritionist which can make and individualized meal plan while also providing support and motivation.



Profession	Assessments	Billing	CPT Codes	Costs
Medicine	BMI screening, Nutrition and exercise counseling	Initial visit Obesity Counseling	99382 99401	$73.49 $19.72
Nursing	BMI screening, Nutrition and exercise counseling	Bills under medicine		
Audiology	Audiometry	Audiometry (air, bone)	92553	$21.56
Dentistry	Oral examination Preventative tooth care	Comprehensive Oral Examination (new) Topical Application Fluoride	D0150 D1208	$47.37 $19.50
Occupational Therapist		Occupational Therapy Examination	97165	$54.00
Social Worker	Family therapy	Family support	90847	15 min ($17.38)
Labs		Cholesterol Lipid Panel Metabolic panel (blood) Blood Glucose	82465 80061 80053 82947	$4.33 $11.88 $11.57 $3.91

III. Challenges to the implementation of assessment tool/solutions to overcome these challenges

Language Barrier: Parents may not be able to read/understand the chosen language on the poster. If the problem is only a native language difference, the poster can be printed in the second most common language that patients typically have in the facility. In order to ensure the problem is not a reading deficiency, health care providers should assess patients reading level during visit.
Ignoring the poster: Parents may not take note of the poster while in the room. To prevent this have a health care provider point out the poster to the parent when they first enter. The importance of the poster should be explained to the parent as well. The health care provider can also ask (at the beginning or end of the appointment) if the parent has any questions, comments, or concerns about the infographic.
Not recalling responses to infographic: Before the parent has an opportunity to discuss the results with the health care provider, they may forget the responses to the infographic or the topic all together. To intercept potential forgetfulness, underneath the poster will be handouts relating to the topic for parents to take and record their responses.

IV. Team's reflection of IPEC sub-competency CC8

CC8. Communicate the importance of teamwork in patient-centered care and population health programs and policies." -
This infographic can be posted in any healthcare facility. All healthcare professions are educated in the importance of maintaining healthy body weight, eating well, and exercising. The infographic integrates the knowledge all medical professions can provide and allows eat profession to discuss their professions strengths as related to the infographic. It may also provide references to which professions patients need to go to for help achieving its competencies.

V. References

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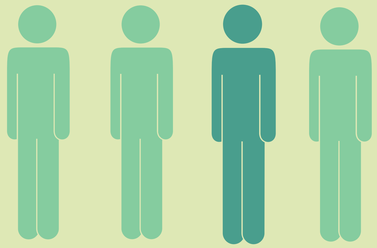
Are you 50-59 with Diabetes Mellitus?

1 IN 4 ADULTS WITH LIVING WITH DIABETES HAS KIDNEY DISEASE



Diabetes mellitus is a major cause of Chronic Kidney Disease (CKD) and End-Stage Renal/Kidney Disease (ESRD/ESKD) in the United States

According to the U.S. Renal Data System, 468,000 patients underwent dialysis in 2013

What next?

45-minute Interprofessional Health Assessment

	Assess-ment	Assess-ment	Com-ments	CPT/CDT Code	Fee Sched-ule
Audiology	Hearing Screening		Administer after PCP health assessment	N/A	$0
Dental	Compre-hensive oral evaluation		Completed before hearing screening	D0150	$47.37
Primary Care Physician	Preven-tative wellness exam	Urinalysis and blood glucose screen	The main provider of the visit	99386 81000 82948	$50 $4.01 $4.01

Although not all health professions are represented in our 45-minute interprofessional assessment**, we all still play in important role in patient care**. In our age range, overall well-being is most important as this patient population experiences more rapid aging.

Ideally, **public health** would be the outreach to our population to administer pre-screens and questionnaires. This would hopefully prompt an appointment with their **primary care physician (PCP**) if they any concerns. During the appointment, the **audiologist** may administer a hearing screening after **(MED STUFF HERE)**. After, the PCP may make proper referrals to **dental and audiology** to seek further care for the patient's oral and/or hearing and balance health.

Ultimately, our team decided that this would be the most use of our time limit to ensure there is proper time and care distribution among what is needed in the appointment and what can be treated. There is also room for the audiologist to demonstrate how to perform a hearing screen so that the PCP may be able to carry it out on their own. We felt as a team this was the best plan of care for our population and professions.

"KIDNEY DISEASE IS THE 9TH LEADING CAUSE OF DEATH IN AMERICANS AGED 55-64"

Hispanics are about 1.5 times more likely to develop ESRD than non-Hispanics.

African-Americans are about 3.5 times more likely to develop ESRD than Caucasians.

Each year, kidney disease kills more people than breast or prostate cancer

In 2013, more than 47,000 Americans died from kidney disease

Barriers and Solutions

Although we are comfortable in our interprofessional health assessment, there are some barriers we encountered with implementation.

1. How could we ensure that all members of our team would have interaction with our proposed patient population following the initial visit?
2. Would the cost to have the initial appointment turn patients away?

A solution we came up with for our first challenge was accurately updating the patient's medical record and following-up with our patients after. Also, by communicating via email or phone amongst health professionals on our team once a month we are able to keep in touch with our patients and their care plan.

The second barrier idealistically would be diminished following pre-screenings, surveys, and/or questionnaires administered by our public health advocate. We have great confidence that the cost of the appointment would be worth the investment once educated by public health on the matter.

Final Thoughts

Working as an interdisciplinary team is fundamental to bettering patient-centered care. Our team worked closely on our plan, which allowed for educational discussion on the importance of every profession. This second year of Team Up has been heuristic for all members, and through this project we were able to strengthen interdisciplinary respect and rapport.

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An Interprofessional Assessment of Adults 60-69 Years Old

Group 6: Mandie Melancon (Dentistry), Kristin Firmin (Dental Hygiene), Jamie Buckel (Nursing), Candace Navarre (Audiology), Travis Chen (Medicine), David Mas (Medicine), Hannah Zachary (Medicine)

BACKGROUND

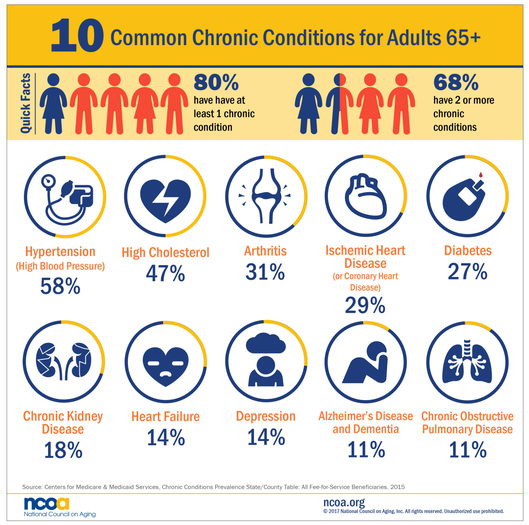
DEMOGRAPHICS

- By 2030, the number of people 65+ years old will outnumber the number of people 18 years old or less for the first time in history.
- In developed countries, older adults are more likely to suffer from chronic, noninfectious diseases, including hypertension, dyslipidemia, and type 2 diabetes mellitus.
- According to the CDC, the top three causes of death in the US as of 2015 are shown in the table below:

	Aged 55-64	Aged 65+
Men	Cancer (29.5%) Heart disease (24.4%)	Heart disease (26.7%) Cancer (23.8%)
Women	Cancer (37.1%) Heart disease (17.0%)	Heart disease (24.4%) Cancer (18.7%)

PROFESSIONAL INTERVENTIONS

- Medicine/ Nursing
  - Primary: patient education on healthy lifestyle (smoking cessation, exercise regimen, dietary changes), vaccinations
  - Secondary: vital signs, physical exam, specific screening exams, fall risk assessment
- Audiology
  - Primary: baseline comprehensive audiograms, education on hearing loss
  - Secondary: routine annual audiograms
- Dentistry/ Dental hygiene
  - Primary: nutritional counseling, oral hygiene instruction
  - Secondary: oral cancer screening



ASSESSMENT AND COST

ASSESSMENT

- In order to maximize our time with the patient, we planned to send a few subjective questionnaires for the patient to complete ahead of their planned visit. These reliable questionnaires address depression, activities of daily living, fall risk, and nutrition. By having the patient complete these ahead of their visit, we will save time that can be used for other portions of the assessment. We plan to also conduct standardized assessments of fall risk, cognition and vision.
- One component of our assessment is secondary prevention of cardiovascular events. As per the AHA's current guidelines, we planned to obtain a blood sample from the patient to test for fasting glucose and a fasting lipoprotein profile as part of this secondary prevention.
- To keep the visit on-time, we structured the assessment to maximize the efficiency of the healthcare providers involved. The order of events is listed in the table below. The order of events allows team members to efficiently collaborate with each other on their findings of the patient's health status.
- The referral process for patients at high risk of cardiovascular disease, cancer, depression, hearing aids, or falls, as determined from their assessment, should involve an interprofessional approach with free communication among team members.

Team Member	Role in Assessment	Estimated Time
Nursing	Obtain baseline vital signs (especially BP and BMI), obtain blood sample, administer recommended vaccines	7-10 minutes
Dentistry/ Dental hygiene	Oral cancer screening, review Nutritional Health Screen with patient, provide necessary oral health education	7-10 minutes
Audiology	Comprehensive audiogram, tympanometry and acoustic reflexes, review Hearing Handicap Inventory for the Elderly with patient	7-10 minutes
Medicine	Review take-home questionnaires with patient, perform physical exam, including Mini Mental Status Exam and visual acuity	15-20 minutes

PROJECTED TOTAL COST: **$315.42**

- Medicine/ Nursing: $252.71 (99201, 90750, 90756, 80061, 99173, 80047)
- Audiology: $44.71 (92550, 92557)
- Dentistry/ Dental hygiene: $18.00 (D0190)

BARRIERS TO CARE

- The ability of our assessment to fit into the 45 minute time limit depends on the patient's competence with technology in order to access the questionnaires prior to the visit. A potential solution to this would be to mail physical copies directly to the patient.
- Because we are using information reported by the patient outside of the office, there may be some bias on the patient's part. A potential solution to this is for a member of the healthcare team (medical assistant, nurse, or physician) to stress how important it is to report honest answers and to explain the procedure clearly to the patient.
- We thought it was unrealistic to perform recommended screening tests for prevalent cancers in 60-69 year old adults due primarily to time constraints and somewhat to cost. Many cancers prevalent in this population also do not manifest physically until late in the disease process. We believe the best method in screening for cancers is by assessing for risk factors and by counseling the patient to return to care annually, or sooner if potential signs of cancer manifest.

CC8 COMPETENCY

Teamwork is a crucial aspect of healthcare. In order to effectively care for our patients, all healthcare professionals must be prepared to work professionally in a team. Without effective teamwork, our patients may be undertreated or overtreated if results are not shared among team members.

It is essential to foster an open and safe culture in healthcare to promote effective communication. Communication is hindered if a member feels as though their professional opinion is not respected. Overall safe and effective interprofessional communication is one of the biggest factors that contribute to a patient's healthcare.

Honest and efficient communication is especially important in execution of our assessment tool because it relies heavily on compiling a complete picture of the patient from smaller individual assessments.

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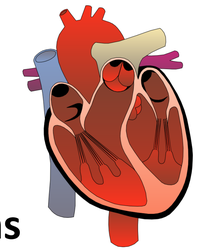
Coronary Artery Disease

in individuals ages 70-79

45 Minute CAD Assessment

Background

Coronary artery disease (CAD) is the most common heart condition and is the leading cause of death in both men and women. CAD is especially prevalent in individuals 70-79 years of age.

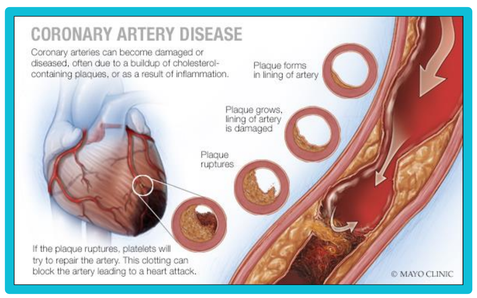


Risk Factors

Age, Family History, Hypertension, Smoking, and Diabetes

Signs & Symptoms

- Chest pain: pressure or tightness in the chest, usually occurs on the middle or left side of the chest and triggered by physical or emotional stress. The pain subsides within minutes after ceasing the stressful activity. In some, especially women, the pain could be fleeting or sharp and felt in the neck, arm or back.
- Shortness of breath: due to the heart insufficiently pumping enough blood to meet the body's needs resulting in shortness of breath or extreme fatigue with exertion.
- Heart attack: if there is a completely blocked coronary artery will cause a heart attack.The classic signs and symptoms of a heart attack include crushing pressure in your chest and pain in your shoulder or arm, sometimes with shortness of breath and sweating.



Interesting Facts

- You only need 10 minutes of brisk exercise a day to reduce heart attack risk by 50% and only 30 minutes to cut the risk by 75%.
- 3 simple ways anyone can take steps in the prevention of CAD:
  1. Maintain a healthy weight
  2. Reduce and manage stress,
  3. Maintain a diet low in fat and salt and high in fruits, vegetables and whole grains.

Pre-Assessment by Nursing and Intake Team

Multiple blood pressure readings - clinical diagnosis of hypertension
Complete metabolic panel - HbA1c, serum glucose, ALT/AST, Lipases, etc...
Lipid panel profile - HDL, LDL, VLDL, Triglycerides
Case history additions to consider:

- Questions regarding hearing perception, smoking, diabetes, exercise, and diet
- Self reported screening questions from The Geriatric Depression Scale (GDS) or Vitor Quality of Life Scale for the Elderly (VITOR QLSE)
- Questions geared to assess the patients Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL)

Assessment by Primary Care Provider

Lifestyle adjustments

- Weight loss, healthy diet, smoking cessation/avoidance, alcohol limitation, etc.

Dyslipidemia, hypertension, and diabetes management and control
Hearing Screening (Pure Tone Air Conduction - Optional based on case history)

Post-Assessment Referrals by PCP to other professionals

Cardiology referral for dyslipidemia and hypertension
Endocrinology referral for diabetes
PCP follow-up is necessary for coordination of care
Audiology referral for perceived hearing loss or failed hearing screen
Mental health referral if quality of life found to be poor by the patient
Dental referral for periodontal evaluation and SRP if necessary

Challenges

1. Due to the specialized nature of some of the professionals on our team, how we do ensure everyone plays a role in the interdisciplinary approach to CAD?
2. Due to complications associated with the advanced age of individuals 70-79, how do we ensure they maintain post-assessment referrals and meeting their needs?
3. Is there a way to quickly gather information regarding CAD and other issues affecting the geriatric population so that information is obtained sufficiently, but in a time conscious manner that does not infringe too heavily on the appointment time?

We believe that in order to maintain care that is centered around the individual and overcome these challenges, we need all members of the team to be diligent in communication committed to the assessment.

Solutions

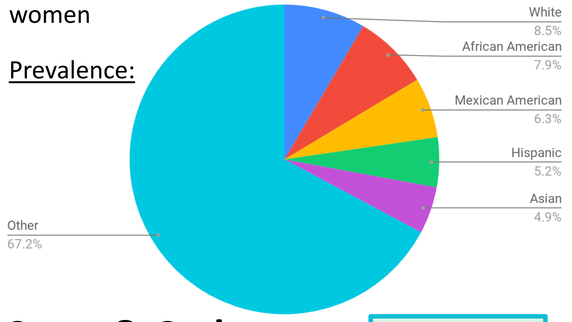
1. The importance of making appropriate referrals is pinnacle to specialized fields (i.e. dentistry and audiology), who in most clinical settings would not be on-site or readily available.
2. By educating the patient and any family present, providing summaries of medical advice discussed in writing, and written appointment reminders can help our patients understanding of CAD as well as maintain post-assessment treatment plans. The PCP would be the individual best suited to this responsibility.
3. By adding CAD and geriatric specific questions history targeting important information ensures that information is gathered quickly and nothing of great importance is overlooked during the visit.

Demographics

Risk: women at highest risk after [illegible] men at highest risk between the ages [illegible] and 64.

Mortality rate: 8.3% in men and 6.1% in women

Prevalence:



Costs & Codes

CPT 80061 (lipid) - $11
CPT 99211 (BP) - $0
CPT 80053 (CMP) - $9
CPT 99406 (smoking) - $0
CPT 92552 (hearing screening)- $30
CPT 99213 (office visit) - $72

Resource List

- Endocrinology - Ochsner - (866) 624-7637
- Geriatric Psychiatry Services - Ochsner - (866) 624-7637
- LSUHSC Audiology Clinic - 1900 Gravier St.,- (504) 568-4348
- New Orleans Council on Aging - 2475 Canal St., LA - (504) 821-4121
- New Orleans Dietetic Association - https://www.eatrightneworleans.org
- New Orleans Heart and Vascular Center - Touro - (504) 897-7011
- Smoking Cessation Trust - Blue Cross Blue Shield - (855) 259-6346
- Smoking Cessation Trust - Ochsner - (877) 678-3909

It is our hope that this assessment tool will not only help identify individuals 70-79 at risk for CAD, but identify other health concerns in this population that our colleagues in other healthcare professions can provide care in order to treat the whole person.

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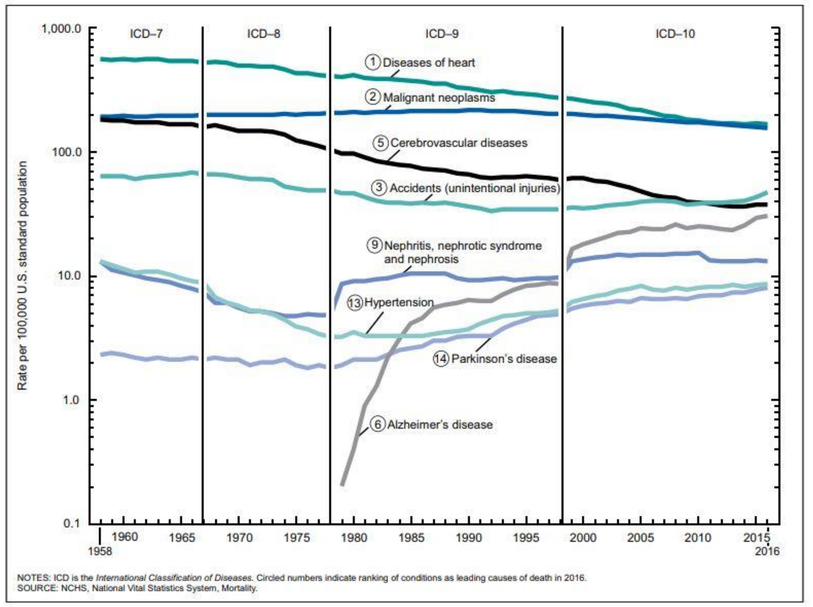
Geriatric Interprofessional Assessment

By 2030, there will ***be 72 million Americans that are older than 65 years of age***. This is ***20% of the American population***. Due to tremendous advances in medicine, the average lifespan has increased to ***81% for females and 77% for males***. As healthcare providers, we have the duty to ensure that the geriatric population is living the healthiest and most active life possible. By conducting regular assessments on factors such as mobility, socialization, and depression, we can achieve early recognition of possible geriatric health issues that would impair geriatric well-being.

A very important consideration for the elderly is *quality of life.*



According to the CDC, age-adjusted death rates have significantly increased for unintentional injuries (9.7%), Alzheimer's disease (3.1%), suicide (1.5%), and Parkinson's disease (3.9%).

Screening Test	Price	Length
Depression	$18	5 minutes
Falls/ Gait and Balance	$41.18	2 minutes
Polypharmacy	N/A	15 minutes
Hearing Impairment	$15	5 minutes
Visual Acuity	N/A	5 minutes
Cognitive Impairment	$47.88	3 minutes
Advance Directive Completion	$86	5 minutes
Oral Health Assessment	$47.37	15 minutes
Urinary Incontinence	N/A	5 minutes
Total	**$181.25**	**60 minutes**

Depression Screening

Associated Professions: Physician or Non-Physician Practitioner (NPP)

Complete Patient Health Questionnaire-2 (PHQ-2). If patient scores 3 or greater, complete a PHQ-9.

Falls/ Gait and Balance Assessment

Associated Professions: Medicine, Audiology, Nursing, Physical Therapy

A patient who takes 12 seconds or longer to complete the Timed Up and Go (TUG) assessment is at risk for falling.

Polypharmacy Screening

Associated Professions: Nursing, Medicine

A common polypharmacy prevention tool is called ARMOR, which assesses and ultimately condenses the patient's medications down to the necessary drugs only.

Hearing Impairment Screening

Associated Profession: Audiology

Identify individuals with hearing loss risk so that they may be referred for further evaluation and rehabilitation.

Visual Acuity Screening

Associated Professions: Medicine, Nursing, Optometry

Evaluate a patient's ability to distinguish a letter or symbol from a specified distance. A very common visual acuity test is the Snellen test.

Cognitive Impairment Screening

Associated Professions: Medicine, Nursing

Mini-Cog is a test that increases detection of cognitive impairment in older adults. It consists of two parts: a 3-word recall memory test and a scored clock drawing test.

Advance Directive Completion

Associated Profession: Medicine

Allows the elderly to express their end of life preferences in standardized forms. Includes explanation and discussion of advance directives by physician with patient, family member(s), and/or surrogate.

Oral Health Assessment

Associated Profession: Dentist, Dental Hygienist

Evaluation of oral health to determine the extent of disease and initiate preventative methods. It is specifically designed to accommodate the patient's mental and physical status.

Urinary Incontinence

Associated Professions: Medicine, Nursing

Incontinence Impact Questionnaire (IIQ-7) is a valuable tool for evaluating urinary incontinence.

IPEC sub-competency CC8 Reflection

In developing the 45-minute interprofessional assessment tool, our team achieved a better understanding of the importance of a multidisciplinary approach to health promotion and illness prevention. This project ultimately taught us how each of our individual professions, education, and specific skills acquired through clinical experience can collaborate to provide comprehensive patient-centered care. Although collectively our assessment tool takes 60 minutes, it is intended that the interprofessional team will tailor the assessment to meet the patient's individual needs. This will allow a multidisciplinary approach to screening the geriatric population that can be accomplished in 45 minutes.

Challenges/Barriers to Screening

1. Transportation
2. Multiple office visits for screening tests
3. Scheduling multiple appointments

Solutions to Challenges/Barriers

1. Offer at-home screening tests
2. Consolidate all screening tests to one location.
3. Conduct all screening tests at the same time so that only one appointment has to be made.

Team Roles in Research:

Depression: David Thompson, Medicine
Falls/Gait and Balance Assessment: Rebecca Ellzey, Nursing
Polypharmacy and Urinary Incontinence: Sera Niehaus
Hearing Impairment Screening: Cydni Poirier, Audiology
Visual Acuity Screening: Camille Prejean, Medicine
Cognitive Impairment Screening: My Tho Nguyen, Nursing
Advance Directive Completion: Caroline Savoie, Medicine
Oral Health Assessment: Evan Morse, Dentistry

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https://www.lehighcenter.com/disorders/about-geriatric-depression/
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https://www.healthline.com/health/visual-acuity-test#purpose
https://mini-cog.com/
https://www.nia.nih.gov/health/advance-care-planning-healthcare-directives
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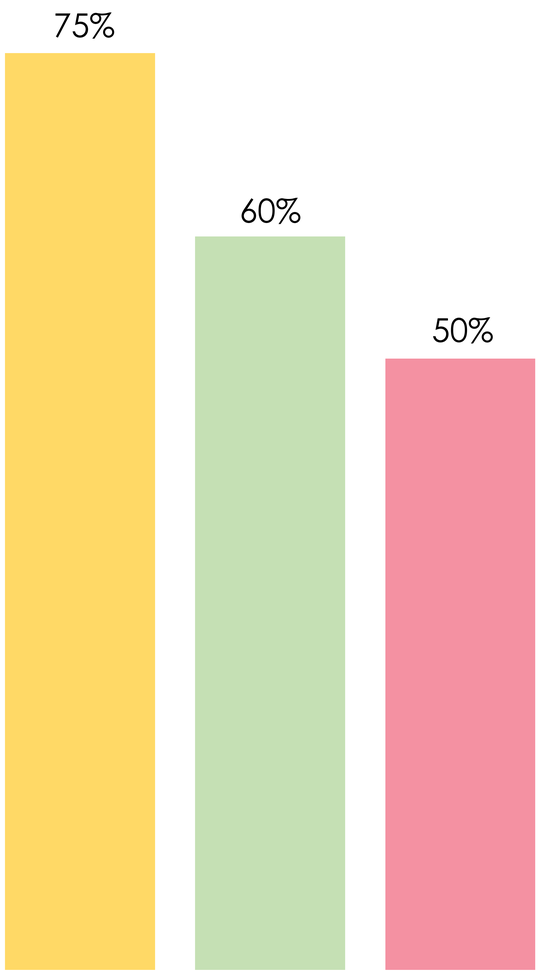
https://www.ada.org/en/member-center/member-benefits/practice-resources/dental-practice-parameters/evaluation-patient-requiring-a-comprehensive-oral-evaluation
http://www.livingwellmag.com/urinary-incontinence-no-more-accidents/

What causes Down Syndrome?

Down Syndrome results from having an extra copy (trisomy) of chromosome 21. Risk factors of having a child with Down syndrome include:

- Maternal age ≥35
- One parent being a genetic carrier of Trisomy 21
- Already having a child with Down Syndrome

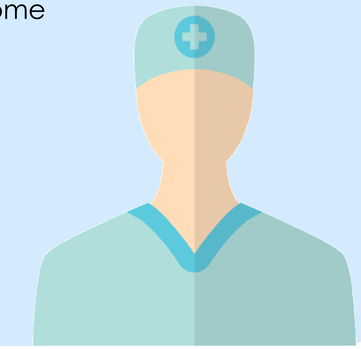


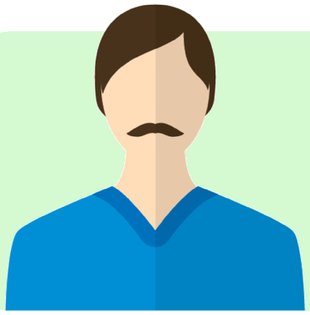
Down Syndrome Age 1–5

Screening Recommendations:

- ☐ Evaluate emotional wellbeing of patient and parents
- ☐ Educate parents on special home care needs
- ☐ Teach self-care and infection prevention methods
- ☐ Identify specific family concerns

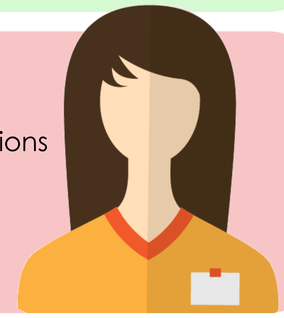
- ☐ Evaluate height and weight using the Down Syndrome specific growth chart
- ☐ Monitor for symptoms of heart disease
- ☐ Evaluate thyroid function
- ☐ Monitor for symptoms of obstructive sleep apnea
- ☐ Recognize evidence of atlantoaxial instability
- ☐ Detect changes in vision





- ☐ Evaluate oral hygiene and discuss proper care techniques with patient and parents
- ☐ Monitor for periodontal disease, hypodontia, and delayed dental eruption
- ☐ Nutritional counseling

- ☐ Continuously assess for changes in hearing
- ☐ Monitor symptoms of otitis media and frequency of infections
- ☐ Evaluate craniofacial anomalies
- ☐ Detect speech and/or language delays



Estimated cost with Medicaid = $311.10

IPEC CC8—Care for patients with Down Syndrome includes aspects of health which expand across a multitude of specialties. Each provider maintains a unique and essential role in each patient's care, and ensuring that all patient needs are fully met requires global communication and continued collaboration between all providers.

Health Disparities among Down Syndrome Patients

- Low provider adherence to screening recommendations
- Increased vulnerability
- Lower rates of subspecialty referral
- Decreased life expectancy in African American patients
- Variable levels of provider comfort leads to decreased continuity of care

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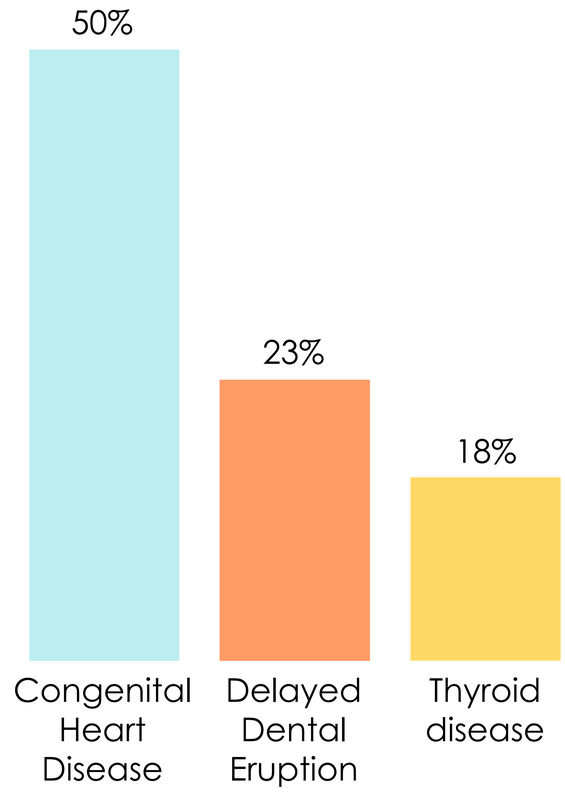
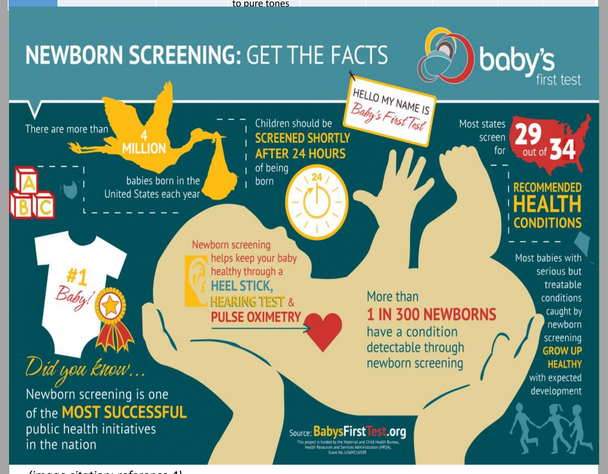


Cerebral Palsy Assessment Tool

Program	Assessment	Assessment	Assessment	Assessment	Assessment	Assessment	CPT Code	Fee Schedule
Medicine	**Echoencephalograph /Pediatric Cranial Ultrasound** to screen for anatomic abnormalities	**New Born Metabolic Screening:** to assess for congenital metabolic disease that could affect fetal brain development *(see image below)*	Thorough **History and Physical Exam** at birth and subsequent all visits: **review prenatal and birth history, family history, growth history**	**Apgar Score**: apgar <7 at 5 minutes increases risk for CP (>7 considered normal) *(reference 8)*			76506 S3620 *(reference 2)*	$148.04, $30.00 (flat rate for newborn screen in Louisiana) *(reference 1)*
Dental Hygiene and Dentistry	**Tooth Decay Screen**	**Periodontal Health Screen**	**Fluoride Education**	**Oral Hygiene Education**	**Comprehensive oral examination**	**Oral Cancer Screen**	D0105, Additional services incident to DDS	$47.37
Nursing	**Assess for maternal and perinatal infections:** for example, chorioamnionitis	**Hammersmith Infant Neurological Exam** *(reference 3)*	**CBC:** Blood chemistry panel to assess general organ function	**Plasma screen:** for plasma ammonia level	**Assess and provide care** for Very low birth weight **(VLBW)**/ Extremely low birth weight **(ELBW)**		N/A: Services incident to MD, PA, NP	N/A
Audiology	**Assess outer hair cell function:** evoked otoacoustic emissions, for those who cannot give behavioral responses	**Conditioned play audiometry:** for those old enough to give behavioral feedback	**Brainstem Evoked Response (ABR):** test of neural synchrony supplemental to pure tones				92587, 92582, 92585	$22.34 $74.24 $109.92



(image citation: reference 4)

Potential Challenges and Barriers to Assessment Implementation:

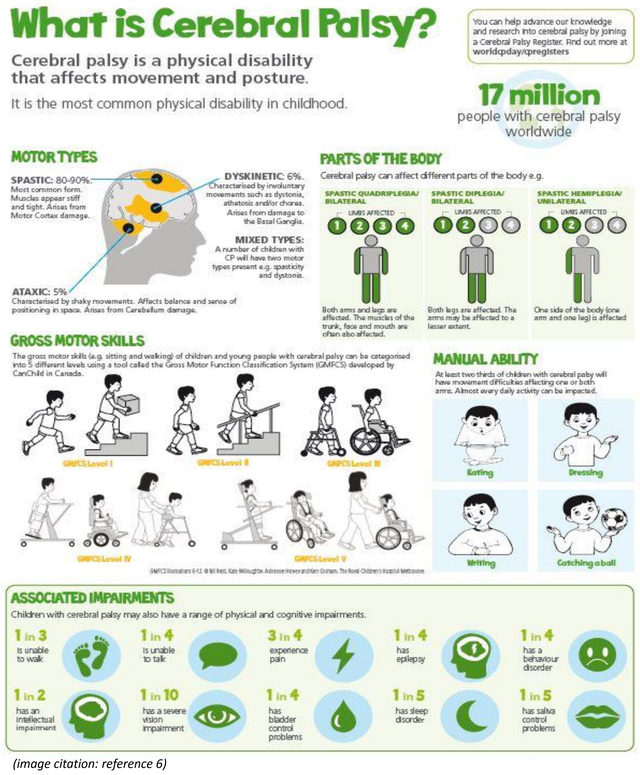
1. It can be difficult to administer the full test with regard to all of the different profession's parts since practically, it is uncommon to have all of the professions in one place; for example, you rarely will have medicine and nursing in the same facility as dentistry.
2. Religious/Cultural beliefs against certain aspects of prenatal, neonatal, and subsequent healthcare for mother and child

Proposed Solutions to Above Challenges:

1. Administer the test in parts: medicine and nursing can perform their assessments in the hospital and at doctor's visits, dental at dental check ups when the patient starts seeing the dentist. Medicine and nursing should encourage all of their patients but especially those at high risk to initiate early oral care. Each discipline should refer patient to the appropriate service for findings identified during assessment if they need to be addressed by another provider.
2. Educate patients about the importance of prenatal and neonatal care as well as the importance of regular pediatric visits for the health of their children. Allow family to have the autonomy to make the choice after education whether or not to participate in care.

Cerebral Palsy

Team 10: Janzen Viator, Elizabeth Prejean, Alejandro Molina, Alexander Say, Christian Nguyen, Kathryn Ogea, Carrie Gallien, Brooke Gilmore



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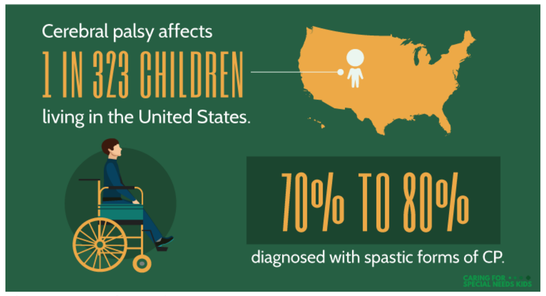
Prevalence

- Higher in preterm than term infants and increases with decreasing gestational age at delivery:
  - can reach up to 15% of infants born between 24-27 weeks
  - 82/1000 live births <28 weeks gestation
  - Decreases to 1.4/1000 live births at 36 weeks gestation
- Per a USA population based study:
  - Stable rate of spastic CP: 1.76/1000 in 2002
  - Racial disparities in changes of CP prevalence between 1985 and 2002:
    - Decline in CP in non-Hispanic White population (1.65 decreased to 1.34/1000)
    - Increase in CP in non-Hispanic Black population (2.29 increased to 2.34/1000) *(reference 7)*



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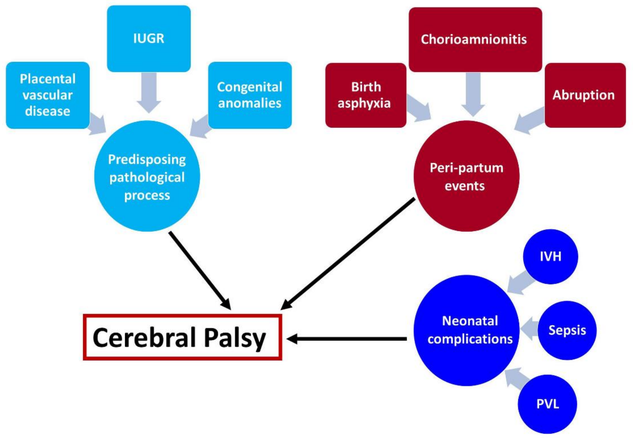
The Facts

- The most common motor disability in childhood
- Heterogeneous non-progressive clinical syndrome involving:
  - Permanent disorders of movement and posture
    - Abnormal muscle tone, posture, and movement
    - Cause limited activity and functionality of affected person
  - Additional signs/symptoms:
    - Sensory, perception, cognitive, communication, and behavior disturbances
    - Epilepsy
    - Secondary musculoskeletal problems
- Causes:
  - Disturbance of developing fetal brain
  - Intrauterine pathology
  - Complication of prematurity *(reference 7)*

Risk Factors

Any event that can affect fetal and neonatal brain development:

- congenital malformations
- fetal growth restriction
- multiple gestations
- infection during the fetal and neonatal period
- birth asphyxia
- preterm delivery (leading risk factor, especially if before 28 weeks of gestation)
- untreated maternal hypothyroidism
- perinatal stroke
- thrombophilia *(reference 7)*
- low birth weight
- Preeclampsia
- placental abruption
- heavy maternal alcohol consumption
- maternal smoking
- maternal obesity
- apgar <7 at 5 minutes (>7 considered normal)
- requiring mechanical ventilation after birth
- requiring antibiotics after birth
- neonatal seizures *(reference 8)*



(image citation: reference 7)

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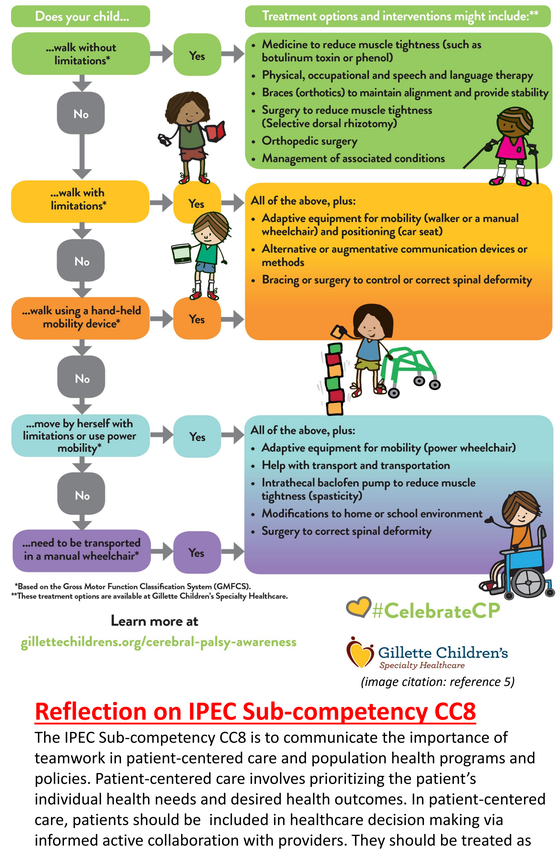
What Are the Treatments for Cerebral Palsy?



*Based on the Gross Motor Function Classification System (GMFCS).
**These treatment options are available at Gillette Children's Specialty Healthcare.

#CelebrateCP

Learn more at
gillettechildrens.org/cerebral-palsy-awareness

Gillette Children's Specialty Healthcare

(image citation: reference 5)

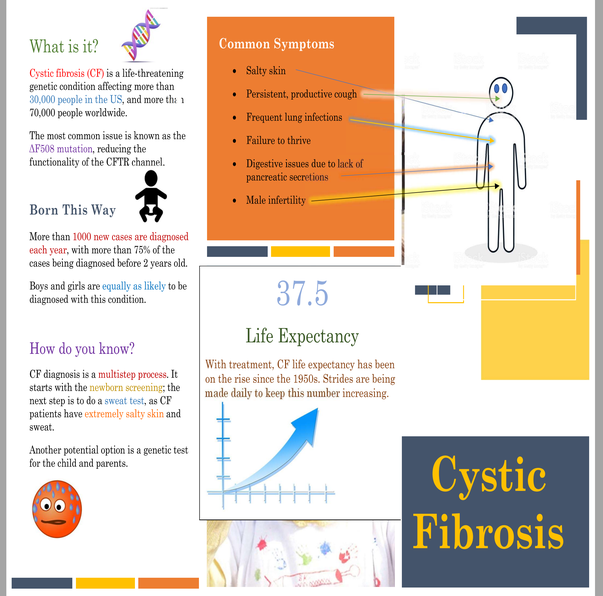
Reflection on IPEC Sub-competency CC8

The IPEC Sub-competency CC8 is to communicate the importance of teamwork in patient-centered care and population health programs and policies. Patient-centered care involves prioritizing the patient's individual health needs and desired health outcomes. In patient-centered care, patients should be included in healthcare decision making via informed active collaboration with providers. They should be treated as though they are partners with their healthcare team and the goal should be to address physical health along with emotional, mental, spiritual, and socioeconomic concerns pertaining to care. These ideas can be extended to include families in healthcare as well. Current population health programs and policies, health care systems, and quality improvement efforts are aligned with providing patient-centered care, and the health care system is designed to be team based. Individual providers specialize in addressing singular pieces of the patient's health, and it is important for these providers to collaborate in order to address the patient holistically.

Through completing this project, our team practiced the communication skills that we will need to incorporate into our careers to provide patient-centered care. Much of our project was completed via electronic communication and shared documents that all of us worked on remotely to meet the same end goal: design an assessment tool for patients with cerebral palsy. This is similar to the way that healthcare providers work today; for example, individual medical specialties are not necessarily practicing in close proximity to each other in the same facility, but they communicate via electronic records. Software, such as Epic and Powerchart, utilize technology to organize patient data and allows multiple members of the healthcare team to retrieve that data. As we pursue our careers in healthcare, it is critical that we learn how to properly document aspects of care that we perform in order to communicate with the rest of the health care team.

At the core of patient-centered care is allowing patients to make informed, educated decisions about their care; this means that they must be educated about their health and options available to them. This can be achieved in the healthcare setting through many approaches, including informational posters like the one we have created about cerebral palsy for this project. This can also be achieved outside of the medical setting through patient support groups. These provide a network for patients to benefit from mentally through giving and receiving advice from others in similar situations as well as physically via learning to recognize and manage their symptoms before healthcare providers can intervene. With advances in technology, online support groups now exist and are easier to access than ever before. For patients with cerebral palsy for example, groups through the Department of Family Services, Families Helping Families, and Mom2Mom may be helpful and should be shared with patients and families by their healthcare providers.

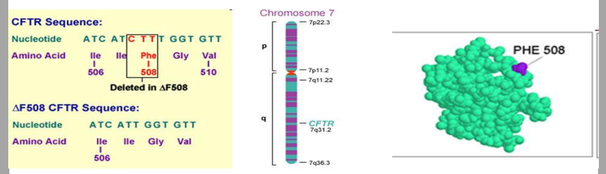
Ultimately, this project was an exercise of working on an interdisciplinary healthcare team to develop an assessment tool and educational resource for providing patient-centered care to those with cerebral palsy.



Transmission of Human Traits - Recessive Alleles

Cystic Fibrosis

- Autosomal recessive disorder on chromosome 7
- People with cystic fibrosis lack one amino acid in the 1,480 amino acid sequence that makes up the CFTR protein
- CFTR protein is a transport protein located in the cell membrane – absence causes a thick mucus that clogs the lungs and makes patient susceptible to infection.



- Cystic fibrosis (CF) is a autosomal recessive disease thus risk factors are related to factors that increase the chance of the patients parents being a carrier of the mutation.
- Cystic fibrosis is more common in Caucasians.
- Ashkenazi Jewish (1 per 24) have the highest carrier frequency of the Cystic Fibrosis mutation, followed by Non-Hispanic Whites (1 per 25), Hispanic White (1 per 58), African American (1 per 61) and finally Asian American (1 per 94)
- Unaffected parents who have a child with cystic fibrosis are carriers
- Carriers are usually asymptomatic
- Siblings of a patient with CF have a 25% chance of being affected (having cystic fibrosis), 50% chance of being a carrier of the mutation and 25% chance of being unaffected (ie do not have CF) and not a carrier (ie no CF mutations)
- Offspring of a patient with cystic fibrosis will inherit one mutated CF transmembrane conductance regulator (*CFTR*) allele from their affected parent, but the risk of the offspring developing CF depends on the other parents CFTR alleles. Before an individual with CTFR has children, genetic testing is recommended for the other partner to determine if they are a carrier.

Cystic Fibrosis

Interprofessional Assessment Tool

Goal:

To have an interprofessional assessment tool to assess a cystic fibrosis patient in one 45 minute or less visit and determine what, if any, treatment is needed.

Obstacles:

1) Logistics of having the patient and clinicians from each profession together at one specific time and having the necessary diagnostic/screening equipment available.
2) Time constraints of having many different screenings/exams done in one 45 minute appointment and clinicians not having time to do a more thorough exam that may be necessary to properly diagnose a patient. This could lead to incorrect or missed diagnosis.
3) Non-universal medical records.
4) Failure of insurance company to cover respiratory therapy.

Possible Solutions:

1) Have a designated location that would be easiest for all involved to access (i.e. clinic) and would have appropriate equipment readily available.
2) Services that are performed would have to be brief and prioritized by importance to the patients health. Chief complaints and issues likely to have a significant impact on the patient would need to be given more time (i.e. pulmonary) during the visit. Where overlap between professions occurs, have only one clinician perform that service in order to save time.
3) Give updated copy of records to pt. at the end of every visit.
4) Lobby for universal coverage for all aspects of disease treatment.

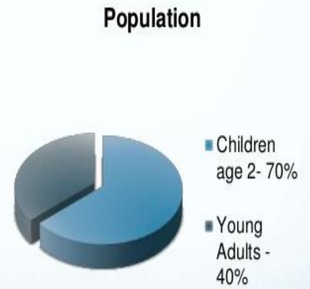
Dietitian
Nurse
Physician- CF expert (Pulmonologist)
May also include: otolaryngologist, gastroenterologist, endocrinologist
Social workers
Psychologist
Respiratory therapist
Genetic counselors
May or may not include:
Physical therapist
CF pharmacist
Pharmacist
Research coordinator

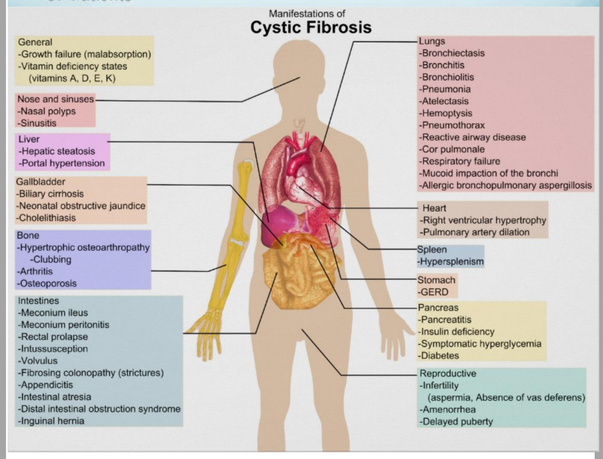
Sample 45 Minute Visit

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Medicine	Newborn screening - Initial comp preventive medicine eval & mgt, under 1 yr	Periodic comp preventive medicine reeval. & mgt			Periodic evaluation range of codes corresponds to age rage	99381, 99391-99395	$76 $64 $78
Nursing	Clinical assessment of patients both in the hospital and in the clinic for possible signs of CF					Services incident to MD, PA, NP	N/A
Occupational Therapy	Independence with daily activities	Management of daily medications	Increasing quality of life			97166	$65
Physical Therapy	Exercise and education customized to patient's needs					97162	$66
Dentistry/Dental Hygiene	Tooth decay screening	Head and neck exam	Oral cancer screening	Oral hygiene instruction		D0150 D1100	$47 $35
Audiology	Visual reinforcement audiometry (VRA)	Comprehensive audiometry threshold evaluation and speech recognition				92579, 92557	$36 $54
Respiratory Therapy	Spirometry	Therapeutic procedures to increase strength or endurance or respiratory muscles			Respiratory therapy not covered under LA Medicaid	94010, G0237	$68
Approximate Total Cost							**$589**

Statistics

- As the most common Chronic lung disease in children and some adults, this disorder affects about-
  - 30, 000 children and young adults
  - Where about 1200 children are diagnosed every year
  - About 70% of these patients are diagnosed with the disease at age 2
  - And about bout 40% of the population being 18 years of age and older.
  - Life span of patients with Cystic Fibrosis is about 37 years (Cystic Fibrosis Foundation, 2014)
- * Respiratory failure is mostly the major consequence of Cystic Fibrosis and usually what causes death amongst CF Patients





Development of the Assessment Tool

It was recognized early on by the team that there was a need for thorough communication between the different professions as many of the health problems that patients are facing will have multiple providers managing them. There is a distinct advantage in having those people together when the patient is assessed. They are able to have a more complete "big picture" of the patients status and needs. This will lead to a more comprehensive diagnosis of the patient, better coordination of treatment and reduction in duplicity of services. Time of all of those involved is reduced and possibly costs as well.

Most importantly, the patients benefit greatly from more thorough care. The Assessment Tool is also a great reference for professionals that will enable them to see beyond their scope of practice when they are treating patients with cystic fibrosis.

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- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3081249/
- https://www.asha.org/uploadedFiles/Interprofessional-Collaboration-Core-Competency.pdf

Lung Cancer Screening

- Medicine
  - Low dose CT scan
  - Referral to oncologist
- Nursing
  - Family History of lung and pack-year
- Dental
  - Head and neck exam, soft tissue
  - Complete dental exam, biopsy of suspicious tissue
- Dental Hygiene
  - Oral exam
- Cardiovascular Sonography
  - Transthoracic echocardiogram

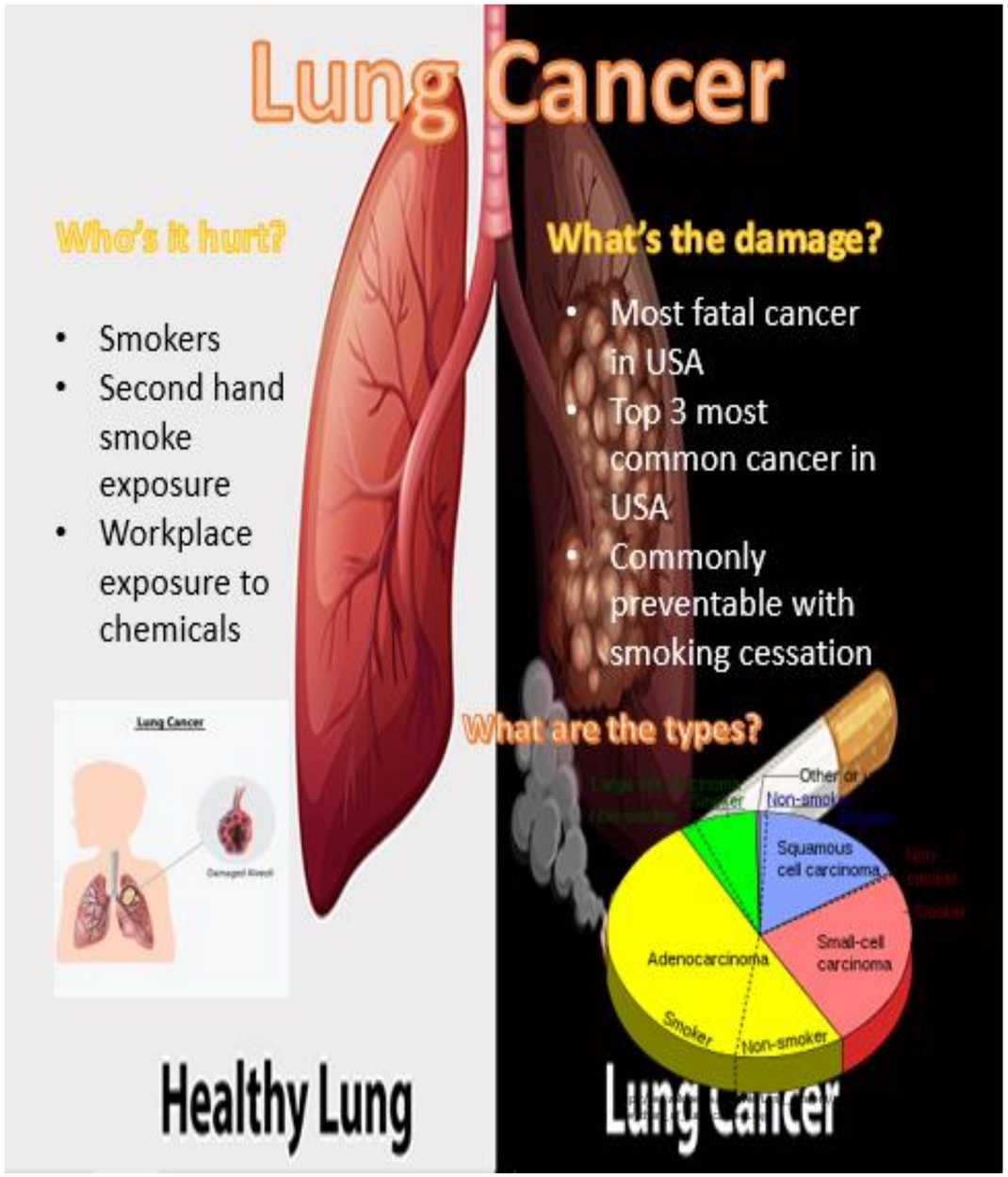
Total estimated Medicaid cost of multi-disciplinary screening tool:

$669.95

Challenges:

- Time will be of great concern.
  - The most important tests should the counseling and the exam. Some test such as the echocardiogram can be shortened to a limited study and with the technology of newer machines, post measurements can be done. The patient should have all questionnaires sent to them ahead of time to fill out and send back by email. This way the Dr. and pertinent staff can look at them ahead of time. Preparation is key for everyone involved.
- Staff missing info in charts.
  - Templates should be created for staff to ensure everything is charted correctly and nothing is missed. This will also help with fluidity for time's sake. A pregame daily meeting each morning would be most helpful to discuss patients coming in that day.
- Space will also be of concern.
  - There should be a process in place to get patient from room to room by each clinician from one to the next, because it may not be possible to utilize one room for all test and would also be faster than the staff traveling with equipment.

Lung Cancer Screening & Prevention in Smokers



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Lung Cancer Prevention

- Medicine
  - Smoking cessation motivational interview
- Nursing
  - Smoking cessation education
- Dental
  - Chewing tobacco cessation motivational interviewing
- Dental Hygiene
  - Oral hygiene counseling

IPEC Sub-Competency CC8

Healthcare practitioners generally see patients that come in with a vast array of problems that require more than one discipline of health to address the patient's complex concerns. Yet today we still occasionally see healthcare providers acting independently from each other while treating these patients. For example, this happens when doctors and specialists don't confer, when lab tests are constantly repeated and results not shared, or when there is lack of communication while transitioning the patient between different settings of care.

Ultimately the patient's treatment may hit a standstill. The patient may begin to get frustrated with the lack of progress with treatment and from being shuffle around from health provider to health provider. Here's where interprofessional education comes in.

Interprofessional education (IPE) is a measure that aims to teach future healthcare professionals to collaborate in order to achieve a common goal. It is based on the idea that when health care professionals consider each other's perspectives, including that of a patient, they are able to deliver enhanced care.

Of course, IPE doesn't come without any challenges. Communication is key for IPE and interprofessional collaboration, yet it could also be a potential barrier when considering time and locational restraints. This is course can be overcome by implementing a platform of communication where healthcare professionals can have direct access to one another or a system that universalizes how medical information is shared between different healthcare professionals. Because of its importance, communication is one of the four core competencies for an interprofessional collaboration. The competency states, "communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease." Furthermore, there is heavy emphasis on communicating the importance of teamwork in patient-centered care and population health programs and policies (IPEC sub-competency CC8).

Attributions for Team Up Group 12:
Infographic – Adam Prevot – Medicine
Lung Cancer Screening/Prevention tools:
Kaitlyn Burrell – Nursing
Paul Nguyen – Dentistry
Ryean Hebert – Dental Hygiene
Brandon Broussard – Cardiovascular Imaging
George Jeha– Medicine
Cost Analysis – Jantzen Collette – Medicine
Challenges – Brandon Broussard – Cardiovascular Imaging
Team Reflection – Katherine Garrett – Nursing
References formatting – Kaitlyn Burrell – Nursing
IPEC Reflection – Paul Nguyen – Dentistry

Alzheimer's Disease

Team 13: Aryel Achee, Jayda Batiste, Gabrielle Bruard, Elizabeth Forgey, David Mondschein, Julie Nguyen, Emerson Scheinuk

Background

Background of Care:

- Dental Hygiene and Dentistry
  - It is important to ensure the patients understand and remember the importance of oral hygiene to prevent degenerative disease as well as prevent oral cancers through early detection via checkups
- Medicine
  - Tailoring the patient's care as their disease progresses is extremely important, and a thorough history is essential to ensure appropriate support systems and care will be provided throughout the disease's progression, especially at home
- Nursing
  - Both in the hospital and in nursing care facilities, nurses are crucial in preventing disease progression through providing care to prevent disease progression and avoid comorbidities

Risk Factors:

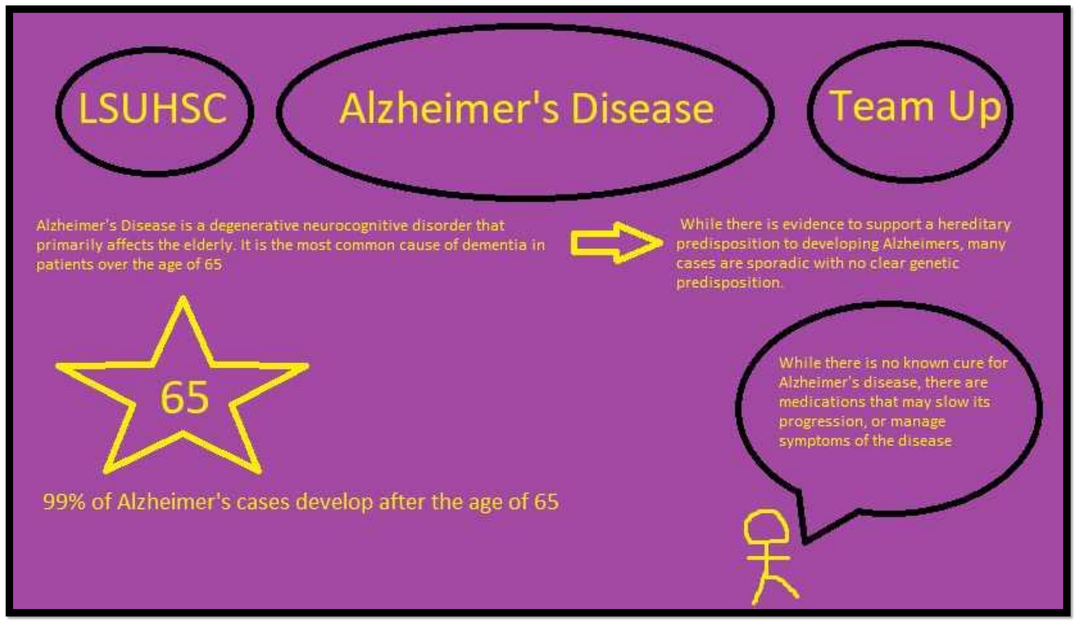
- There is **no known cause** for Alzheimer's, but it is thought that there are several predispositions:
  - Genetics
  - Old age
  - Hypertension
  - Hypercholesterolemia
  - Diabetes
  - Obesity

Lifestyle Modification:

- Subtle lifestyle modifications may alleviate worsening of symptoms
  - **Daily Exercise**: balance and coordination exercises to help maintain equilibrium (yoga, cardio, swimming)
    - Avoid heavy contact sports with potential for head injury
  - **Social Life**: community service, social groups, support groups, social events
  - **Healthy Diet**: low sugar, good fats (omega-3), complex carbs, fiber, avoid trans fats
  - **Mental stimulation**: challenge the mind, stimulate the brain (puzzles, games, newspaper)
  - **Sleep**: ensure 7-8 hours of quality rest
  - **Stress Management**: breathing exercises, meditation

Assessment Tool, Infographic

Specialty	Assessments	Comments	CPT codes	Fee Schedule
Medicine/ Nursing Staff	Focused Patient Interview	Take a focused history on patterns of losses, behavioral issues, current functioning, safety concerns, and onset of memory/cognitive problems	99201	$24.61 for a new patient office visit to physician
	Geriatric Review of Systems	Ask about continence, driving, falls, constipation, vision, hearing, dental, depression, and neurologic symptoms		
	Risk Assessment	Review social/family history, medications, preventative interventions (immunizations)		
	Family Interview	Determine caregiver's perceptions about patient's cognitive and behavioral symptoms. Check for caregiver strain.		
	Physical Exam	Include vital signs, neurological exam of all cranial nerves, and muscle strength/reflexes/tremor		
	MMSE (Mini-Mental State Exam)	A 30-point questionnaire to screen for dementia. Takes 5-10 min.		
	GDS (Geriatric Depression Scale)	15 questions. 5 or more depressed responses warrants further evaluation.		
	FAQ (Functional Activities Questionnaire)	Informants provide performance rating of target person. 10 questions.		
	ADL (Activities of Daily Living)	Informants provide information on level of dependence in daily activities for target patient. 6 questions.		
	Cognitive Incapacity and Problem Behaviors Assessment	14 questions (answered by caregiver) that result in a cognitive score and behavior score.		
Medicine	Order Laboratory Tests	Basic Metabolic Panel Blood Test Panel for Electrolytes	80047 80051	$9.78 $7.55
	Order Brain CT scan without IV contrast	Look for Hydrocephalus, mass lesions, infarcts, and subcortical ischemic changes.	70450	$144.06
Dentistry	Comprehensive Oral exam	To determine how well patient is brushing/flossing	D0150	$47.37 for new patient



"Though those with Alzheimer's may forget us, we as a society must remember them."
-Scott Kirschenbaum

Cost and Barriers

Total Assessment Cost:

- The cost for a complete assessment totals $233.37
- The cost is divided between multiple providers and may represent a significant out of pocket cost depending on the patient's insurance coverage

Potential Barriers to Assessment:

- The cost of the complete assessment may represent a barrier for someone who demonstrates early signs of Alzheimer's but does not want to spend in excess of $100 for a screening that may not provide a definitive diagnosis
- The assessment may require visits to multiple providers and coordination between providers such as dentistry, medicine, and nursing, which may be difficult if the patient's providers are part of separate health systems
- The stage at which the patient presents may be highly variable depending on several factors
  - Annual Checkups – if the patient does not see a physician regularly, warning signs may be detected later
  - Living Alone – if the patient lives alone and does not socialize, they may not notice their forgetfulness themselves
  - Fearfulness – patients may fear a diagnosis of Alzheimer's to the point that they avoid being screened for the condition

Possible Solutions to Barriers:

- Screen patients early and often to accustom them to the screening at a younger age, when they may be less fearful of a diagnosis
- Comfort and reassure patients upon diagnosis; attempt to address stigmas of Alzheimer's and encourage/set up followup appointments to reduce the chances of comorbidities
- Ensure collaboration across healthcare professions to eliminate lapses in care

References:

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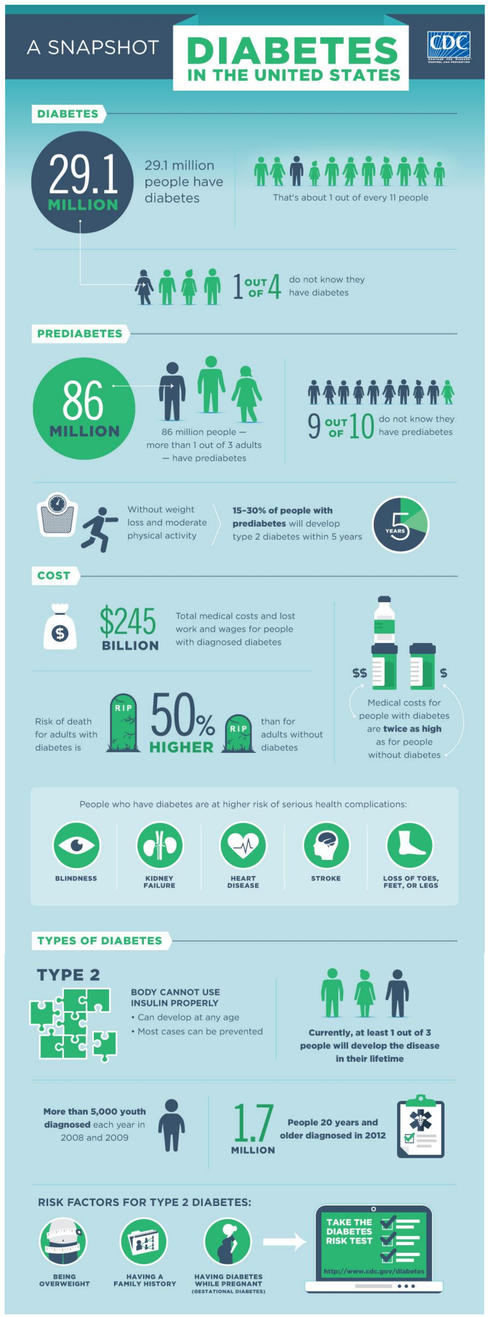
Interprofessional Primary Intervention Tool for Type II Diabetes Mellitus

Background

- 30.3 million Americans are diagnosed with diabetes mellitus as of 2015: 90-95% of these are type 2.
- Diabetes causes more deaths per year than does breast cancer and AIDS combined.
- Globally, the prevalence of type II diabetes mellitus is predicted to double within the next 20 years, with more than 70% of new cases arising in developing countries.



PRIMARY PREVENTION TOOL

Profession	Assessment	Assessment	Assessment	Assessment	CPT codes	Cost
Medicine	Complete Metabolic Panel (creatinine to measure renal function), Lipid Panel, Glucose Fingerstick Test, A1C	Check for symptoms of diabetes: Polyuria Polydipsia Numbness vision changes	Two separate tests for glucose of >126 or 1 test of glucose >200 with symptoms		80053 80061 82962 83036	11.57 11.88 2.70 9.66 = $34.81
Nursing	(A) Assessment of Family History of Diabetes: Research has provided Hard evidence showing that a family history of Type-2 DM, is a strong risk factor for the development of T2DM.	(B) Assessment of current Physical Activity: Dietary habits and a sedentary lifestyle are the major factors for rapidly rising incidences of DM weight loss, reduces the risk of developing Type-2 diabetes in adults at high risk by 50%-70%	(C) Assessment of current Dietary Habits: (see Assessment B)	(D) Assess whether the patient is a smoker: Smoking has been implicated as a major risk factor for the development of Type 2 DM.		Services incident to MD, PA, NP
Dentistry	Medical hx: • Blood glucose level(ask what is normal level, have they eaten or taken medication before coming) • Are they diagnosed with diabetes? (how long) • A1C level • Blood pressure (what is normal, are they on medication)	Oral examination (2)	X rays (3)		(2) D0150 (3) D0210	47.37 60.17 = $107.54
Dental Hygiene	Medical History: When were they diagnosed? Did they eat? take meds? A1C? glucose level? when is it usually taken? what is their normal level? When was their last doctor visit?	Oral exam	X-rays			Services incident to DDS
Cardio-Vascular Sonography	Assess the heart valves using echo; look for thickening of any valves	Perform Arterial Brachial Index to assess peripheral blood flow; look for arteries that cannot be compressed				Services incident to MD, PA, NP

Demographics

T2DM affects Americans of different races and ethnicity at different rates (percent of population affected):

- Non-Hispanic Whites……7.4%
- Asian Americans:……8.0%
- Hispanics:……12.1%
  - Rates highest among Mexican Americans at 13.8%
- Non-Hispanic Blacks:……12.7%
- American Indians/ Alaskan Natives:……15.1%

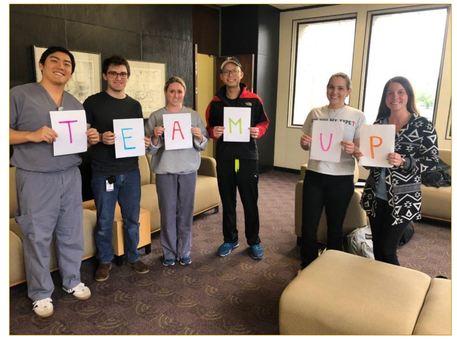
Challenges to Implementation

Two barriers associated with the collection of assessment data for preventive measures of type 2 diabetes mellitus are ineffective communication and lack of cultural competency. Effective communication and cultural competency are essential in the collection of reliable data and for the development of a healthy relationship between caregiver and client. Without effective communication, the caregivers ability to build a trusting relationship is challenged. Having a trusting relationship with the client is essential for the collection of assessment data.

IPEC Sub-competency CC8 Reflection – Group 14

While developing an interprofessional assessment tool for Diabetes Type II, our team learned the importance of one another's health professions. Upon doing research on Diabetes, we each saw how our own roles were vital to patient-centered care for this topic. Diabetes affects millions in the United States each year, and learning that each of our own professions play a part in the diagnosis and/or treatment was astounding.

An assessment tool made by one individual would not be as beneficial for the diabetic population as a tool made by a variety of healthcare professionals. Our team, made up of medical, nursing, dental, and sonography students, developed a tool where each member is able to screen a diabetic patient. We were able to do this using a skill set that only Team Up has taught us. Our group learned how to collaborate with one another through breaking the communication barriers that separate our professions. Team Up is a valuable experience that will lead us to greater patient care.



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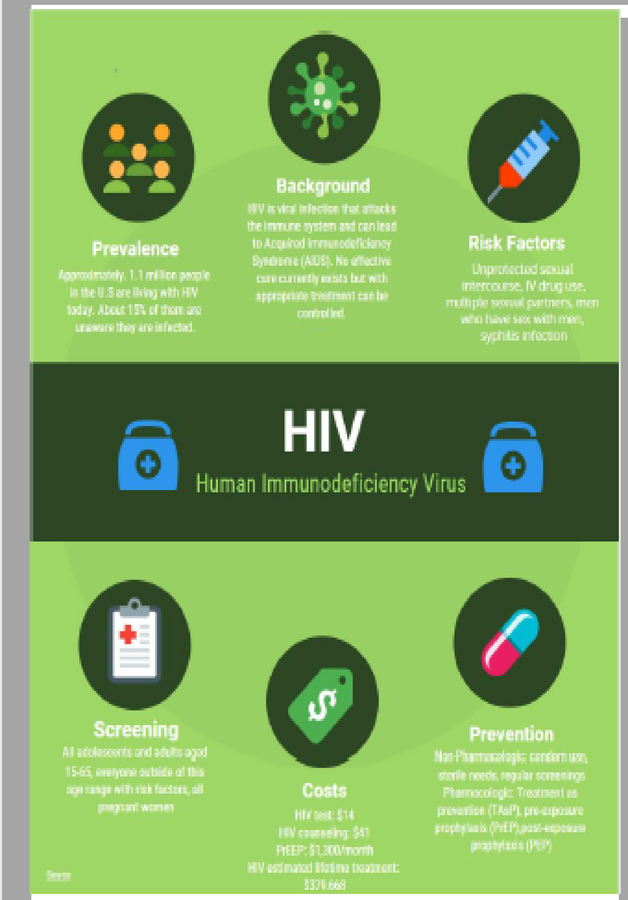
[3] American Diabetes Association: http://www.diabetes.org/diabetes-basics

[4] CPT Codes: https://www.lamedicaid.com/provweb1/fee_schedules/feeschedulesindex.htm

IMAGES:
Infographic from the American Diabetes Association (diabetes.org)/CDC

Human Immunodeficiency Virus

Team 15: Alex Lambert, Delena Phung, Hilary Connell, Mackenzie Fredricks, Raelyn Carr, Sarah Lawhon



Prevention

Nonpharmacologic measures include:

- condom use (80% effective)
- provision of clean needles among injection drug users
- male circumcision

Pharmacologic measures include:

- treatment-as-prevention (TAsP) antiretroviral treatment (ART) of HIV-infected individuals to reduce risk of transmission to their noninfected partners
- preexposure prophylaxis (PrEP) antiretroviral drugs are taken continuously by individuals with a high, ongoing risk of HIV infection
- postexposure prophylaxis (PEP) -refers to administration of ART, usually for 28 days, following potential exposure to HIV

Assessment Tool

	Assessment	Assessment	Assessment	CPT Code	Fee Schedule
Medicine	HIV testing	PrEP Education and Prescription	STD Transmission Education	86701 86702 36415 99403	$10.52 $2.58 $40.85 $1,300.00 Total: $1353.95
Dentistry	Head/Neck exam; soft tissue oral exam	Complete periodontal and dental exam	Biopsy of suspicious soft tissue lesions	D0120 D0150 D7286 D4341 D1110 incident to DDS	$26.83 $46.66 $150.25 $115.58 $47.29 Total: 802.16
Dental Hygiene	Oral Exam	Fluoride education	Oral Hygiene education		
Respiratory Therapy	ABG	Smoking Cessation	Education on Aerosol Medications	82805 94664 99407*	$9.00 $11.19 $25.39 Total: $45.56

Strategy for Referrals

Local New Orleans clinics with free HIV testing:

UMC HOP clinic - HIV Outpatient Program (504-702-4344)

- Healthcare multidisciplinary services for patients with HIV

Planned Parenthood - Walk-in HIV testing services

Walgreens - Wednesday, free HIV testing 10am to 7pm

CrescentCare Main Office and Wellness Center (504-945-4000)

- Gonorrhea, Chlamydia, Syphilis, Hepatitis C, and HIV screening for gay, bisexual, and queer-identified men and transgender individuals **Interested in PrEP? Contact Wellness Center.**
  - *Mon/Tues – 9am-2pm (last appointment at 1:30pm)*
  - *Wed/Thurs – 12pm-8pm (no appointments 3:30-4:30pm)*
  - Couples HIV Testing and Counseling - Tues, (4:30 pm to 7 pm)

The Movement (504-945-4000)

- HCV rapid testing available, as well

Risk Factors

- Unprotected sexual intercourse
  - Receptive anal (1/72 transmission rate)
  - Insertive anal (1/900 transmission rate)
  - Receptive penile-vaginal (1/1250 transmission rate)
  - Insertive penile-vaginal (1/2500 transmission rate)
  - Receptive or insertive penile-oral sex (0-4/10,000 transmission rate)
- Syphilis Infection
- IV drug use
- Multiple sex partners
- High viral load in HIV+ transmitter

Challenges/Barriers

- Challenge: To effectively complete a thorough interprofessional assessment in a timely 45 minutes
  - solution: turn this assessment tool into a protocol for the hospital so we don't waste any time
- Challenge: Increased patient load and having adequate time to spend educating patient in safe practices
  - Solution: Increasing appointment time, providing take home resources such as pamphlets and a contact for follow up questions

Lessons Learned

- It's important to get guidance from other health professionals to get the full history of each patient's health. We should be comfortable to approach each other with questions and concerns regarding our patient, in order to accomplish optimum patient health outcomes.

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-"Fee Schedules." *Louisiana Medicaid*, State of Louisiana Department of Health and Hospitals, www.lamedicaid.com/provweb1/fee_schedules/feeschedulesindex.htm.
-Cohen, Myron S. "HIV Infection: Risk Facts and Prevention Strategies." Edited by John G Bartlett, and Meg Sullivan. *UpToDate*, 20 Nov. 2018, www.uptodate.com/contents/hiv-infection-risk-factors-and-prevention-strategies#H525605897.

BACKGROUND:

A stroke occurs when oxygen-rich blood is prevented from reaching areas of the brain.
Strokes are the fifth leading cause of death in the United States. At young ages, men are more likely to have a stroke than women; however, women are more likely to die from complications involving a stroke. The use of oral contraceptives have been linked to strokes in women.

Experiencing the abrupt onset of focal neurologic deficits is the hallmark of the diagnosis of ischemic stroke.

Top 5 Risk Factors:
1. Previous stroke/TIA
2. High blood pressure
3. High cholesterol
4. Heart disease
5. Diabetes

Common Symptoms:
- Leg paresis
- Arm paresis
- Dysphagia

FUN FACT: 80% of all strokes can be prevented through lifestyle changes and controlling risk factors. (CDC)

INTERPROFESSIONAL ASSESSMENTS:

Physician's Role: Assess for risk and screen for hypertension and diabetes. Screen for high cholesterol. Advise on smoking cessation.

Nursing's Role: Educate patient on the signs and symptoms of stroke, medications (when to take them and why they are taking it) and their side effects; talk about blood pressure control and diabetes; discuss the importance of yearly screenings for cholesterol; discuss dietary needs

Dental's Role: Assess for manual dexterity for adequate oral hygiene and give oral hygiene instructions/modifications. Evaluate panoramic X-rays for carotid stenosis.

Cardiovascular Sonographer's Role: Assess the heart for intracardiac shunts, Coronary Artery Disease, heart valve defects, irregular heartbeat, or enlarged heart chambers.

Are you at risk for a STROKE?

BE INFORMED!

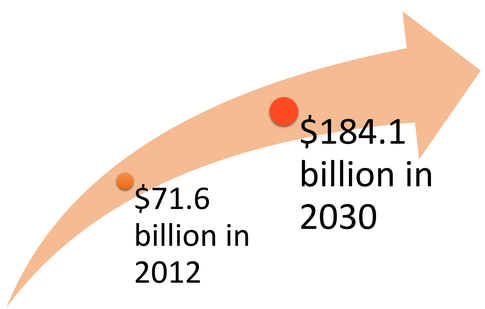
- A **stroke** can occur whenever an area of the brain stops receiving blood from the heart.
- Over **800,000** strokes occur annually in the United States.
- Risk factors for strokes include **obesity, diabetes**, **high blood pressure, and, tobacco and alcohol use.**
- **Early intervention** is essential to prevent strokes from occurring.

PREVENTABLE MEASURES

Eat a Healthy Diet
- Limit red meat intake to two servings per month.
- Eat foods low in fats & cholesterol like fruits and vegetables.
- Follow the DASH diet to help reduce salt intake.

Mange your Health
- Notify your health care team if notice changes in your health or have a relative who has had stroke.
- Monitor cholesterol and blood pressure.
- Limit alcohol and nicotine.

Be Active
- Exercise reduces the risk of strokes and other cardiovascular events.
- **Children & Teens**: 1 hour of physical activity every day
- **Adults:** 2 hours of moderate aerobic physical activity each week (EX: brisk walking)



Projected Healthcare Costs of strokes and their complications

BARRIERS TO OVERCOME:

Insufficient access to care
- Address health changes since last visit.
- Discuss cost effective options for maintaining their health if the patient lacks insurance or income.

Communication with patients
- Maintain a shared decision-making approach and use motivational interviewing when offering care.
- Assess the patient's health literacy to ensure their understanding of health issues, medications, or treatments.

Communication with team members
- Effectively describe plans of care.
- Respectfully address lapses in communication.

CPT ANALYSIS:

Assessment	Code	Cost
Smoking Cessation Counseling	99407	$14.32
Cardiovascular Risk Counseling	G0446	$25.50
Diabetes Screen	82947	$36.46
Cholesterol Screen	80061	$130.00
Electrocardiogram (complete)	93000	$21.25
Echocardiogram (TTE + bubble study)	93306	$303.32
Total		***$530.85***

Total cost of assessment for a patient with a previous cardiovascular event: $530.85

IPEC CC8:

PEC CC8: Communicate the importance of teamwork in patient-centered care and population health programs and policies:

We have learned from our research and discussion that a stroke can affect multiple aspects of a patient's life. In a similar manner, multiple healthcare disciplines must be involved to ensure the patient's heath is managed while also maintaining optimal quality of life. For example, a dental hygienist can provide excellent cleaning care, and the dentist can educate the patient on how to maintain proper dental health; but if the patient has residual hemiparesis, an occupational therapist may need to step in to help the patient with basic tasks such as maneuvering around their home, and a physical therapist may need to help them gain their strength back so they can become independent again. Efficient and integrated teamwork can absolutely effect a patient's recovery and prognosis from not only a stroke but most, if not all, medical issues.

TEAM UP GROUP 16:

Tess Leblanc, Dental Hygiene
Levi Procell, Dentistry
Timothy Montet, Medicine
Karlie Ragas, Medicine
Jason Schroeder, Medicine
Cecile Cusanza, Nursing
Amanda Parenti, Nursing
Sadie Dyer, Cardiovascular Sonography

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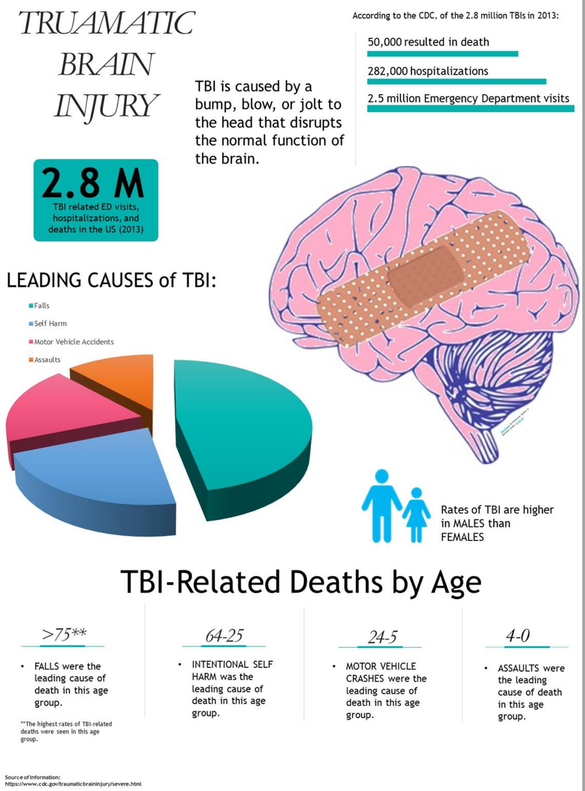
https://www.aafp.org/afp/2017/1001/p436.html
https://www.cdc.gov/stroke/healthy_living.htm
Suhaenih Budin, Rabiatul Adawiah Muhammad Azzuar, Rehana Basri, Mohammad Khursheed Alam, Sam'an Malik Masudi, Shalini Bhaskar. Clinical Scenario and Oral Health Status in Stroke Patient. *International Medical Journal*. 2014;21(2):156-159.



Team's reflection of IPEC sub-competency CC8 as related to the development of the 45-minute interprofessional assessment tool:

Our team worked together to develop a 45-minute assessment tool for a patient suffering with a TBI. Our assessment tool considered the top priorities in caring for this patient, which included:

- Which professions would be most beneficial in the immediate treatment of this patient
- Which assessment tools would be utilized by each profession in this 45-minute appointment
- How much would this appointment cost based on the services rendered

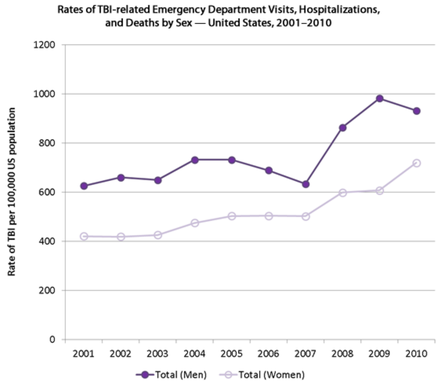
This exercise allowed us to reflect on the importance of each healthcare professional's role in caring for an individual patient affected by a traumatic brain injury. In doing so, we were able to determine and prioritize the immediate needs of the patient as a whole and use critical thinking to demonstrate the patient's immediate care.

TBI: Traumatic Brain Injury

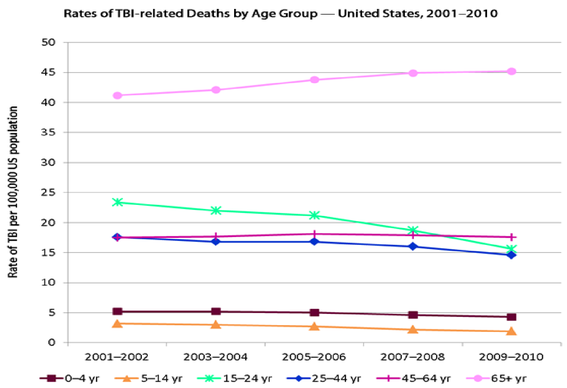
TBI (traumatic brain injury) is defined by the CDC as a disruption in the normal function of the brain that can be caused by a bump, blow, or jolt to the head, or penetrating head injury. Everyone is at risk for a TBI, especially children and older adults.

RISK FACTORS:

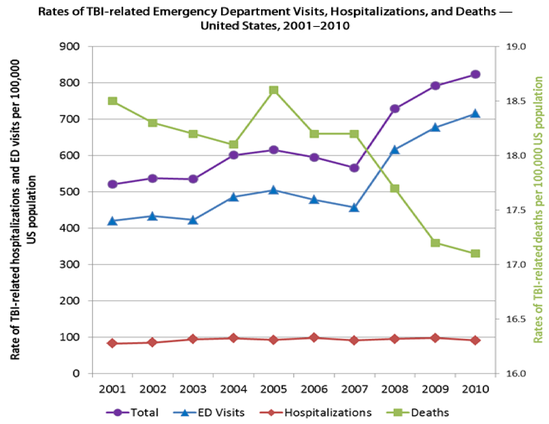
- Males are at a greater risk than females
  - Overall rates of TBI have climbed slowly starting in 2001, spiked sharply in 2008 and have continued to climb through 2010. The increase in TBI rates in 2008 was much sharper for men (nearly 40% increase) than for women (20% increase).
  - In 2007, overall rates of TBI were 26% higher in men compared to women. In 2008, that gap began to widen, reaching 61% in 2009 before narrowing to 29% in 2010. Rates of overall TBI are largely driven by rates of TBI-related ED visits.



- Age (rates of hospitalization highest for elderly 75 y.o. and >)
  - Rates of TBI-related ED visits have increased across all age groups. However, those 65 and older have the highest rate of TBI-related hospitalizations (particularly those 75 and >) and TBI-related deaths.



- Non-white ethnicity
  - Statistics show that African Americans have the highest rate of deaths from TBI's. African Americans, Native Americans, and Alaskan Natives have the highest rate of hospitalization for TBI's



  - It is important to note that although the rates of TBI-related ED visits and hospitalizations have increased, the mortality rate by TBI has not.

REFERENCES

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- http://dental.washington.edu/wp-content/media/sp_need_pdfs/TBI-Adult.pdf
- https://www.cdc.gov/traumaticbraininjury/prevention.html
- http://www.traumaticbraininjury.com/prevention/
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2367127/

SECONDARY PREVENTION PLAN

- Medical:
  - Neurological exam
  - Fall risk assessment
  - Assessment of medications and polypharmacy risk
- Respiratory:
  - Determine need for Oxygen or ventilator support
- Nursing:
  - Provide home health services
  - Mini mental status assessment
  - Rate patient on Glasgow coma scale
- Physical Therapy;
  - Determine ability to perform activities of daily living

ESTIMATED COSTS:

- Medical: primary care doctor copay visit can be $15-$30 or more, depending on the insurance plan.
- Respiratory: co-pays for a specialist will generally be between $30 and $50. Nursing: included in copay with a regular doctor visit
- Additional home health services to prevent TBI: "non-medical, in-home care in Louisiana averages $16 per hour."
- PT: copay visit can be $30 to $50 or more, depending on the insurance plan.
- annual life care cost without rehabilitation, $222,600; projected post-acute rehabilitation program cost, $450,000; annual life care cost with supervised home placement, $49,688; and annual life care cost with behavioral group home placement, $84,082.

REFLECTION:

- Challenges/ Barriers: finding ways to effectively communicating outside of the scheduled TeamUP meetings.
- Solutions :utilizing group messages to communicate key ideas and meet deadlines.

TEAM UP
COMPASSION, COMMUNICATION, COLLABORATION

Group 18

Cervical Spine Injury

Background Information

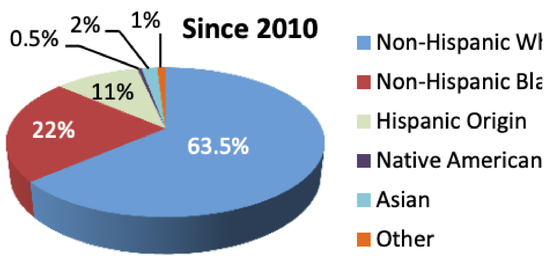
- There are roughly 54 cases per million people in the US, or around 12,500 new cases each year.
- The average age to which CSIs occur is 42 years.
- Males account for 80% of new cases.
- The current leading cause of CSI is vehicle crashes, with falls and acts of violence coming in second and third.
- The average length of hospital stay is 11 days in the acute care setting, while the length of stay in a rehabilitation setting is 35 days.
- Less than 1% of CSIs experienced full neurological recovery by hospital discharge.

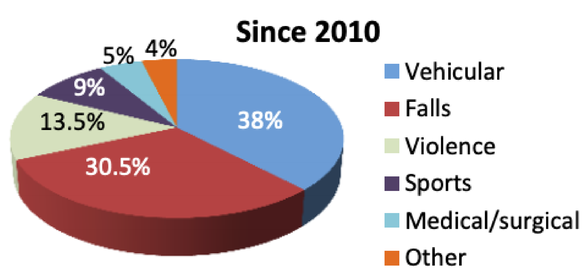
Risk Factors

- Young adult males ages 16-30
- High risk activities including contact sports
- Acts of violence
- Alcohol and drug use
- Older adults prone to falling
- Disease (metastatic cancer or arthritis of the spine)

Assessment

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Dentistry	Tooth decay screen		Oral hygiene instruction	Oral examination	Adjust tx based on patient's disabilities	D0150	$47.37
Dental Hygiene	Tooth decay screen	Topical fluoride application	Oral hygiene instruction	Adult prophy	Adjust tx based on patient's disabilities	D1110 D1208	$48.01 $19.50
Medicine	Radiologic Studies	Neurological Examination	Examine patient's ability to speak and move upper and lower extremities	Examine patient's airway, breathing, and circulation	Adjust tx based on postsurgical results and possible complications.	99205	$130.32
Nursing	Glasgow Coma Scale and Pupil Response	Neurological Examination	Patient ability to move legs, then hands, spread fingers, extend wrists, shrug shoulders	Educate about prevention of further complications (e.g. pressure ulcers)	Continuous assessment of ventilation, circulating blood volume, and patency of airways	Services incident to MD, PA, NP	N/A
3Respiratory Therapy	Ventilator initiation and management	Prevention of airway obstruction and sputum accumulation	Oral care for prevention of Ventilator Associated Pneumonia (VAP)	Arterial blood gas	Ventilator settings based on ventilatory status	94002 94003 94640 36600	$94.39 $68.19 $18.18 $31.94





Challenges & Barriers

Barriers to implementing our assessment tool would be time constraints, physical location, as well as the availability and cooperation of our patient's healthcare team. It would be difficult to implement our assessment tool because each professions' assessment might last more than 45 minutes if we want the patient to receive the proper care and attention. Ideally, all members of our healthcare team should be present in the same location to deliver the assessment tool, but members of our healthcare team tend practice in different settings and have different schedules. It would be difficult for all team members to coordinate schedules in order to see one patient in a timely manner. Establishing good communication and being willing to collaborate are essential to overcoming these barriers to our assessment plan.

IPE Sub-compentency CC8

Teamwork is an essential component of the Interprofessional collaboration. Communication between interprofessional disciplines reduces medical errors. In addition, it helps decrease patient harm events and unnecessary health care costs while increasing the quality of patient centered care that all medical professionals strive to achieve.

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National Spinal Cord Injury Statistical Center. (2016). Spinal Cord Injury (SCI) Facts and Figures at a Glance. Retrieved from http://www.cnn.com/2015/04/02/us/rescued-after-66-days-at-sea/

Sullivan, C. M. (2017). Spinal Cord and Peripheral Nerve Problems (J. Kwong & D. Roberts, Eds.). In S. L. Lewis, L. Bucher, M. M. Heitkemper, & M. M. Harding (Authors), *Medical Surgical Nursing: Assessment and Management of Clinical Problems*(10th ed., pp. 1419-1445). St. Louis, MO: Elsevier.

Chronic Obstructive Pulmonary Disease

Secondary Prevention Assessment tool for COPD

Medicine

- Full primary exam followed by a focused lung exam with a referral for chest x-ray to determine extent of COPD

Respiratory therapy

- Spirometry monitors the progression of disease and response to therapy
- CAT assessment would be administered to determine the effects of COPD on the patients overall health

Nursing

- Social history would be used to detect environmental factors that contributed to COPD
- Family history would be used to determine if genetic counseling is necessary

Dentistry & Dental Hygiene

- If the causative agent of COPD was smoking, an oral exam would be performed to determine if tobacco use caused reduced oral health

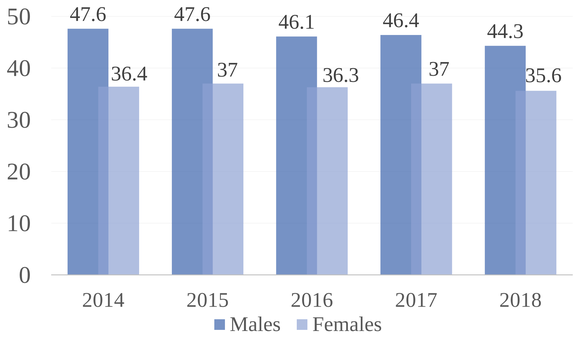
References

CDC - Data and Statistics - Chronic Obstructive Pulmonary Disease (COPD). (n.d.). Retrieved from https://www.cdc.gov/copd/data.html

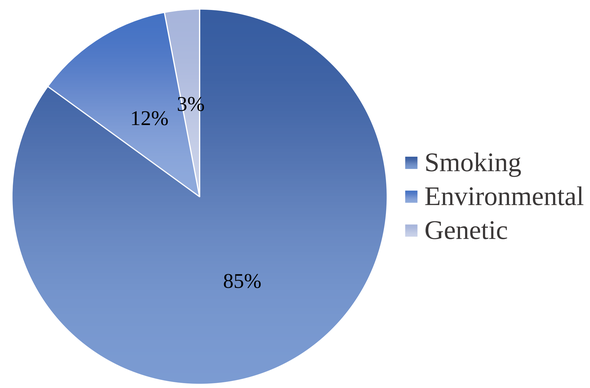
CDC - State Factsheets - COPD. (n.d.). Retrieved from https://www.cdc.gov/copd/maps/index.html

Mirza S, Clay RD, Koslow MA, et al. COPD Guidelines: A Review of the 2018 GOLD Report. Mayo Clin Proc. 2018;93:1488–1502. doi: 10.1016/j.mayocp.2018.05.026

Death Rates for COPD comparing Males and Females



COPD Risk Factors



CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

COPD consists of emphysema and chronic bronchitis. These conditions result in difficulty breathing due to a blocked airflow.

1 BACKGROUND
Chronic bronchitis causes an increase in mucus production and inflames airways, while emphysema enlarges air spaces, leading to their destruction. These diseases can lead to the development of other illnesses such as heart disease and lung cancer.

2 PREVALENCE/STATISTICS
In 2016, COPD was the third leading cause of death. More than 15 million people (6%) in the United States and more than 65 million around the world have been diagnosed with the disease, although many more are living undiagnosed.

3 SIGNS AND SYMPTOMS
Common symptoms of COPD include shortness of breath with or without exertion, excess mucus/sputum production, wheezing, fatigue, and frequent respiratory infections.

4 RISK FACTORS
Smoking tobacco is the most significant contributing factor to the development of COPD. Genetic predisposition and exposure to pollutants can also result in a diagnosis of emphysema and/or chronic bronchitis.

5 AT-RISK POPULATIONS
Specific populations at risk include people over 65 years of age, females, American Indians/Alaska Natives, smokers and former smokers, and those with a history of asthma.

Interprofessional Assessment Tool

	Assessment	Assessment	Assessment	Assessment	CPT Code & Fee
Respiratory Therapy	Spirometry	CAT assessment	Education about COPD	Smoking cessation education	94010- $36 99407- $24
Medicine	Full exam with a focused lung exam	Smoking and familial history	CAT assessment	Motivational interviewing and education	99204- $133
Nursing	Collect family and social history	Smoking cessation education	Flu and pneumococcal vaccine	Genetic testing education and referral	Services incident to MD, PA, or NP- N/A
Dentistry	Oral Examination with tooth decay screening	Fluoride education and application	Oral hygiene education		D0150- $47.37 D0191- $15 D1206- $24.29
Dental Hygiene	Tooth decay screen	Fluoride application	Oral hygiene education		Services incident to DDS- N/A

Meet Our Team

- Medicine: Harry, Mary, & Kaeli
- Respiratory Therapy: Brennan
- Nursing: Megan & Catherine
- Dentistry: Spencer
- Dental Hygiene: Lyndsey

Challenges

- Time constraints of visits
- Scheduling conflicts between professions as well as with patients
- Follow up appointments
- Referrals to other specialties that cannot be present
- Lack of communication

~

Solutions

- Organization and efficiency during visits
- Automated scheduling systems with telephone or email reminders
- Communication between each profession
- Standardization of interprofessional education in an effort to increase respect and cohesiveness to all professions

Total Assessment Price

$279.66

ASSESSMENT TOOL

Our 45 minute assessment tool for Alcohol use disorder in adults includes the following:

	Assessment	Assessment	Assessment	Comments
Medicine	Prescribe needed medications (PRN)	Physical Assessment	Order Labs: CBC Liver Enzymes Electrolytes Lipid Panels	Refer to psychiatrist for mental health needs
Nursing	Medical and family history Mental health screenings	Nutrition Assessment	Attain blood samples	Provide information on available resources (AUDIT,CAGE)
Cardiopulmonary	Echo			Screen for potential: Dilated Cardiomyopathy Heart Failure A.Fib Aortic Aneurysm Coronary Artery Disease
Dental hygienist	Patient education on oral care Oral and tooth decay screening	Fluoride education	Assess factors of excessive alcohol use	
Dentist	Oral and tooth decay screening	Fluoride education		
Psychiatrist	Diagnosis and therapy of mental health comorbidities	Substance-induced disorders of: mood anxiety psychosis personality chronic suicidality	Chronic alcohol use disorder	

Comprehensive Assessment Cost

CPT	Description	Fee Schedule
G0396	Alcohol and/or substance (other than tobacco) abuse structured assessment (e.g., AUDIT) and brief intervention, 15 to 30 minutes	$34.02 - $36.40
96127	Brief emotional/behavioral assessment (e.g., PHQ-9) for depression and anxiety	$4.52 - $6.97
80061	Lipid profile	$16.53
99201	Level 1 patient visit (blood pressure check included)	$25.18 - $36.48
D0150	Comprehensive dental exam	$47.37
80053	CMP	$13.04

Multidisciplinary approach to being aware of alcohol use and its associated issues is best in preventing complications from alcohol use.

Implementation of Assessment Tool Challenges

- ★ Poor communication between healthcare personnel and patient
  - Solution:
    - Accessibility to proper documentation needed to guide diagnosis and treatment
    - Up-to date on patient's contact and demographic information
- ★ People not telling the truth on survey
  - Solution:
    - Patients would be more honest on paper screening
    - Motivational interviewing
    - Open non judgemental approach
- ★ Alcohol use disorder is associated with poor outpatient adherence.
  - Solution:
    - Recommendation to different treatment programs and support groups
    - https://www.therecoveryvillage.com/local-rehab-resources/louisiana/new-orleans/#gref

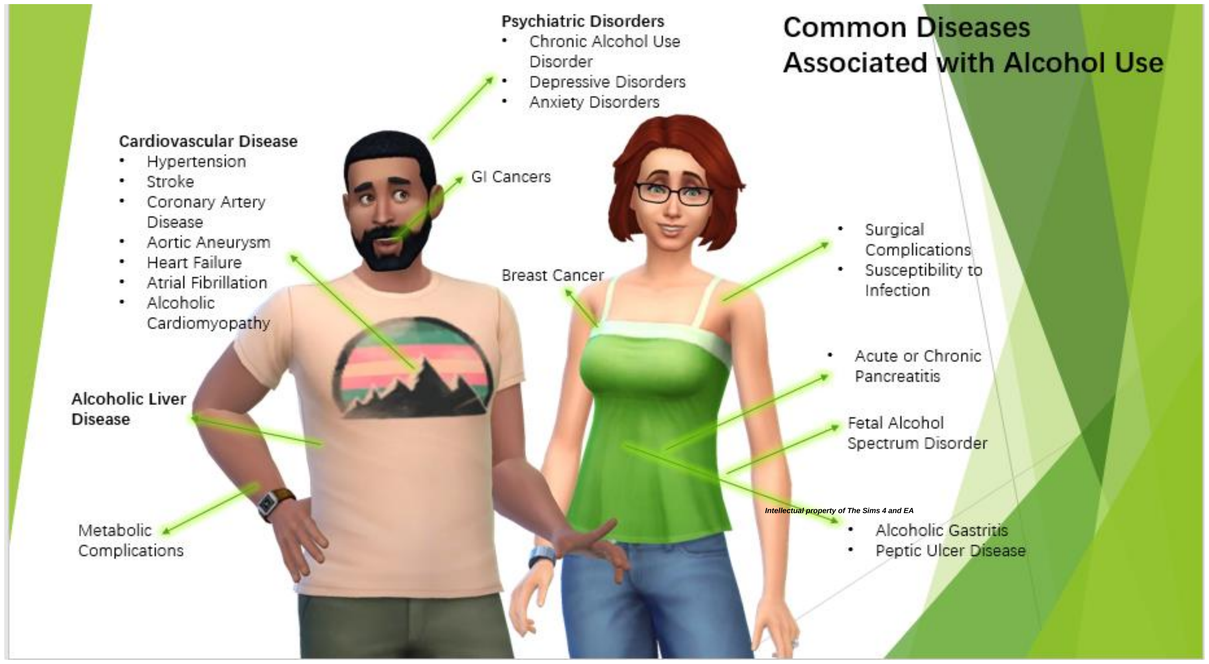
Primary & Secondary Prevention

Primary Intervention includes:
- ★ Teaching and education in the community or during wellness visits with all clients of excessive alcohol intake and the dangers associated with it.

Secondary Intervention includes
- ★ Early diagnosis through AUDIT, CAGE, etc screenings and prevention of worsening effects of alcohol.

Tertiary Intervention includes:
- ★ Support groups, therapy, rehabilitation centers and treatment of comorbidities (liver disease, anemia, nutrient deficiencies) when the client is compliant with the care.

ALCOHOL USE DISORDER



Alcohol use disorder defined by DSM-5 criteria is a highly prevalent, highly comorbid, disabling disorder that often goes untreated in the United States.*

Diagnostic and Statistical Manual IV Criteria

The presence of at least 2 of these symptoms occurring within a 12-month period indicates an alcohol use disorder (AUD):
- Alcohol is often taken in larger amounts or over a longer period of time than intended.
- There is a persistent desire or unsuccessful effort to cut down or control alcohol use.
- A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.
- Craving, or a strong desire or urge to use alcohol.
- Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home.
- Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
- Important social, occupational, or recreational activities are given up or reduced because of alcohol use.
- Recurrent alcohol use in situations where it is physically dangerous.
- Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
- Tolerance as defined by either of the following: a) a need for markedly increased amounts of alcohol to achieve intoxication or desired effect, b) a markedly diminished effect with continued use of the same amount of alcohol.

The severity of the AUD is defined as:
Mild: 2-3 symptoms.
Moderate: 4-5 symptoms.
Severe: 6 or more symptoms.

AUDIT QUESTIONNAIRE

A. Alcoholic beverage consumption frequency ?
(0) Never
(1) 1 time / month or less
(2) 2 - 4 times / month
(3) 2 à 3 times / week
(4) 4 times or more by week

B. If you consume at given days alcoholic beverage, estimate the number of drinks of these days
(0) 1or 2
(1) 3 or 4
(2) 5 or 6
(3) 7 or 8
(4) 10 or more

C. Does it happen on certain occasion to drinki more than 6 times alcoholic beverage or more ?
(0) never
(1) less than one time/ month .
(2) each month
(3) each week.
(4) daily or almost daily.

D. How many time during this past year, have you felt not to be able to stop drinking, once started it ?
(0) never
(1) less d'1 time/ month
(2) each month
(3) each week
(4) daily or almost daily.

E. Combien de fois, l'année écoulée, avez-vous dû renoncer à vos simples obligations de vie à cause de l'alcool ?
(0) never
(1) less d'1time/ month
(2) each month
(3) each week
(4) daily or almost daily.

F. How many time during this past year, did you needed to take asmall drink early in the morning for starting after heavy drinking the day before ?
(0) never
(1) less d'1 fois
(2) each month
(3) each week
(4) daily or almost daily.

G. How many time during this past year, have you felt guilty or regret after having drinking ?
(0) never
(1) less d'1time/ month
(2) each month
(3) each week
(4) daily or almost daily.

H. How many time during this past year, have you been unable to remember the day after what happened the day before, in the evening because you have been drinking ?
(0) never
(1) less d'1time/ month
(2) each month
(3) each week
(4) daily or almost daily.

I. Have you harmed or been harmed by yourself or other because of your drinking ?
(0) Non
(2) yes, but not this past year
(4) yes, this past year

J. Has one of your close, relative, friend, a physician or other health actor has shown you concern about your alcohol consumption or invite you to lower it ?
(0) No
(2) yes, but not this past year
(4) yes, this past year.

Sum all your points :

Problem with alcohol if 8 - 10 points or more.

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Group 21: Interprofessional Assessment of Amyotrophic Lateral Sclerosis

Evan Courville, Grant Gonzalez, Bradley Jordan, Jessica Le, Danielle Pierce, Julia Poynter, Emily Robért, Farryn Wallow

Background

Amyotrophic Lateral Sclerosis (ALS), also known as Lou Gehrigs Disease, is an extremely rare neurological disorder characterized by the progressive degeneration of motor neurons. Approximately 90% of all ALS cases are considered sporadic, whereas the remaining 5-10% of cases result from inheritance with a majority of familial mutations resulting at C9ORF72.[1,3]

Symptoms Initial onset of symptoms typically include difficulty performing simple motor tasks and irregular gait which progress into limb fasciculations, stiff muscles, atrophy, slurred speech, and dysphagia and utlimately result in immobility, apnea, and death.[1,2,3] More than 14% of patients with the inherited C9ORF72 mutation typically have frontotemporal dementia.[4]

Clinical Manifestation Clinical diagnosis involves a range of neuroimaging scans, MRI's, nerve conduction study, and laboratory tests to refute the possibility of any other diseases that can cause ALS-like symptoms.[1]

Risk Factors In a multigenetic registrar cohort, siblings of ALS patients have 17 times the risk of developing ALS (95%CI 8.1-30.4), and children of ALS patients have 9 times the risk of developing ALS (95%CI 6.2-10) compared to spouses and other familials.[3] Other possible risk factors include 44% increased risk among former smokers (RR: 1.44, 95%CI: 1.23-1.68), 42% increased risk among current smokers (RR: 1.42, 95%CI: 1.07-1.88), and a 2.47-fold increased risk among persons with formaldehyde exposure (RR: 2.47, 95%CI: 1.58- 3.86). Men and women are equally likely to develop ALS with the inherited C9ORF72 mutation.[4]

Epidemiology ALS patients with the C9ORF72 mutation did not differ significantly from ALS patients without the mutation in age at diagnosis, race, or site of onset.[4] Incidence rates range from approximately 2-6 per 100,000 in developed countries.[4] Disease onset typically occurs between 40-70 years of age with the average age of onset being 55 years old.[3]

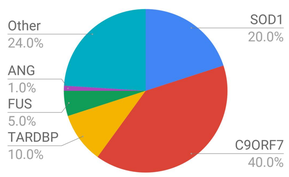


Figure 1. Percentage of familial genetic mutations among ALS cases[4]

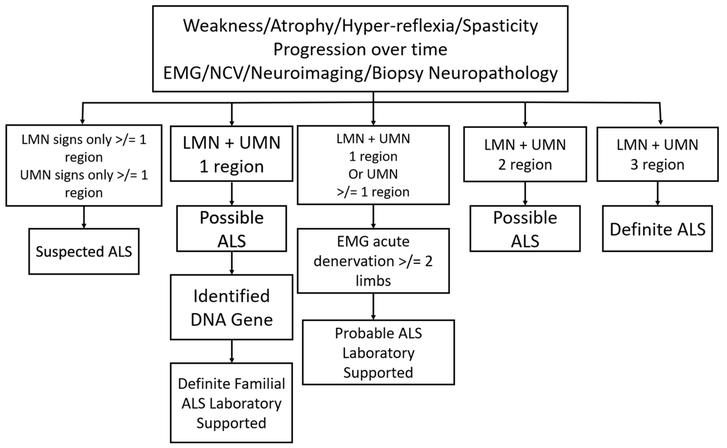
Assessment Tool

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Cardio-pulmonary Science	Spirometry (repeat every 3 months)	Sleep Study	Noninvasive Ventilation (NIV)			94010 95783 94660	CCR CCR CCR
Nursing	Muscle Weaknes/ Skin Statuss	Urinary and Bowel Function	Nutritional Needs	Respiratory assessment	Screening not within scope of practice - referrals to PT, OT, Speech Therapy, and Respiratory Therapy	Screens for SLP, PT, OT – not within normal limits triggers a referral	N/A
Medicine	Electro-myography	MRI (location based on weakness)	Nerve Conduction Study	Comp. Metabolic Panel		95860 Code Varies 95907 8 0053	CCR CCR CCR $11.74
Public Health	Flu Vaccine						N/A
Dentistry	Tooth Decay Screen	Fluoride Education	Oral Hygiene Instructions	Oral Exam and Cancer Screening		D0150	$43.37
Dental Hygiene	Prophylaxis-Adult	Topical Application of Fluoride				D1110 D1208	$48.01 $19.50

Barriers/Solutions

- Difficulty of making diagnosis of ALS. Many other diseases could be causing similar symptoms. Careful examination of patient is needed (see flowchart).
- Spirometry: Loss of muscle strength can impact measurements. Using more consistent measurement between FVC and SVC can help.[5]
- Dental/Hygiene: Dysphagia will make appointments more difficult. Breaks throughout and the use of bite block while working in a semi-supine position will improve the patient's experience.[6]

Diagnostic Flowchart



CC8 Reflection

When all health care professionals work together as a team the result is positive patient outcomes and enhanced patient satisfaction. When dealing with complex diseases, such as ALS, teamwork among healthcare professionals enhances the care provided to each patient. When developing our 45 minute interprofessional assessment tool each member of the team was able to verbalize what their profession would typically assess when approaching the care for a patient with ALS. This collaboration provided learning opportunities and a different point of view to other individuals in each health care profession. Working as a team to develop the assessment tool enhanced each team member's knowledge of the roles of other health care professions. It provided a sense of appreciation for other health care professional's roles and showed each team member the value of each health care profession.

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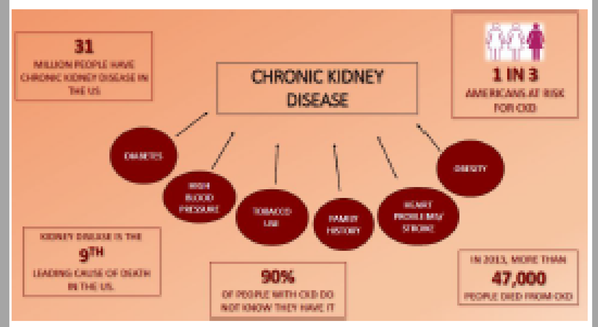

What are my risk factors?

Diabetes
HTN
Increased age (>60 yr)
Smoking & drinking
Low birth weight
Cardiovascular disease
Family history of CKD
Exposure to nephrotoxic drugs
Obesity
African American or Native American race

How can I prevent this?

Achieve optimal glycemic control
Yearly protein albumin test
Maintain BP in normal ranges (medication use if necessary)
Prevent kidney injury

Did you know?

ESRD prevalence is 3x greater in African Americans, 1.4x greater in Native Americans and 1.5x greater in Asian Americans as compared to Caucasians.

Every year kidney disease is the cause of more deaths than breast and prostate cancer.

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LSU Health NEW ORLEANS

Chronic Kidney Disease

LSU Health NEW ORLEANS

Team 22: Hayley Redrick, Delaney Sheehan, Laura Mullen, Kaylyn Poleto, Tucker Rudisill, Tabassum Lodhi, Katie Richard

Background

Chronic kidney disease (CKD), as defined by the National Institute of Diabetes and Digestive and Kidney Diseases, is any condition that causes reduced kidney function over a period of time. Chronic kidney disease may worsen over time and lead to end-stage kidney (or renal) disease (ESRD). There are 5 stages of CKD that correlate with decreasing glomerular filtration rate (GFR).

Stages of Chronic Kidney Disease of all Types		
Stage	**Qualitative Description**	**Renal Function (mL/min/1.73 m²)**
1	Kidney damage-normal GFR	≥90
2	Kidney damage-mild ↓ GFR	60-89
3	Moderate ↓ GFR	30-59
4	Severe ↓ GFR	15-29
5	End-stage renal disease	<15 (or dialysis)

	Assessment	Assessment	Assessment	Assessment	Assessment	Assessment	Codes	Fees
Medicine	Urinalysis	Blood work including CBC, serum creatinine/BUN, eGFR, serum Ca and PO4	Blood pressure	Family history of CKD	Bone mineral density scan	Discuss transplant options	I12.9, 8100,	$22, $26, $125 DEXA, $260,000 transplant
Nursing	Blood pressure	Family history of CKD	Dialysis	Information on HTN management	Information on diabetes management	Physical examination and medicine discussion	90999, 90935	N/A
Dentistry	Oral examination	Teeth cleaning	Discussion of smoking cessation	Education about potential complications	Medication and history assessment	Blood work – CBC prior to dental work	D0120	$50-80, $127
Dental Hygiene	Teeth cleaning	Discussion of smoking cessation	Medicine and history assessment				D0120	N/A
Physical therapy	Strength training	Fall risk assessment	Bone mineral density scan				97110	$50-200
Cardiac sonography	Blood pressure	Echocardiogram	Vascular ultrasound				93306	$2000
Public health	Prevention of obesity	Information on diabetes management	Information on HTN management					N/A
Dietician	Dietary planning	Diet monitoring	Patient education for a special diet				97802	$100-200
Psychologist	PHQ-2 and 9 Depression screen	Palliative care discussion					G0444	$75-150
								= $2450 - $2725

Normal Kidney

End Stage Kidney

Challenges and Barriers to Assessment Tool Implementation

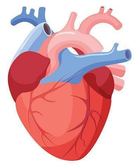
Some challenges or barriers to receiving health care from all of these health care professionals would be living in an underserved area, financial obstacles, low health literacy about their disease, and bad prior health care experiences. Another problem would be poor communication between healthcare providers leading to duplications of tests or polypharmacy. We can overcome these challenges by educating patients on their condition, helping the patient access healthcare resources available to them, and focus on improving our relationship with the patient and their other healthcare providers.

IPEC Sub-Competency CC8 Acknowledgement

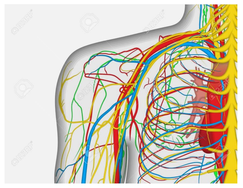
The IPEC sub-competency CC8 highlights importance of strong teamwork in patient-centered care and population health programs and policies. In development of this assessment tool, communication among our various programs was key. Each health care professional brought a unique perspective and profession-specific expertise to inform its development. Representatives from cardiac sonography, dentistry, dental hygiene, nursing, and medicine needed to come together to make this patient-centered tool.

Etiologies of Syncope

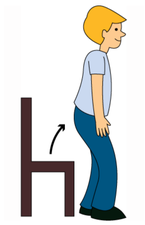
Cardiogenic



Vasovagal



Postural



- Polypharm (orthostatic hypotension)
- Peripheral artery disease
- Past history of dizziness

Vasodepressor Syncope is the Most Common Emergency in the dental office (typically caused by anxiety).

Dizziness/Vertigo in Geriatric Adults >65yo

Presented by TeamUp Group 24

	Assessments	CPT Codes	Fee Schedules
Dentistry & Dental Hygiene	• Hospital Call • Unspecified Adjunctive Procedure, By Report	• D9420 • D9999	• $106.18 • Fee May Vary
Nursing	• no billable code, services inicident to MD, PA, NP		
Cardiovascular Sonography	• Echocardiogram • Carotid duplex ultrasound	• 93303 • 93895	• $141.62 • $76.71
Medicine	• Behavioral Assessment for 15 mins • Immunizations: TdaP, Influenza, Pneumovax, Herpes Zoster • Immunization administration, IM injection • Labwork: Vitamin D, CBC, CMP • Vision screen • Hearing loss assessment	• 97151 • 90715, 90686, 90732, 90736 • 90471, 90472 • 82306, 80053, 80047 • 92004 • 92557	• $25 • $32.34, $53.37, $107.75, $212.67 • $14.70, $9.13 • $32.89, $11.74, $10.72 • $85.26 • $30.32

Assessment Challenges/Barriers

- Communication (different record system)
- Cost
- Patient demographics (education, transportation, access, compliance, inaccurate self-reporting & recall)

Possible Solutions to Overcome Challenges/Barriers

- Facilitate interprofessional communication
- Decrease waste and duplicated services
- Spend time educating patient and connecting them to resources

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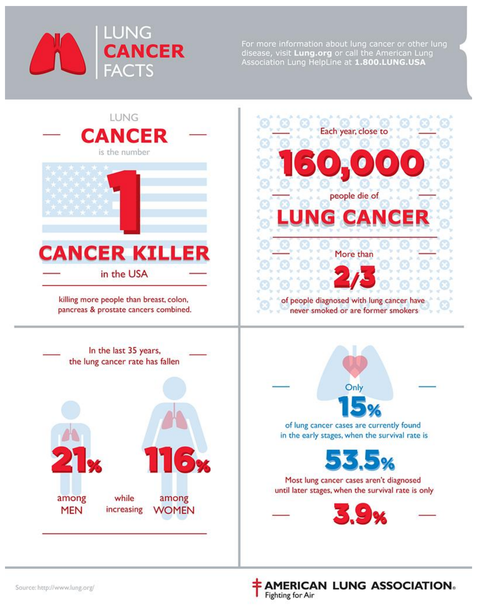
Lung Cancer

History of Lung Cancer/Statistics:

Number one cause of cancer in America

Risk Factors:

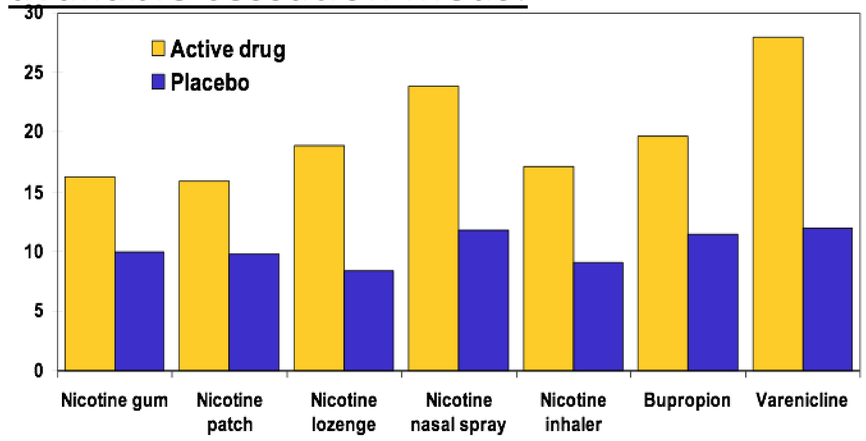
1) History of smoking
2) Second hand smoking
3) Family history of lung cancer



Primary Prevention:

- Assist screening tool (Medicine)
- Motivational Interview (Dental)
- Anti-smoking campaigns (Public Helath)
- 5 R's and 5 A's of Smoking Cessation (Respiratory Therapy)
- Cost- nicotine patch- 25-40$ (insurance?)
- Know the risk factors and presentation to recognize who and when to screen (CC8)
- Annual screening tool (Nursing)
- CPT code- 99241 (medical evaluation)
  - Cost ($34.14)

Long Term (>6 months) quit rates for available cessation meds:



Secondary Prevention:

- Medicine- low dose CT/needel biopsy
- Cost- $334

References:

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Pros: cost effective, decrease risk for other co-morbities

Barriers: 50% relapse, not wholistic, insurance will only cover so much

Solutions:making it more inclusive, community outreach

Total cost of Primary Evaluation:
$34.14 (+$25-40 with patch)

Total cost of Secondary Evaluation (Includes primary):
$368.14

Pros: Early diagnosis with asymptomatic illness

Barriers: false positives, radiation exposure, time consuming, emotional anxiety, incidental findings

Solutions: Risk-benefit evaluation before performing.

Assessment

Sonography

Perform an Exercise Stress Test on a treadmill to measure how the hearts responds to physical exertion

Occupational Therapy

Utilize wellness programs to increase endurance, strength, overall health, and wellbeing

Help with medication management and compliance by making sure the patient has a reminder system for taking scheduled medications

Nursing

Assess vital signs especially blood pressure, capillary refill, and auscultating the heart

Ask about family history of heart disease or heart attack

Evaluate patient's social history to determine the modifiable risk factors affecting the patient's health status, i.e. Smoking, obesity, diet, and physical activity

Medicine

Comprehensive health exam

Order labs for testing- fasting blood glucose, CBC, lipid profile, serum creatinine with eGFR, serum

Dental/Dental Hygiene

Aware of current medications especially anti-hypertensive and potential drug interactions

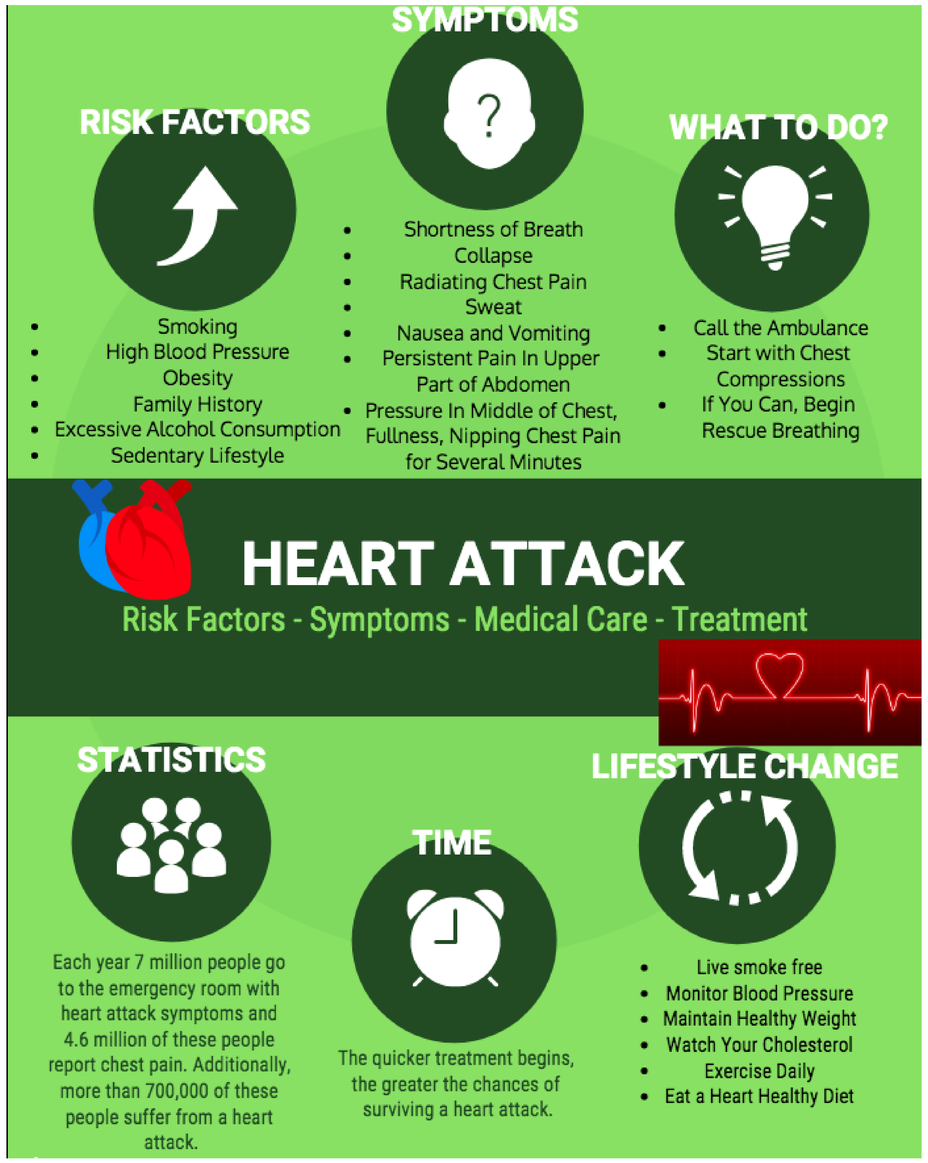
Managing oral care by reviewing medical history and ensuring all information is up to date

Special accommodations are made for patient with cardiovascular risks such as heart attacks. Reducing stress during dental procedures is important.

Heart Attack

Background

Myocardial infarction, or MI (commonly known as a "heart attack") occurs from damaged or death of the heart muscle. An MI is caused from a lack of blood flow to the heart due to a blockage. This blockage can be caused by a buildup of fat, cholesterol, or other substances. There are numerous risks that can put one at risk for a heart attack, such as: age, sex, family history, and race. Various signs and symptoms of a heart attack can include chest pain, shortness of breath, nausea, feeling tired, and palpitations. To diagnose a heart attack, an emergency care team is needed to evaluate one's symptoms and run further testing. An ECG (also known as EKG or electrocardiogram) can show how much damage has occurred to your heart muscle and where it should be monitored. Once a heart attack is diagnosed, the treatment will begin immediately. To prevent heart attacks, the goal is to keep your heart healthy by visiting your doctor, changing lifestyles, and taking any precautionary medications prescribed.



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CPT code	Fee Schedule
80061, 80053, 83036, 82962, 99212, 99213, 99214	$68.00, $179.00, $61.00, $49.00, $40.00
D0191	$148.00
D1110, D1330	$127.00
93351	$4,361.00

Total= $5,033

Challenges

- Documentation
- Efficiency
- Vicinity
- Communication

Solutions

- Multi-disciplinary clinics
- Interprofessional charting software
- IPE training
- Accurate documentation and accessibility

TEAM UP™ Team 27

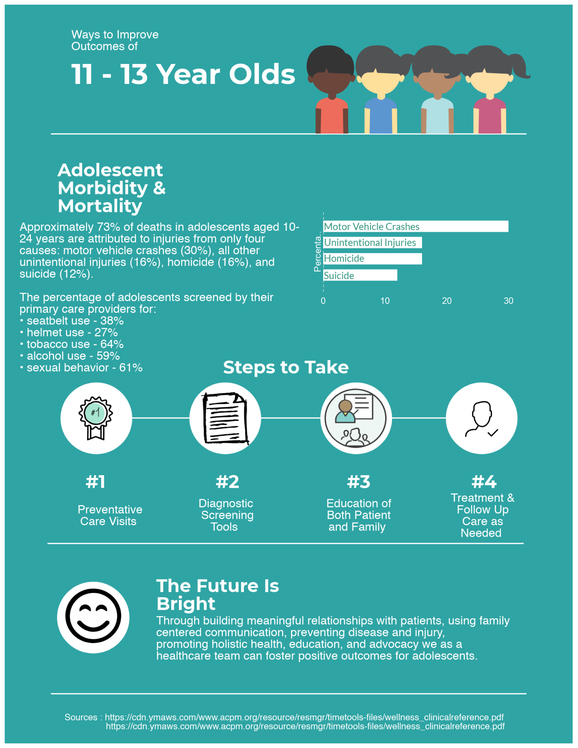
COMPASSION, COMMUNICATION, COLLABORATION

Background Information

Patients ages 11-13 are still very dependent upon a parent for medical care and fostering of positive health habits. At the same time, a child's need for independence increases during this period. Many of the causes of death at ages 11-13 are avoidable through positive safety habits and regular exams with healthcare providers. A collaborative effort between parent, child, and a team of healthcare providers can help reduce cases of disease or mortality.

Challenges

- Many children begin acting rebellious, and parents may have trouble enforcing proper safety or hygiene habits.
- Due to hormonal, mental, and environmental changes, children may experience depression or anxiety that could lead to suicide.
- If a parent is not invested in caring for their child, there is a limit to what a healthcare team may accomplish.



Age Group 11-13

	Assessment	Assessment	Assessment	CPT Code
Medicine	Physical (Wellness) Exam including Growth and BMI, BP, skin and back assessment, assess sexual maturity rating	Screenings: vision, hearing, TB risk assessment, anemia, STIs if sexually active, pregnancy, fasting lipid profile	Brief Screener for Alcohol, Tobacco, and Other Drugs (BSTAD)	Periodic comp exam-99394, Vision screening-99173, Hearing screening-92551, TB Skin Test-86580, Alcohol or substance abuse screening-99408
Nursing	Immunizations: Tdap, Meningococcal Vaccine, HPV, Flu vaccine (annually), TB skin test if at high risk	Teen Functional Assessment (TeFA), PHQ-9 for Adolescents: Screening for Depression	Unintentional Injury Safety Assessment	Immunizations-90460, Tdap-90700, Meningococcal-90734, HPV-90651, Flu Vaccine-90630, Behavioral/emotional assessment-96127
Registered Dietician	Home nutritional assessment	Nutritional counseling and education	Set 1 or 2 nutritional goals	Nutritional assessment-97802, Nutritional counseling-97803
Dentistry/ Dental Hygiene	Physical exam/oral cancer screening, Full Mouth X-Rays for caries assessment and pathology	Diet assessment, recommendation of less cariogenic diet; Oral hygiene instruction	Social history, drug / e-cig usage/ smoking assessment	Comprehensive exam-D0150, Diet/caries risk assessment-D0601-0603, Drug/smoking counseling-99408
Public Health	Educational programs, community outreach to identify and reduce risky behaviors.		Home and environmental health assessment.	Environmental intervention for medical purposes-90883

Category	Parent	Patient
MVC/Other Land transport accident	1. Does your child wear a seatbelt? 2. Does your child wear a helmet when riding a bike, etc.?	1. Do you wear a seatbelt? 2. Do you wear a helmet when riding a bike, etc.?
Unintentional Drowning	1. Does your child know how to swim? 2. If no, are appropriate safety measures in place?	1. Do you know how to swim? 2. If no, is an adult present with you when you are around water (i.e. pool, lake, pond)?
Unintentional Poisoning	1. Does your child have access to household chemicals, medications, etc.? 2. Are these products safely and appropriately stored in your home?	1. Do you know where the medicines and cleaning supplies are kept in your home? 2. Are you able to access these?
Unintentional Discharge of a Firearm/ Homicide/ Suicide	1. Is there a gun in the home? 2. Is it safely and appropriately stored?	1. Is there a gun in your home? 2. Can you access it?

IPEC sub-competency CC8

Lessons Learned in the Development of our Assessment Tool:

In the development of our assessment tool for screening for the leading causes of death in preadolescents (ages 11-13), our team served as a reflection for how important teamwork is in implementing patient-centered care with population health programs. By utilizing a team-based approach to designing our screening tool, we demonstrated that patient care is more thorough and beneficial for the patient when different professions with different perspectives and roles collaborate. Examples of our collaborative effort include but are not limited to:

- **Using technology (i.e. GroupMe®, texting, Google Docs®) to communicate specific contributions from one's field when we were away from our monthly workshops**
- **Delegating roles to group members with the most experience in a specific task (i.e. nursing with administration of optimal assessment tools, dentistry with detailed oral exam procedures, etc.) and having them present those ideas in our face-to-face interactions to ensure all members understood each profession's contribution**
- **Practicing the collaborative skills we have learned in Team Up such as listening and contributing in one's professional capacity during the design of the tool**
- **As featured in our presentation, we ensured all members of the interprofessional team were represented in the design of our tool with their professions' roles being clearly defined**

By including all our groups' professions (dentistry, dental hygiene, medicine, nursing, public health) in the design of our screening tool, we have successfully created a 45-minute assessment tool that screens preadolescents for the leading causes of mortality for their age group. Without our collaborative effort across multiple fields, we would likely have missed risk factors that could have been addressed with the patient and the patient's parents before any adverse events could occur. We hope our tool can serve as a foundation for interprofessional collaboration in the betterment of preadolescents' preventative healthcare.

References

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- https://cdn.ymaws.com/www.acpm.org/resource/resmgr/timetools-files/wellness_clinicalreference.pdf
- https://www.cdc.gov/healthyschools/obesity/facts.htm
- https://www.nami.org/getattachment/learn-more/mental-health-by-the-numbers/childrenmhfacts.pdf
- https://cdn.ymaws.com/www.acpm.org/resource/resmgr/timetools-files/wellness_clinicalreference.pdf

Primary and Secondary Preventions

PRIMARY:

❖Dental/Dental hygiene:
- Often the first clinicians to encounter these conditions during routine intra and extra oral screenings.
- Intraoral screenings for lesions related to oropharyngeal cancer (which can be associated with alcoholism and STDs)
- **Intra and extra oral screenings done minimally every 6 months**.

❖Primary Care Physicians:
- 45% of those who commit suicide have visited their primary care physicians within one month of their death.
- Primary care physicians should review each patient's personal and family history for suicide risk factors and **screen patients for suicide risk factors** with a brief, standardized questionnaire screening tool.
- Physicians should screen their patients for **alcohol misuse with the CAGE Questionnaire** and employ motivational interviewing for high risk patients.
- The USPSTF recommends **screening for STDs** in adults and adolescents **ages 15-65**

❖Nursing: Involved in health promotion such as health screenings, assessing risk factors, and applying **preventative measures such as immunizations**.

SECONDARY:

❖Public Health: **Performing population – level research** to inform policies and educational campaigns.

❖OT: Educated to provide services which support mental and physical health. Occupational therapy practitioners **provide services in community settings such as community mental health centers**.

Referral/Consultation Strategy

➢ Occurs after primary and secondary screening

➢ Referral/consult system will be based on what was brought to light after the screening process.

➢ Each healthcare field involved in the screening should have a group of professionals available to the patient.

- For our project that would include:
  - Physician (GP and Gyno or urologist for sexual health)
  - Dentist and Dental hygienist
  - Psychiatrist (for depression and substance abuse needs)

Challenges:

- Cost of healthcare
- Time restraints for screening visits
- Lack of commitment or follow up
- Males at higher risk of suicide, less likely to ask for help
- People with alcoholism may not be aware of or think they have a problem
- Embarrassment for people with STD risk

Solutions:

- Provide programs that offer safe environments and keep people motivated by letting them know they are not alone (AA meetings, groups for people struggling with depression, etc.)
- Community out-reach programs which provide informational packets/brochures about mental health, alcoholism, STDs
- Implement better school programs discussing STDs
- Insurance/incentive for follow ups
- Build good patient-healthcare relationships to make sure they feel comfortable

Young adults 18–21: Suicide, Alcohol Consumption, STD's

Background: Suicide, Alcohol Consumption, STD's

- **Suicide is the third leading cause of death in this age group**
- **More young people survive suicide attempts than actually die**
- **Warning signs include: withdraw, anger or mood changes, increased substance abuse, feelings of hopelessness**

- **Heaviest drinking patterns, including binge drinking, occur in young adults**
- **Over 45% of young adults binge drink at least once a month**
- **Alcohol is a leading contributor to vehicle-related deaths in young adults**

- **Young people acquire half of all new STDs**
- **Young adults are at a higher risk of acquiring STDs, including chlamydia, gonorrhea and syphilis**
- **Young people are at a higher risk of acquiring STDs based due to a combination of biological, behavioral, and cultural reasons**

Risk Factors

- **Family history of suicide**
- **History of depression or other mental health issues**
- **Incarceration**
- **Alcohol and drug use**
- **Groups at higher risk: women (for attempts), men (for completion), Native Americans**

- **Demographics at highest risk for risky alcohol consumption: young men, whites and Native Americans, and non-college educated young adults report high rates of drinking**

- **Demographics at highest risk for acquiring STDs: young men, whites and Native Americans, and non-college educated young adults report high rates of drinking**

Prevention Efforts

- **Suicide awareness education in schools and communities**
- **Support programs**
- **Counseling and clinical interventions**
- **Crisis hotlines**
- **Increased knowledge of risk factors and warning signs**

- **Alcohol control policies that influence the availability of alcohol and the messages allowed in advertisements**
- **Lowering the blood alcohol content (BAC) for young drivers**

- **Comprehensive sex education offered in schools and universities**
- **Ensuring young adults have access to condoms and other forms of affordable contraceptives**

Resources & References

Suicide Prevention Resource Center: https://www.sprc.org/
Alcohol Safety: https://www.alcohol.org
CDC STD website: https://www.cdc.org/std

Suicide Prevention Lifeline number: 1-800-273-TALK (8255).
Alcohol Abuse hotline: 1-866-692-5058
CDC National STD hotline: 1-800-232-6348

1. Centers for Disease Control & Prevention. (2017). Suicide Among Youth. Retrieved from https://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/SuicideYouth.html.
2. National Institute of Alcohol Abuse and Alcoholism (2006). Young Adult Drinking. Retrieved from https://pubs.niaaa.nih.gov/publications/aa68/aa6/
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Assessment and Cost Evaluation

Suicide risk assessments:

- PHQ-2 (Personal Health Questionnaire)
  Used in the primary care setting to screen for depression
- PHQ-9
  Extended questionnaire to diagnose and monitor severity of depression
- SAFE-T
  Suicide Assessment Five-Step Evaluation and Triage

Alcohol consumption assessments:

- Alcohol Screening and Brief Intervention for Youth: a Practitioner's Guide
  NIAA guide quick screen for youth at risk for alcohol-related problems
- AUDIT (Alcohol Use Disorders Identification Test)
  Developed by the WHO and correctly categorizes 95% of people into either alcoholics or non-alcoholics; used in primary care setting
- SBIRT
  Used by public health professionals in community settings

STD risk assessments:

- Sexual Risk Assessment and Risk Factors for Sexually Transmitted Diseases
  Developed by the California Department of Public Health to assess STD risk
- Sexually Related Infections Risk Assessment
  Assessment for women from Aria Healthcare

Assessments	CPT codes	Fee schedule
PHQ-2	Not billable	N/A
PHQ-9	96127	$5.50
SAFE-T	90791	$117.68
Alcohol Screening and Brief Intervention for Youth	Not billable	N/A
AUDIT	99408 (<30 min), 99409 (>30 min)	$33.41 $65.51
SBIRT	99408 (<30 min), 99409 (>30 min)	$33.41 $65.51
Sexual Risk Assessment and Risk Factors for Sexually Transmitted Diseases	99201	$43.69
Sexually Related Infections Risk Assessment	99201	$43.69

CC-8 Competency

Teamwork is integral for effective patient-centered care and population health programs and policies. Teamwork and collaboration from clinical and non-clinical professionals ensures that patients have improved safety, satisfaction and health quality outcomes, medical errors can be prevented, and health care processes are more efficient. There are a variety of evidence-based tools and programs available that are aimed at educating and training effective healthcare teams. For example, the Agency for Healthcare Research and Quality (AHRQ) and the U.S. Department of Defense has developed the TeamSTEPPS program (Team Strategies and Tools to Enhance Performance and Patient Safety), which utilizes more than 25 years of scientific research that has been conducted on teams and team performance. The program focuses on improving four teamwork competencies: communication, leading teams, situation monitoring and mutual support. TeamSTEPPS's website (https://www.ahrq.gov/teamstepps/index.html) provides no-cost access to a variety of resources, including trainings, webinars, and other materials.

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Interprofessional Assessment | Population Aged 22-29
Grand Rounds Poster Presentation | Team Up Group 30

Alexandra Côté, Madeline Horn, Brandon Kent, Madeleine Rawls, Hayes Robert, Rebecca Tatum, Kailey Unger, Daniel Vince

Louisiana State University Health Sciences Center, New Orleans.

LSU Health NEW ORLEANS School of Medicine

TEAM UP commit to COMPASSION, COMMUNICATION, COLLABORATION

Assessment Plan

45 minute assessment:

1. Patient history (nurse) *5 minutes*
2. Stage of development, growth and development (OT, PT, Nurse) *8 minutes*
3. Ask about depression, home life, support system (religion) (nurse, doctor) 7 *minutes*
4. Environment, schooling, income, insurance, education (OT, nurse) *7 minutes*
5. Physical assessment: general appearance, vitals, teeth, measurements (height, weight, head circumference, blood sugar level) (nurse, doctor, dental) *8 minutes*
6. Level of consciousness, fine and gross motor skills, seizures, pupil size (nurse, doctor) *10 minutes*

Total cost: $303.59 – 2,208.59

Note about Team Reflection

During the two years of Team Up, our team has worked hard to be successful. Two areas where we feel we have excelled have been communication and conditions. Throughout the program, we used various platforms (eg GroupMe, Google Drive) to discuss, share feedback, and collectively create and develop our projects. Sharing resources and contributing individual cultural values during meetings are ways our team excels in fostering favorable conditions. Our members sought to respect each other's opinions that we shared during our meetings. We enjoyed working together and getting to know each other's professions.

Background and Infographic: Age 22-29

5 Leading Causes of Death by Age Group, United States; Zoom in on unintentional deaths age group 15-34; 2016

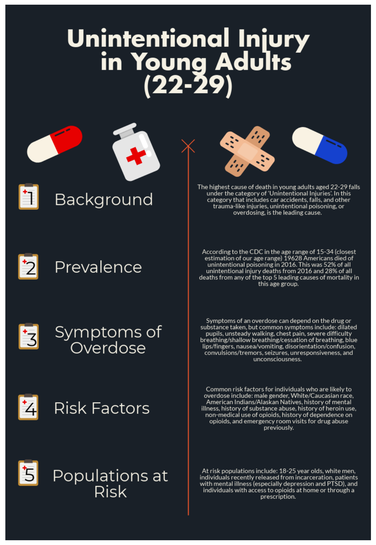
	Age Groups						
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44
1	Congenital Anomalies 4,816	Unintentional Injury 1,261	Unintentional Injury 787	Unintentional Injury 847	Unintentional Injury 13,895	Unintentional Injury 23,984	Unintentional Injury 20,975
2	Short Gestation 3,927	Congenital Anomalies 433	Malignant Neoplasms 449	Suicide 436	Suicide 5,723	Suicide 7,366	Malignant Neoplasms 10,903
3	SIDS 1,500	Malignant Neoplasms 377	Congenital Anomalies 203	Malignant Neoplasms 431	Homicide 5,172	Homicide 5,376	Heart Disease 10,477
4	Maternal Pregnancy Comp. 1,402	Homicide 339	Homicide 139	Homicide 147	Malignant Neoplasms 1,431	Malignant Neoplasms 3,791	Suicide 7,030
5	Unintentional Injury 1,219	Heart Disease 118	Heart Disease 77	Congenital Anomalies 146	Heart Disease 949	Heart Disease 3,445	Homicide 3,369

Data Source: National Vital Statistics System, National Center for Health Statistics, CDC.
Produced by: National Center for Injury Prevention and Control, CDC using WISQARS™.

Unintentional injuries breakdown

Rank	15-24	25-34
1	Unintentional MV Traffic 7,037	Unintentional Poisoning 14,631
2	Unintentional Poisoning 4,997	Unintentional MV Traffic 7,010
3	Homicide Firearm 4,553	Homicide Firearm 4,510
4	Suicide Firearm 2,683	Suicide Firearm 3,298
5	Suicide Suffocation 2,100	Suicide Suffocation 2,643

In age group 22-29, the 5 leading causes of death are unintentional injury, suicide, homicide, cancer and heart disease. Unintentional poisoning accounts for most deaths from unintentional injury.



Interprofessional assessment tool

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Nursing	SAFE-T (Suicide Assessment Five-Step Evaluation and Triage)	Genetic Testing	BMI plot	Obesity prevention	Positive for CDKN2A Melanoma Gene	Services Inident to MD, PA, NP	$100-$2,000
Medicine	Full physical exam	Screen for depression	Obesity prevention	Motivational interviewing session	Assess patient lifestyle and promote healthy diet	G0444 (Depression Screen) G0447 (Behavioral Counseling for Obesity/BMI)	$39-$44
Dentistry	Complete series of intraoral radiograph images	Compre-hensive Oral Exam	Panoramic Radiograph Image	–	Counsel regarding proper teeth cleaning	D0150, D0210, D0330	$164.59
Dental Hygiene	Obtain vitals (BP, pulse, respirations)	Intra- and extra- oral exam	Discuss risks for caries, periodontal disease, head and neck cancer, TMD	Oral Hygiene Instruction (toothbrush, floss, misc interventions)	Discuss risks and interventions with patient	Code is filled under practicing DDS or DMD	N/A

Challenges and Barriers to Implementation

Challenges

- Generally healthy population
- Stigma around mental health
- Cost of healthcare
- Time constraints of visit (working population)
- Population at risk of low SES
- Lost of follow up
- Males at higher risk of suicide, less likely to ask for help

Solutions

- Provide information pamphlet about mental health and drug addiction resources
- Community outreach
- Automated scheduling systems with telephone and email reminders
- Insurance monetary incentives for follow up

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Addressing Addiction, Depression, and Diabetes to Improve Health Outcomes for Adults Age 30-39: An Interprofessional Approach

S Bordelon (n), M Fazende (dh), C Gunther (m), A Nguyen (m), M Nguyen (m), Z Richard (m), A Silvera (m), M Sleptsov (m), O Stassen (d), B Thibodeaux (d) , M Thibodeaux (dh)

(n): Nursing; (dh): Dental Hygiene; (m) Medicine; (d) Dentistry

BACKGROUND

Addiction, depression, and diabetes are leading causes of morbidity and mortality for adults age 30-39. (NIMH, 2019)

Mental and behavioral disorders are the leading causes of disability-adjusted life years (DALYs) in this age group. Specifically, overdose and suicide – tragic endpoints of the diseases of addiction and depression, respectively – are the two most common causes of death in adults age 30-39. (CDC, 2016)

Nationwide, the overall prevalence of diabetes is increasing as overweight and obesity rates rise. (NIDDK, 2019). In Louisiana, more than 500,000 people – roughly 1 in 7 adults – have diabetes, with total costs estimated at $5.4B each year. (ADA, 2019)

Figure 1 at right illustrates how addiction, depression and diabetes are important leverage points for interprofessional teams (IPTs) to improve health outcomes and reduced health care costs for adults age 30-39.

ASSESSMENT TOOL AND TEAM

Our proposed IPT includes a psychologist based on the importance of behavioral health for our age group. **Figure 2** at right outlines our assessment tool.

Figure 1. Risk factors for key diseases, adults age 30-39

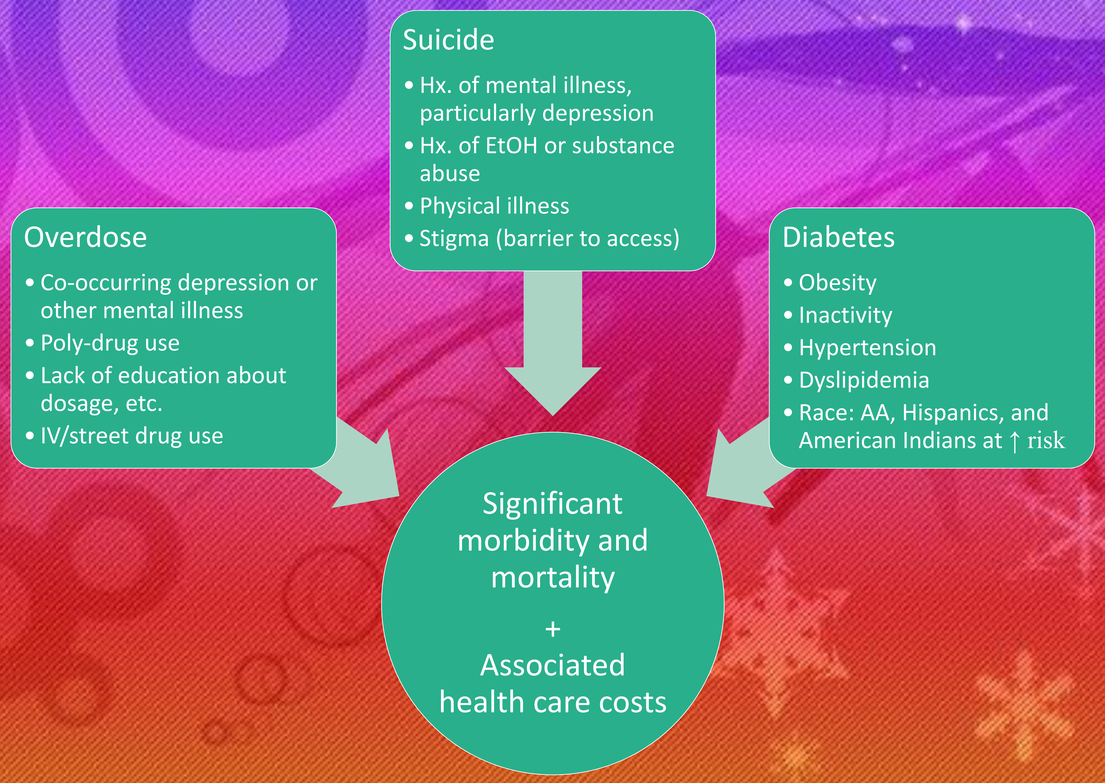

Figure 2. Interprofessional assessment tool for addiction, depression, and diabetes

Profession	Assessment	Comments	CPT Code	Fee Schedule
Psychologist	Depression screening and counseling	Example screen: PHQ-2 for primary care	Counseling: 90834	$85.97
Medicine	BMI screening, HbA1c, drug testing, patient education	Educational focus on nutrition and drug dosage and adverse effects	Dr. Visit: 99382 Drug test: 80306 HbA1c: 83036	$70.76 $19.81 $13.56
Dental Hygiene	Vitals, full oral exam, patient education	Educational focus on nutrition and periodontal health for diabetics	Oral exam: D0150	$47.37

COLLABORATION

We sought to apply the values of collaboration, honesty, and ethical responsibility when creating the assessment tool for our assigned patient age group. As a team, we focused on the providers most vital to this patient's (age 30-39) overall health given the top three health concerns. Each selected member will help connect the dots to promote coordinated patient care for patients who might otherwise experience a fragmented health system.

CHALLENGES/BARRIERS

Possible challenges and barriers include:

- Scheduling difficulties for patients and interprofessional team
- Communication issues between interprofessional team and patient

The IPT should plan time weekly or whenever the patient receives treatment to share information about the patient's status. Effective coordination across the team results in nothing missed in the care of the patient.

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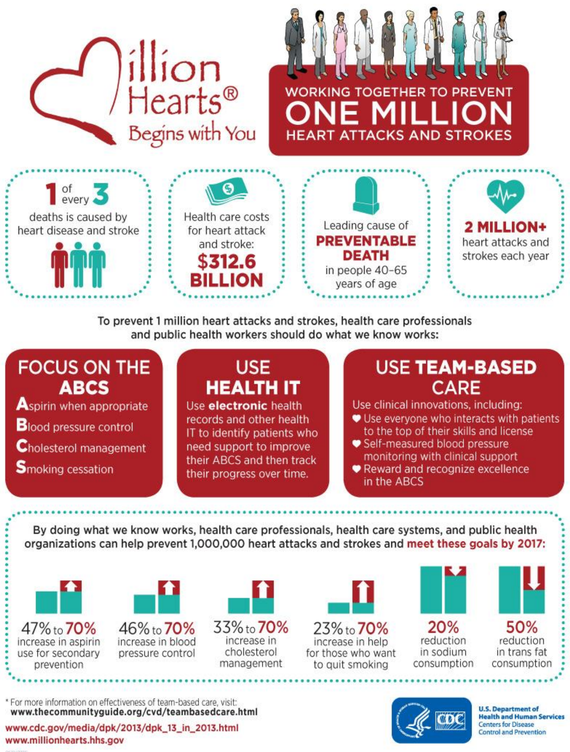
Heartbreak in your 40s:

Preventing heart attack age 40-49

Primary prevention: *aims to reduce incidence of heart attacks and involves interventions applied before there is any evidence of disease or injury*

- ♥ Assess for risk factors at least every 4-5 years starting at the age of 20
- ♥ Management of dyslipidemia, blood glucose, blood pressure
- ♥ Medications when appropriate (e.g. blood thinners, diabetics, hypertensives)
- ♥ Encouraging healthy lifestyle (BMI, diet, exercise, smoking cessation, limit alcohol intake)



Secondary prevention: *intervention to prevent additional heart attacks once one has previously occurred and decrease severity of the heart disease*

- ♥ Medications (blood thinners, statins, anti-arrhythmic, diuretics, ACE inhibitors)
- ♥ Individualized education plan to optimize care and promote wellness that includes education on medication adherence and recognition of worsening symptoms
- ♥ Screen for disease progression

Check-in to exam room : 5 minutes

Office staff ensures quick check-in process and develops an **environment** congruent with trust and affection for the health care system.

Patient evaluation: 15 minutes

Physician must perform thorough cardiovascular **physical** exam, consider family and medical history, evaluate lab tests, and use clinical judgment to determine appropriate therapy.

In-take and pre-exam:10 minutes

Nursing, phlebotomist, medical assistants obtain reason for visit, vital signs, blood draw, current and past medical medications and other relevant information. Health professionals should pay special attention to the patient's **emotional** well-being by addressing questions or concerns.

Patient education: 10 minutes

Before close of patient interaction, the physician should ensure patient **understanding** of cardiovascular disease and treatment.

Patient check-out: 5 minutes

Discharge patient to office staff for billing, insurance, and appropriate consultation:

- ♥ Physical therapy: mobility, girth measurements, endurance measurements, decrease morbidity
- ♥ Occupational therapy: energy conservation techniques and evaluation for in-home equipment
- ♥ Nutritionist: diet counseling and provide diet tools such as Weightwatchers, MyFitnessPal app, calorie counter sheets, etc…
- ♥ Community support services: ensure patient has cardiac rehabilitation programs for adequate community /spiritual support
- ♥ Pharmacy: distribution of medications, patient counseling for appropriate adherence, prevention of drug interactions and polypharmacy

Assessment Costs:

Medicine:	Comp Prev Med 40-64 yrs- Code 99386-$89.97
Occupational Therapist:	Evaluation- Code 97003- $50.60
Physical Therapist:	Evaluation- Code 97001-$47.88
Comprehensive Cost:	$188,45

References:
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Challenges and Solutions:

Improving medical care in a time constrained environment:

- ♥ Limit visit rates to 3-4 patients per hour
- ♥ Improve training in communication skills
- ♥ Practice of team-building skills

Patient satisfaction:

- ♥ Patient centered communication
- ♥ Listen actively
- ♥ Solicit patient attribution
- ♥ Communicate empathetically

Health literacy:

- ♥ 36% of patients identified as having serious health literacy skills
- ♥ Healthy People 2020 works to help improve health communication
- ♥ Simplifying communication
- ♥ Confirming comprehension for all patients to minimize risk of miscommunication
- ♥ Making the health care system easier to navigate

IPE sub-Competency CC8 states:

Communicate the importance of teamwork in patient-centered care and population health programs and policies.

It is important that a team of different specialties collaborates on health programs and policies so that the disease can be seen as a whole and not just from the view of one specialty. This way the team can share how to spot the risk factors in their particular field and the best way to prevent and handle these risks. By coming together to create policies, health care professionals can create more health programs that provide the most comprehensive prevention and treatment options.

Signs

- Resting Asymmetric Tremor
- Slowed Movement
- Rigid Muscles
- Small handwriting
- Dysarthric Speech
- Difficulty Blinking
- Stoic face expression
- Impaired Posture
- Loss of Smell

Treatment

- Exercise Therapy and Occupational Therapy
- Levodopa
- Deep Brain Stimulation
- Lee Silverman Voice Training

Living with Parkinson's

Assessment Tool

	Assessment	Assessment	Assessment	Assessment	CPT Code	Fee Schedule
Medicine	Musculoskeletal exam	Neurological exam	Mental Status exam	Depression screen	99396	$159.25
Nursing	Home safety evaluation	Fall risk evaluation	Assessment of support		Services incident to MD, NP, PA	N/A
Physical Therapy	Manual muscle test	Patient specific functional scale	10 meter walk test	Timed up and go	97162	$95.00
Speech Pathology	Assess swallowing	Assess dysarthria	Assess phonation & respiration	Assess articulation	92526 92522 92524 92507	$87.48 $93.60 $89.64 $79.92
Dentistry	Adult prophylaxis	Complete series of radiographic images for caries detection	Oral hygiene instructions	Assess for fungal mouth infections from drooling	D1110 D0120 D0210 D1206	$48.01 $27.24 $60.17 $24.29

The Michael J. Fox Foundation for Parkinson's Research. (n.d.). Retrieved from https://www.michaeljfox.org/
https://www.practicefusion.com/blog/medicare-begins-covering-wellness-and/
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https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/MM9782.pdf
https://www.lamedicaid.com/provweb1/fee_schedules/EPSDT_DENTAL_PROGRAM_Current.pdf

Parkinson's disease is a vast disorder but what each patient has in common is the destruction of dopaminergic neurons in the area of the brain known as the substantia nigra.

Your Team

A patient living with Parkinson's will experience an array of symptoms that will require a dedicated interdisciplinary team. Together, they must address neurological, nutritional, emotional, hygienic, speech and movement deficits that each equally contribute to the wholistic wellness of the patient. Care must be community based and client centered.

Team Challenges

Team Communication

- Frequent conference calls to ensure team members are providing informed and seamless care.

Patient Time Commitment

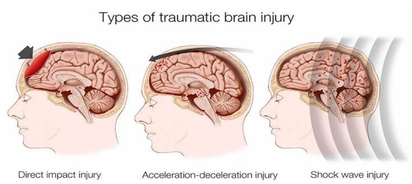
- Providers must be cognizant of the patient's time when scheduling appointment time and location.

What is a concussion?

A concussion is a traumatic brain injury that affects your brain function. Effects are usually temporary, but cam include headaches and problems with concentration, memory, balance, and coordination.
Common injuries include falls or other direct injuries to the head, car accidents, and blast injuries from explosions. These injuries can affect the brain in different ways and cause different types of concussions.

Signs and Symptoms

Headache or a feeling of pressure in the head
Temporary loss of consciousness
Confusion or fog-like feeling
Amnesia surrounding the traumatic event
Dizziness or “seeing stars”
Ringing in the ears
Nausea and/or vomiting
Slurred speech
Delayed response to questions
Appears dazed
Fatigue



Risk Factors [1]

1. Previous Concussion
2. Age
3. Headaches
4. Learning disabilities
5. Depression
6. Gender – females more prone

IPEC CC8

As a team, a more all-inclusive care plan can be made so that the patient would receive care that covers their needs from multiple angles. Team members from different professions would have different perspectives or priorities on the patient’s healthcare and can cover for something that another member may not have considered. In our case, for a concussed patient, a physician might be focused on finding the extent of trauma and assess the severity of the concussion; a nurse might be focused on symptom relief, getting the patient to feel better, and the patient’s day-to-day care; a therapist might be thinking about how to get the patient back to functioning like they were before the concussion as well as what they might need for accommodation with the condition in the meantime; and a dentist might be looking at how the patient’s teeth are affected as part of associated complications

Concussions in High School Athletes

Team 34

Background

The CDC estimates that around 3.9 million sports-related concussions occur in the US each year. The risk for long-term, chronic cognitive, physical, and emotional symptoms associated with the development of post-concussion syndrome and chronic traumatic encephalopathy, as well as the risk for catastrophic injuries or even death, is significant when a concussion or head injury is not properly recognized, evaluated, and managed. Continuing to play with a concussion or symptoms of head injury leaves the young athlete especially vulnerable to greater injury and even death.

Secondary

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Medicine	Initial visit: History and Physical Exam	Acute Concussion Evaluation (ACE) Assessment	Imaging: X-ray MRI CT scan	Assess learning needs and emphasize the importance of physical and cognitive rest	Refer to neurologist or concussion specialist for further follow-up if symptoms persist for more than 10-14 days	Codes for imaging: 70260 70460 70552	 $32.59 $183.30 $317.73
Nurse	Assess airway, breathing, circulation, and level of consciousness	Glasgow coma scale to gather a baseline Mini-Cog Mini Mental Status Exam	Assess the current accident and any hx of head trauma	Assess learning needs and emphasize the importance of physical and cognitive rest		No billable code, services incident to MD, PA, NP	N/A
PT	VOMs Screen Assess vestibular and ocular motor impairments via pt-reported symptoms	Activity Tolerance Assessment: Post-Concussion Symptom Scale (PCSS)	Balance and Postural Control Assessments: Balance Error Scoring System (BESS).			CPT 97161 Eval Low Complexity	$66.79
Speech Language Pathologist	Standardized Cognitive Performance Testing: Ross Information Processing Assessment	Assess expressive language, receptive language, reading and writing, and pragmatics/ social language	Screen for dysarthria and assess discourse and conversational Speech	Clinical Bedside Swallow Evaluation to assess swallow function		96125	$112.44
Dentist/ Dental Hygienist	Provide an oral exam and assess for any loose or missing teeth		Radiographic image 3 surface resin based composite Root canal Crown Extraction Mouth guard	Assess fluoride and teeth-brushing education	No billable code for Dental Hygienist, services incident to Dentist	D0220 D0150 D9940	$14.69 $47.37 $280.08

Team 34 Members:

Ashley Smith, Blake Vidrine, Brent Blanchard, James Southern, Jamie Huth, Lisa Nguyen, Madeleine Richard, Shadia Hamadan, Taylar Boutte

Prevention Assessment

Louisiana Youth Concussion Act. Act No. 314.

Proactive movement to educate families and institutions on how to better serve and protect La youth. Provides for:
New concussion education requirements for professionals, who regularly interact with youth athletes, to help them recognize the signs and symptoms of a concussion.
The removal of youth athletes from competition upon sustaining a concussion to protect young athletes from harm.
Requirements that must be satisfied for a youth athlete to return to play after sustaining a concussion or head injury to ensure their health.
The dissemination of concussion information to inform the public of concussion risks.
Act 314 created new concussion education requirements for 2 defined groups:
The governing authority of each public and nonpublic elementary through high school
- Prior to season, pertinent information to all coaches, officials, volunteers, youth athletes, and their parents or legal guardian which informs of the nature and risk of concussion and head injury, including risks associated with continuing to play after a concussion
- Coaches and officials are required to complete an annual concussion recognition course with subsection C of this section
- Parent and/or guardian is required to sign a concussion and head injury information sheet.

Private club or public recreation facility and each athletic league which sponsors youth athletic activities.

Barriers and Solutions

Barrier: Cost towards the patient.
Solution: Cooperation and communication between providers on assessments and imaging in order to quickly identify and treat the patient without re-doing unnecessary & costly assessments.

Barrier: Lack of knowledge of the costs of provided services (ex: cost of referrals to imaging in or out of the hospital)
Solution: Awareness if the hospital or clinic provides coverage if the patient’s income meets criteria, and education to the patient.

Barrier: Easy access to health care services for treatment and follow-up appointments.
Solution: Schools need to employ specially trained athletic trainers or coaches to identify, refer, and provide instructions on care towards a child with a concussion. Pamphlets or other written instructions on at-home care/ treatment should be readily available around schools.

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Program	Asesssment	CPT Code
Dental Hygiene	Oral exam and x-rays (to evaluate tooth eruption)	D0150-Comprehensive Oral Evaluation $47.37 D0330-Panoramic Film $60
Physical Therapy	Strength Assessment, Developmental Milestones, sensory exam	97161 $66.79
Speech Language Pathology	PLS-5 Screener	96110
Nursing	Family history	No billable code
Medicine	Developental screening Genetic testing (FMR1)	96111, 81243

Challenges/Barriers

Determining which aspects of the patient's diagnosis is most important while also taking time into consideration

One challenge we forsee is coordinating a 45 minute time frame that works for all involved professions.

Solutions

- By researching common presentations of Fragile X Syndrome, we developed a comprehensive list that prioritized the areas that needed assesssment.

- By estabilishing open communications between all healthcare professions, we can determine a set, reoccuring time to perform these assessments

Reflection:

Individuals with Fragile X Syndrome are commonly diagnosed when a child is a toddler. As a team, we realized that the parents are critical in early detection of FXS as well as providing support.

We sought out to establish an efficient assessment that addresses the primary needs of this patient (physical health/diagnosis, motor milestones, and speech development) that can be done in one 45 minutes session to promote accesibility for the parents and reduce cost.

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Interprofessional Patient Assessment Tool:

Medicine/ Nursing:

Primary :
- DSM-5 Diagnostic Criteria for Major Depressive Disorder (MDD)
- Awareness of Verbal Statement and Affect (i.e. "What's the use" or poor posture)

Secondary :
- Patient Health Questionnaire-9 (PHQ-9)
- Beck Depression Inventory (BDI)
- Geriatric Depression Scale (GDS)
- Screen for common somatic symptoms
- Perform Common Laboratory Screening Tests (i.e. CBC, CMP, TSH, BhcG, UA & urine toxicology screen)

CPT Code: 99385(6) [Wellness encounter for adults ages 18 to 39 (40 to 64)]
96127 [Screening for Depression- Adults]

Dentistry/ Dental Hygiene:

Primary :
- Patient Health Questionnaire-9 (PHQ-9)

Secondary :
- Comprehensive Exam to perform oral cancer screening and determine oral hygiene risk status (worse prognosis in depressed patients)
- Evaluation of Cortisol (stress) on Periodontal Disease

CPT Code: D1050 [Comprehensive Oral Examination – New Patient]
D0210 [Intraoral - Complete Series of Radiographic Images]
D0330 [Panoramic Radiographic Image]

Physical Therapy:

Primary :
- LSU PT Clinic Intake Form Screen
  - "During the past month have you been feeling down, depressed, or hopeless?"
  - "During the past month have you been bothered by having little interest or pleasure in doing things?"
  - "Is this something with which you would like help?"

Secondary :
- "Crawling Out of the Cocoon" Patients' Experiences of a Physical Therapy Exercise Intervention in the Treatment of Major Depression.

CPT Code: 97161, 97162, 97163 [Evaluation based on complexity]

Public Health:

Primary :
- *« CDC Promotes Public Health Approach to Address Depression Among Older Adults »*
- Center for Epidemiologic Studies Depression Scale (CES-D)

Secondary:
- Following diagnosis by another health professional, public health officers perform another assessment to find the best treatment facility for that patient
  - IMPACT- Improving Mood- Promoting Access to Collaborative Treatment

CPT Code: N/A

Total Cost

(based on interprofessional assessment and Medicaid reimbursement scheduling):

$300.50

Collaboration Reflection (IPEC CC8):

While understanding of the importance of mental health is on the rise, there is still a lot of work to do.
The implementation of an interprofessional team streamlines each field's ability to recognize the warning signs and to access different resources at their disposal for treatment. This allows for a more personalized approach to patient care. If an individual is suffering with depression, they may have many healthcare providers of whom to choose to confide in. Similarly, an interprofessional team offers alternative therapies (such as the use of physical therapy) for treatment of depression. With this, our focus is to assure that our future patients have access to a healthcare system that were patient advocacy is a central pillar.

Limitations of Interprofessional Assessment Tool:

(1) Finding time and most effective route to train professionals on how to utilize the assessment tool
(2) Making sure HIPPA/ Patient info is not violated within the assessment/sharing process
(3) Different professions have not proper resources to treat should the assessment tool identify depressive symptoms/ risk factors
(4)Utilizing a "check list" format for administering the assessment tool may sound robotic or impersonal

Solutions to Barriers Noted Above:

(1) Use of EMR or other HIPPA approved communication means to effectively and confidentially relay information to other professionals.
(2) Have experienced professional's [those with adequate knowledge of all healthcare roles] train and observe an individuals ability to give the assessment properly
(3)Emphasis on importance of a conversion-format; will likely allow patients to open up more about their depressive symptoms

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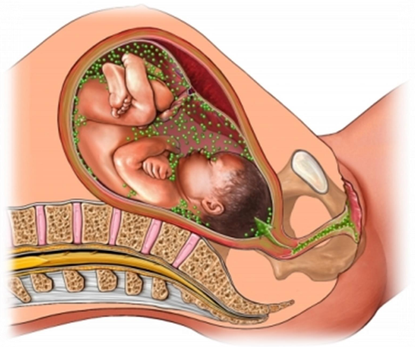
Age 0-1: Congenital Syphilis
Group 37

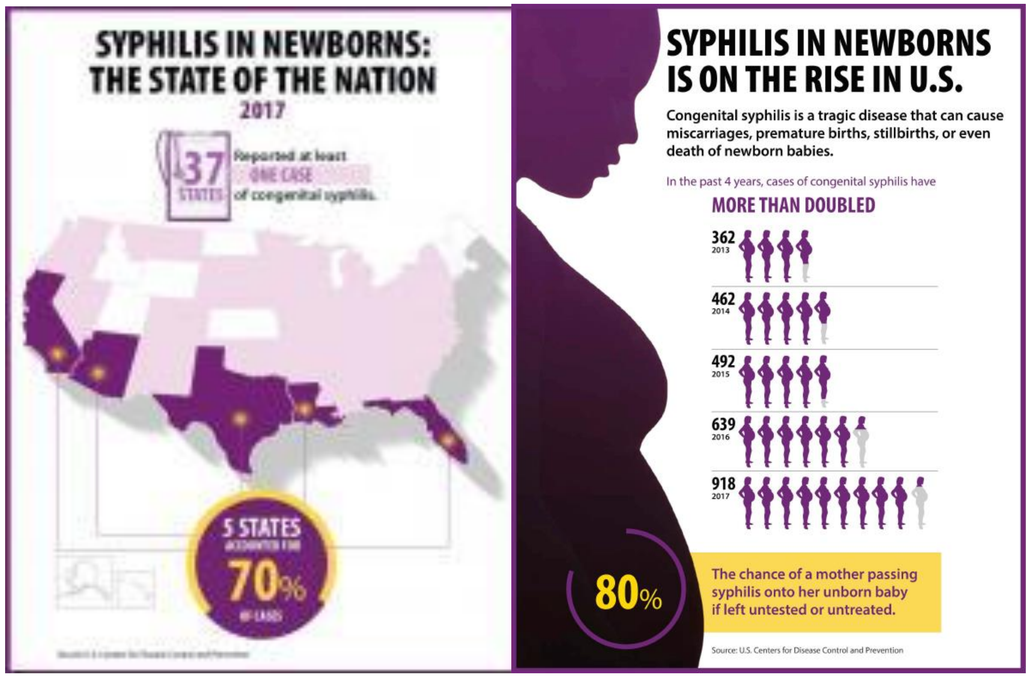
Background

- A severe, disabling, and often life-threatening infection seen in infants
- A pregnant mother who has syphilis can spread the disease through the placenta to the unborn infant
- Symptoms:
  - Hutchinson's triad: Hutchinson's incisors and Mulberry molars, ocular interstitial keratitis, 8th cranial nerve deafness
  - Skin lesions, lymphadenopathy, hepatosplenomegaly, failure to thrive, blood-stained nasal discharge, perioral fissures, meningitis, choroiditis, hydrocephalus, seizures, intellectual disability, osteochondritis, and pseudo-paralysis
- Tests and Exams:
  - Bone x-ray, dark-field examination, eye examination, lumbar puncture, blood tests, dental examination
  - Venereal Disease Research Lab and Rapid Plasma Reagin Test
  - Fluorescent Treponemal Antibody-Absorption Test to confirm
- Treatment:
  - Penicillin or other antibiotics



Risk Factors

1. Maternal Syphilis
2. Paternal cocaine use
3. Treatment at later gestational week



Secondary Prevention Assessment Tool

Discipline	Assessment	CPT Code	Fee Schedule
Medicine	Penicillin G IM or IV minimum of 10 days. Serological tests at each newborn visits(1, 2, 4, 6, and 12 months) until nonreactive. CSF exam performed at 6-month intervals until nonreactive. Reactive exams are indication for retreatment	86780	Depends on insurance
Public Health	Inform and educate community of health risks	n/a	n/a
Dentistry	Intra and extraoral exam Tooth decay screening Fluoride and brushing education	D0150	$47.37
Dental Hygiene	Tooth decay screening Fluoride education Educating parent on brushing	Serviced incident to DDS	n/a
Speech-Language Pathology	Rossetti Infant-Toddler Language Scale Oral Mechanism Examination Feeding evaluation if warranted	n/a	n/a
Physical Therapy	Assessment of Motor Milestones Measurement of ROM and strength Skin assessment	97161	$66.79

Challenges and Barriers to Assessment Tool

- Time required to perform tests and screening measurements
- Patients not being open and honest about sexual and STD history
- Parents not seeking treatment for CS right away

Possible Solutions

- Constant contact with healthcare providers during pregnancy and after birth
- Educating healthcare providers on importance of making patient comfortable
- Educating healthcare providers on signs and symptoms, as well as importance of early treatment

IPEC Sub-Competency CC8 Reflection

As a healthcare team, the importance of teamwork in patient-centered care is vital. We will use our own individual strengths to efficiently and properly diagnosis and treat patients. Next, communication with each other must be maintained to ensure that assessments and treatments are not repetitive and the patient is receiving the proper form of care

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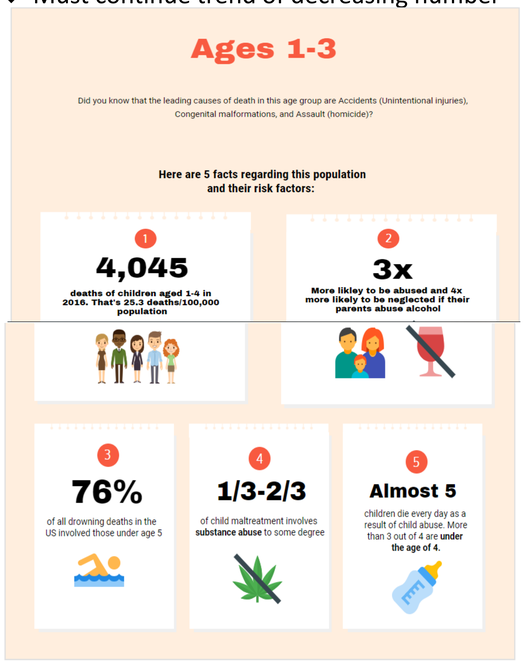
3. https://www.cdc.gov/nchhstp/newsroom/2018/2017-STD-surveillance-report.html

Background & Infographics

Mortality Ages 1-3:

- 4,045 deaths in 2016
- In 1950 there was 139 deaths/ 100,000 population. In 2016, it's down to 25.3 deaths 100,000
- Must continue trend of decreasing number



Risk Factors

Individual risk factors for abuse:

- Children younger than 4 years of age
- Special needs that may increase caregiver burden (e.g., disabilities, mental health issues, &chronic physical illnesses)
- Parental history of child abuse/neglect
- Substance abuse &/or mental health issues
- Parental characteristics: young age, low education, single parent
- Nonbiological, transient caregivers in the home

Family risk factors:

- Social isolation
- Family disorganization, dissolution, and violence
- Parenting stress, poor-parent-child relationships, negative interactions

Community risk factors:

- Community violence
- Concentrated neighborhood disadvantage (e.g., high unemployment rates, etc.)

Screening Assessment for Ages 1-3

Program	Screen
Medicine/Nursing	After thorough chart review to gather information regarding significant medical history, will perform physical exam to identify presence of: ✓ Bruising on: Torso, Ears, or Neck (TEN) ✓ Skeletal injuries ✓ Skeletal survey may be warranted ✓ Lack of medical care or unaddressed medical problems ✓ Check eyes for shaken baby syndrome ✓ Burns (in 6-20% of abused children) ✓ Lacerations ✓ Assess Head circumference, weight, height
Dentistry	Will observe oral cavity to assess the presence of: ✓ Bruising, abrasions, or lacerations of the tongue, lips, oral mucosa, hard & soft palate, gingiva, alveolar mucosa, frenum ✓ Dental fractures ✓ Dental dislocations ✓ Dental avulsions ✓ Maxilla and mandible fractures ✓ Poor oral hygiene ✓ Aptha lesions as a consequence of a nutritional deficiency status ✓ Education for the parents on the aspects of a well rounded diet in this age group
Speech-Language Pathology	Cognition: Will assess through observation of patient and through parental interview to determine if patient is reaching developmental milestones. Clinician will observe child's skills across developmental domains including: - Interaction Attachment (Parent/child interaction) - Pragmatics (social communication) - Play (this assesses child's development of representational & symbolic thought) - Language comprehension & expression (child's understanding& use of language) - Education for the parents: If they notice that their child is not reaching more developmental milestones to bring them back in
All professions	**Emotional** ✓ Observe: Fear, anxiety, clinging <u>Ask the caregiver:</u> ✓ Are you concerned about the amount your child cries? ✓ Are you concerned about the amount that your child sleeps? **Environmental** <u>Ask the caregiver:</u> ✓ Is there a swimming pool at your home? ✓ Do you have stairs in your home? ✓ Do you use a rear facing car seat for your child? ✓ Was your home built before 1978 or are you doing construction on a house that was built before 1978? ✓ Do you put your child to sleep on their back? ✓ Is anything in the crib with the child while he/she is sleeping? **Spiritual** ✓ Religious beliefs ✓ Any dietary restrictions Parent History of Abuse & Parent Education ✓ Pediatric intake form

Challenges & Barriers

- The roles of parents in Child welfare often create barriers in implementing assessment tools.
- Frequency unavailable for evaluation and also may not give accurate information.
- One screen is not enough- as child grows and develops, continued screenings are needed to reflect that- parents will not always commit to these appointments
- Single parenting presents the challenge of not having enough support.

Solutions

- Implement regular training of healthcare staff to be able to recognize signs of child abuse
- Appointing a member of the healthcare team to be a designated child abuse attendant or create child abuse attending team could also help minimize barriers

Cost of Visit

- Initial visit, first time patient, Level 5: $100
- Preventative Medicine/Risk Factor Reduction evaluation: $30
- Dental Consult: $80
- Nutrition therapy, Initial assessment: $61
- Comprehensive Metabolic Profile: $378
- Complete Blood Count: $192

Reflection of IPEC sub-competency CC8

Though it has been difficult to make a 45 minute interprofessional assessment, it can be more patient centered and targeted than having 4-5 different professionals complete the same assessment on their own. We learned the importance of collaborating with each other prior to involving the patient and their family so that they receive an interprofessional assessment from the beginning that is more efficient, organized and collaborative.

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A Primary Disease Prevention Tool for 4-6 Year Olds

Arash Ataei, Darian Harris, Joshua DeBlieux, Kelsey Lacourrege, Lauren Duhon, Trey Becnel

Reflection

Our Tool is based on a fundamental adherence to communication and cooperation, both of which allow our team to function to the best of its ability as we serve those 4-6 year olds in need. Communication is the way that we, languaged beings, convey amorphous thoughts into concrete ideas (words) that can then be ingested by others and turned back into amorphous thoughts in that person. Communication, frankly, is a miracle that far too often is taken for granted. When a team communicates well, all aspects of the team move as smoothly as a rocket flying through the frictionless void of space; however, when a team does not communicate well, people die (this is not meant to be an exaggeration, it is actually quite true when we consider the nature of our health science professions).

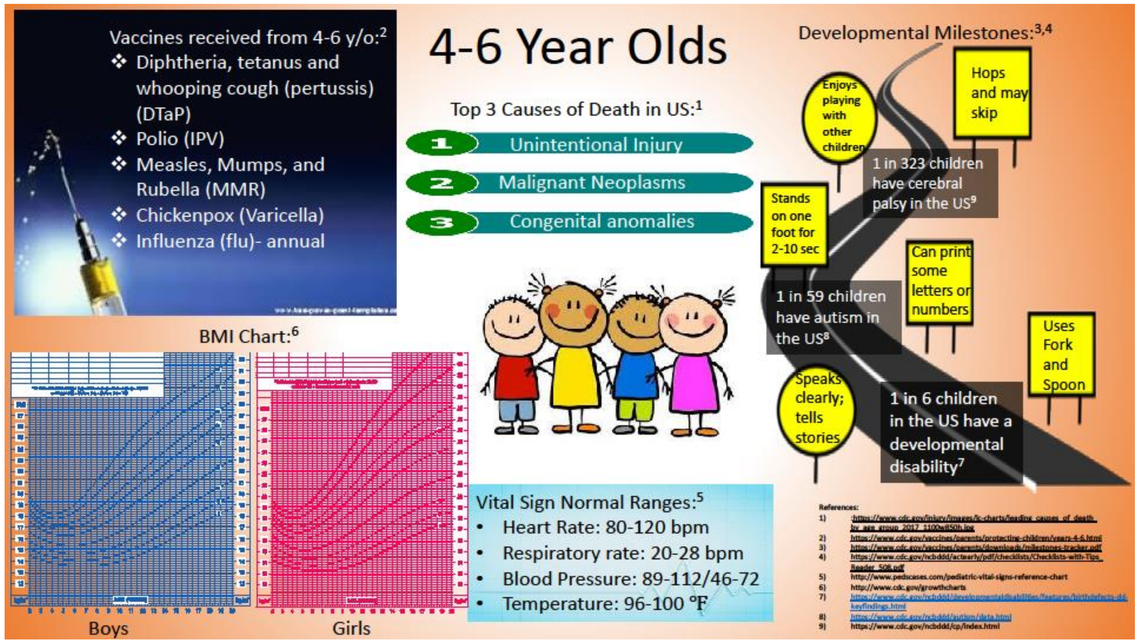
Achieving cooperation does not just take the job of the team as a whole, rather it takes the job of the individual to come to the team with a sense of selflessness. By choosing to approach the team in a sacrificial manner, each member of our team has created the environment of serving others. In this atmosphere of love, we do not judge others, we do not lay a heavier workload on any other so as to remove the yoke placed upon our own shoulders; instead, we work together, making every assignment the team's assignment, not just an individual's assignment so as to achieve a harmony that reflects in the quality of our work.

Armed with conversation, our team is able to combat individualistic, self-serving team approaches. With this tool, we have created a space in which our team works cooperatively. As a result, our team can successfully serve 4-6 year olds in an affordable and efficient manner. The need for interprofessional coordination in healthcare is beyond measure, and our team is dedicated to not only bringing the vision of this tool to life but also expanding upon what we have created so as to offer the best possible healthcare to all individuals.

Resources

- https://www.cdc.gov/injury/images/lc-charts/leading_causes_of_death_age_group_2016_1056w814h.gif
- https://www.cdc.gov/injury/images/lc-charts/leading_causes_of_death_by_age_group_2017_1100w850h.jpg
- https://www.cdc.gov/vaccines/parents/protecting-children/years-4-6.html
- https://www.cdc.gov/vaccines/parents/downloads/milestones-tracker.pdf
- https://www.cdc.gov/ncbddd/actearly/pdf/checklists/Checklists-with-Tips_Reader_508.pdf
- http://www.pedscases.com/pediatric-vital-signs-reference-chart
- http://www.cdc.gov/growthcharts
- https://www.cdc.gov/ncbddd/developmentaldisabilities/features/birthdefects-dd-keyfindings.html
- https://www.cdc.gov/ncbddd/autism/data.html
- https://www.cdc.gov/ncbddd/cp/index.html

Background



Primary Prevention Interprofessional Assessment Tool for 4-6 Year Olds

Leading Causes of Death:

Unintentional Injury, Malignant Neoplasms, Congenital Anomalies, Homicide

Roles of Healthcare Providers:

I. Medicine

i. Verification of Vaccination Schedule
ii. Verification of Major Milestones
iii. Obesity Screening
iv. Physical Exam

II. Nursing

i. Weight, Height, Temperature, BP, Pulse
ii. Vision and Hearing Screening
iii. Urinalysis
iv. Blood Work

III. Dentistry

i. Oral Examination
ii. Caries Risk Assessment
iii. Oral Healthcare Instruction
iv. Nutritional Counselling

IV. Public Health

i. Verification of Vaccination Rates
ii. Monitor and Report Notable Disease Incidence
iii. Analysis and Interpretation of Health Data
iv. Design and Implement Beneficial Community Health Programs and Policies

Estimated Cost Based on CPT Codes: $241.14

Barriers to Implementation of Our Tool

A. Access to healthcare (e.g. location, time, insurance status, trust of the healthcare system, lack of culturally-directed care, etc.)

B. Clinic space that can house all of the healthcare professionals in a comfortable manner

C. Communication (e.g. amongst healthcare workers, to the patient, to the family, etc.)

Solutions to These Possible Barriers

A. Identification of healthcare resource shortages in the community (e.g. lower income areas, sliding scale fees, etc.) and catering to those areas

B. Creating a large clinic that can house a myriad of healthcare vocations

C. Appropriate teaming education

CHALLENGES/BARRIERS

1. The child has difficulty focusing for a long-period of time to complete the 45-minute assessment. There are two acknowledged dimensions of ADHD; hyperactivity/impulsivity (HI), represented by symptoms of poor impulse control, difficulty sitting still, and fidgeting or squirming; and inattention (IA), represented by symptoms including difficulty sustaining attention, carelessness, and disorganization. A child with either one of these dimensions would have trouble in a 45-minute focused assessment.
2. There are comorbidities that exist with ADHD and as health care providers we would not want to ignore them, but also want to give adequate time and focus on the ADHD assessment. Characteristics of ADHD significantly interfere with the normal course of emotional and psychologic development. The health care provider should also assess for coexisting conditions such as emotional or behavioral (e.g. anxiety, depressive, oppositional defiant, and conduct disorders), developmental (e.g. learning and language disorders or other neurodevelopmental disorders), and physical (e.g. tics, sleep apnea) conditions.

SOLUTIONS TO CHALLENGES/BARRIERS

1. Challenge/Barrier: The child has difficulty focusing for a long-period of time to complete the 45-minute assessment
   a. Solutions:
      i. Incorporate/plan breaks within session. This will allow for positive reinforcement for completing part of the assessment, and it will provide a physical/mental break from the assessment.
      ii. Attempt a Transdisciplinary approach when appropriate
      - Transdisciplinary approach: (known as an arena style) a common sample of behavior would be obtained from which all professionals involved would derive their inferences/observations. The team would pick one primary provider to evaluate the child and incorporate the family in the assessment. The other members of the team would watch/observe the live assessment from another room or behind a one-way mirror.
2. Challenge/Barrier: Comorbidities that exist with ADHD
   a. Solutions:
      i. Develop a plan to address common commodities without ignoring them
      - Assign one provider/team member to track referrals and information regarding any comorbidities
      - Allow each provider/team member to take note of comorbidities observed and discuss with team following evaluation
      ii. Develop a plan to accommodate the comorbidity in the assessment or develop an alternative assessment for when a certain common comorbidity exists
      - Have separate forms with same content for the assessment for different combinations of disorders
      - Examples: ADHD and Autism, ADHD and Anxiety, ADHD and Depression, etc.

Attention-Deficit/Hyperactivity Disorder

BACKGROUND

Attention-deficit/hyperactivity disorder (ADHD) is brain disorder marked by an ongoing pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development. Inattention and hyperactivity or impulsivity are prominent behaviors of ADHD. Some may only have problems with one of the behaviors, while others may have problems with all three. However, most children have the combined type of ADHD. These behaviors are more severe, occur more often and interfere with the child's ability to function at home and school. ADHD is one of the most common neurodevelopmental disorders among children.

Inattention Symptoms

Six or more symptoms have been present for at least 6 months and they are inappropriate for developmental level:

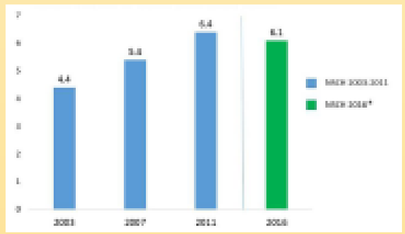
- Is often easily distracted
- Is forgetful in daily activities
- Frequently makes careless mistakes in schoolwork or fails to give close attention to details
- Has trouble focusing on tasks or play activities
- Does not seem to listen when spoken directly to
- Cannot follow through on instructions and fails to complete schoolwork or chores
- Has trouble with organization of activities and schoolwork
- Schoolwork or homework that requires more mental effort over a long period of time is avoided or strongly disliked
- Often loses things like pencils, eyeglasses, books

Hyperactivity and Impulsivity

Six or more symptoms have been present for at least 6 months to an extent that is disruptive and inappropriate

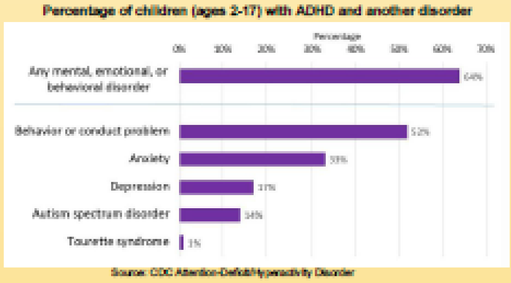
- Fidgets or squirms frequently
- Interrupts conversations
- Talks excessively
- Blurts out an answer before the question is completed
- Has trouble waiting their turn
- When they are expected to be seated, they are leaving their seat or jumping on it
- Unable to play quietly
- Is often described as "on the go," meaning they are constantly on

Estimated number of children (ages 4-17) who ever had ADHD, in millions



Source: CDC Attention-Deficit/Hyperactivity Disorder

Percentage of children (ages 2-17) with ADHD and another disorder



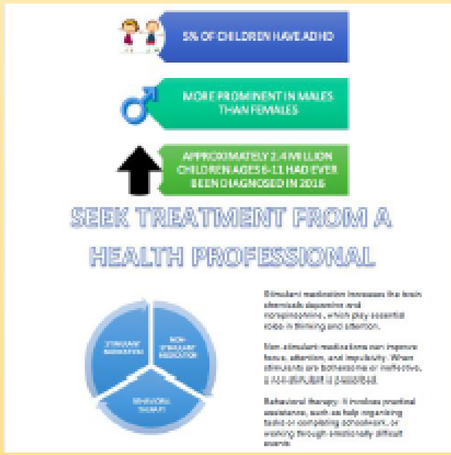
Source: CDC Attention-Deficit/Hyperactivity Disorder

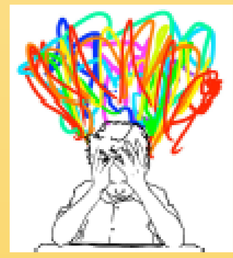
ASSESSMENT TOOL

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Nursing	ADHD Rating Scale	Identification of other illnesses with symptoms that overlap with those of ADHD - Vision or hearing impairments, neurodevelopmental immaturity in relation to gross and fine motor functions and motor or vocal tics, and retardation	Interview with child as well as adults that frequently interact with child	Ask about birth history of patient including preterm delivery and maternal tobacco, drug and alcohol misuse; also ask about developmental milestones		Services incident to MD, PA, NP	N/A
Medicine	Academic or behavioral problems and symptoms of inattention, hyperactivity, or impulsivity	DSM criteria have been met	Physician should evaluate and titrate dose of medication for maximum benefit and minimum side effects	Assessment for other conditions that might coexist with ADHD		99204, ...	
Public Health	Suggest an appointment with a pediatrician, psychologist or psychiatrist	Resources can be found through CDC - Children and Adults with Attention-Deficit/ Hyperactivity Disorder	Contact a Center for Parent Information and Resources to find a Parent Center near you	The National Resource Center operates a call center with trained staff to answer questions about ADHD 1-800-233-4050			
Dentistry	Comprehensive oral examination	Dentist should know which medication patient is on to evaluate possible oral risks.	Tooth Decay screen	Hygiene education		D0150	$47.37
Speech-Language Pathology	Observe child interact/talk with parents and other children	Speech and language development as well as hearing (Parent interview and case history form)	Executive functioning and social skills	School performance - Grades, where do they sit in class, any reports from teacher, etc.	May need to address feeding/swallowing if there are other comorbidities	92523 (if needed: 96111; 92610)	$201.60 (if needed: $137.88; $87.48)
Physical Therapy	Test of Gross Motor Development - 3 (TGMD-3)	Vineland Adaptive Behavior Scale -3	Sensory Profile 2 (SP-2)	Patient History, Cognitive screen, Coordination & Balance assessment, Self-care skills, Motor Milestones assessment	N/A	97161	N/A

IPCE CORE COMPETENCY CC8

Our group exhibited the core competency CC8 by working together as a team to develop an interprofessional assessment tool. As students, learning to communicate in an interprofessional manner enhances our ability to do so in the workforce in the near future. Learning this skill will greatly enhance the outcome of patient care. By developing an assessment tool that collaborates with other professions, we create a standardized way of communicating with each other. Many diseases manifest themselves through signs and symptoms that require intervention from multiple different professionals. In order to meet the wholistic needs of the patient, we must incorporate all professions. This can be done by working as a team, which we accomplished by learning the scope of practice of other professions, and how it could be applied to different disease processes.





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TOP 3 CAUSES OF DEATH IN CHILDREN AGE 11–13 IN THE U.S.

IN 2016:

28.1% Unintentional Injury (Accidents)

14.5% Intentional Self Harm (Suicide)

14.3% Malignant Neoplasm

Group 41

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https://www.aap.org/Documents/Assessment%20%20and%20Management%20of%20Childhood%20Obesity%20Algorithm_FINAL.pdf
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https://www.integration.samhsa.gov/clinical-practice/GAD7OS_10.08Cartwright.pdf)
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https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/MM9782.pdf

11–13 y.o. Girls

who attend Public Schools in New Orleans

Assessment Tool

	Assessment	CPT	Fee Schedule
Physical Therapy	Beep Test → *Aerobic Capacity* Curl-Up / Push-Up → *Abdominal / UE Strength & Endurance* Trunk Lift → *Trunk Extensor Strength, Endurance, & Flexibility* Sit & Reach → *Flexibility*	97161	$54.00 - $66.79
Medicine	Initial comprehensive preventive medicine (12-17 y/o) Patient-focused health risk assessment Depression Screen Anxiety Screen ACE screen	99384 96160	$138.20 $3.96(x3) = $11.88
Speech Language Pathology	Pediatric Quality of Life Inventory→ *physical, emotional, social, and school (cognitive) functioning* Clinical Evaluation of Language Fundamentals Screening Test (CELF 5) Oral Mechanism Exam Hearing Screening Language Sample	92523	$75 for full evaluation
Dental	Comprehensive Oral Exam	D0150	$47.37
Nursing	Head to Toe assessment Cognitive and developmental staging 24 hour dietary recall	N/A	N/A

Possible Barriers to Assessment:

- Time-Restrictions
- Financial Issues
- Transportation
- Young patient does not feel comfortable talking to his/her physician about this sensitive information
- Patient may not want to talk about information in front of parent

Possible Solutions to these Barriers

- Schedule appointment that works for the patient
- Direct the patient to clinic which accepts their insurance or a free clinic if they don't have insurance
- Educate the patient on public transportation and determine if the patient lives in an area, advise the patient to choose a facility close to home
- Assure the patient of your confidentiality and make them confortable with you
- Ask the parent to step out, so you can talk to the patient privately

IPEC Subcompetency CC8:

"Communicate the importance of teamwork in patient-centered care and population health programs and policies"

Teamwork is important in patient-centered care in order to achieve the best clinical outcomes. Each member of the healthcare team has a unique perspective and skill set that adds to quality of patient-centered care. Increasing effective communication between healthcare providers is important for decreasing medical errors. Interdisciplinary, patient-centered teams have been found to increase the quality of care for our patients.

Several specialties contributed to the development of the assessment tool. We relied on each other's education and past experiences from their specialties in order to develop this assessment tool that will have the maximal benefit to the patient.

- Medicine - found questions to screen for anxiety, depression, adverse childhood events
- Physical Therapy - found different ways to assess body functionality (flexibility, aerobic capacity, upper body strength)
- Public Health - developed questions on the community environment of the patient (nearest park, nearest grocery store)

Group 41:

Margot Beerman	Brittney Blackburn
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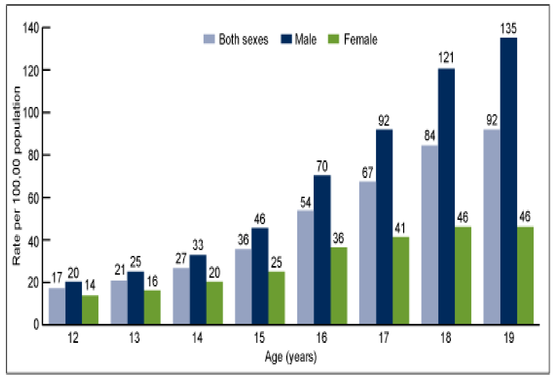
AGES 14 TO 17
GROUP 42

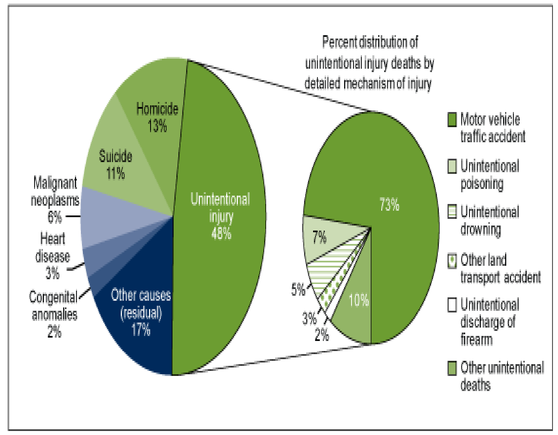
Figure 1. Death rate for teenagers 12–19 years, by age and sex: United States, 1999–2006



SOURCE: National Vital Statistics System, Mortality.

The death rates vary across sex, race, and Hispanic origin. From ages 12 to 19, the death rate of males increases by 32% each year, while the death rate for females increases by 19% for each year of age.

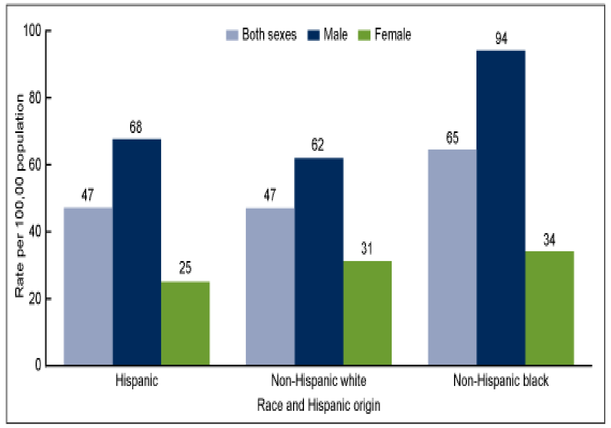
Figure 2. Percent distribution of all deaths to teenagers 12–19 years, by cause of death: United States, 1999–2006



SOURCE: National Vital Statistics System, Mortality.

The most common causes of death in this age group was accidents (unintentional injury), suicide, homicide, cancer, and heart disease. Motor vehicle accidents were by far the most common cause of unintentional injury death.

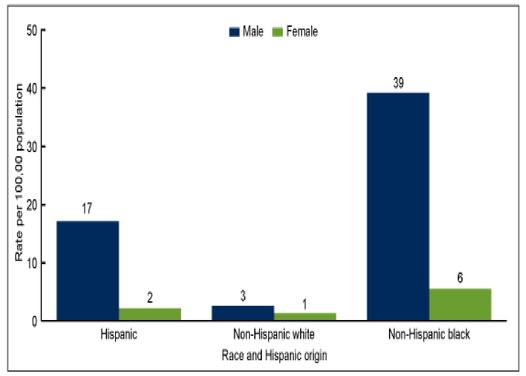
Figure 3. Death rates for teenagers 12–19 years, by race, Hispanic origin, and sex: United States, 1999–2006



SOURCE: National Vital Statistics System, Mortality.

Non-Hispanic black males have the highest death rate at 94 per 100,000 population, which is a nearly a third higher than Hispanic males at 68 per 100,000 (second highest).

Figure 4. Homicide rates, teenagers 12–19 years, by race, Hispanic origin, and sex: United States, 1999–2006



SOURCE: National Vital Statistics System, Mortality.

Black males (39.2 per 100,000) are twice as likely as Hispanic males to die by homicide (17 per 100,000).

ASSESSMENT TOOL

Discipline	Assessment	Assessment	Assessment	Assessment	CPT Code	Fee Schedule
Medicine	Preventative medical evaluation	Behavioral evaluation (mental disorders, past injuries)	Screen: abuse (physical, sexual, emotional)	Screen: substance abuse	99384 97151	$115.19
Public Health	Diet and obesity education	Mental health education	Vaccines (flu)	Drug use education	N/A	N/A
Dentistry	Tooth decay screening	Flouride education	Education on teeth brushing	Oral examination	D0150	$47.37
Nursing	Physical education	Risk assessment	Vaccines (flu)	---	Services incident to MD, PA, NP	N/A

POSSIBLE BARRIERS:

1. Creating an assessment tool in which they would not fear consequences of their answers
2. Finding the optimal method of addressing high risk behaviors

POSSIBLE SOLUTIONS

1. Allow individuals to complete an anonymous assessment of themselves. From their anonymous assessment, the individuals could then receive educational advice based off any high risk behaviors that are identified.

2. Educating teens on what high risk behaviors are, why they are important, and how to identify them, then presenting them with information on where they can seek help.

Madison Kahn, Kayleigh Denny, Alexandra Lieberman, Ali Drye, Brennan Benson, Brittany Klein, Joey Bardot, Jordan Bonfiglio, Michael Langley

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CPT code description:
CPT 99384 (from Applied Behavior Analysis Fee Schedule)
CPT 97151 (from Specialized Behavioral Health Fee Schedule)
For determination of assessment tools used Citations)
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Mortality in Students

Leading Causes of Death and Primary Prevention in University Students Age 18-20

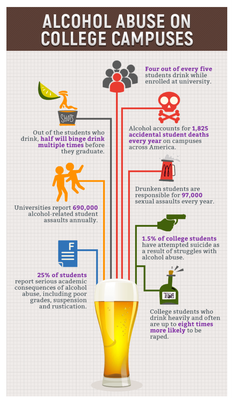
Group 43

Background

- CDC data reports the leading causes of mortality in all persons age 15-24 to be Unintentional Injury or accidents, Suicide, and Homicide
- Recently published data also supports these as the leading causes of mortality in a narrowed age range of 18-20
- Alcohol, Drug Abuse, Depression, and Mental Health are inexplicably linked to these causes of mortality in University Student populations

Alcohol and Drug Abuse

•According to the CDC, alcohol is the most commonly abused drug among youth in the US



•18-20 y/o who drink have a higher risk of suicide, car crashes, unintentional injuries, physical violence, and unprotected sexual activity

•Excessive drinking is responsible for 4,300 underage deaths each year

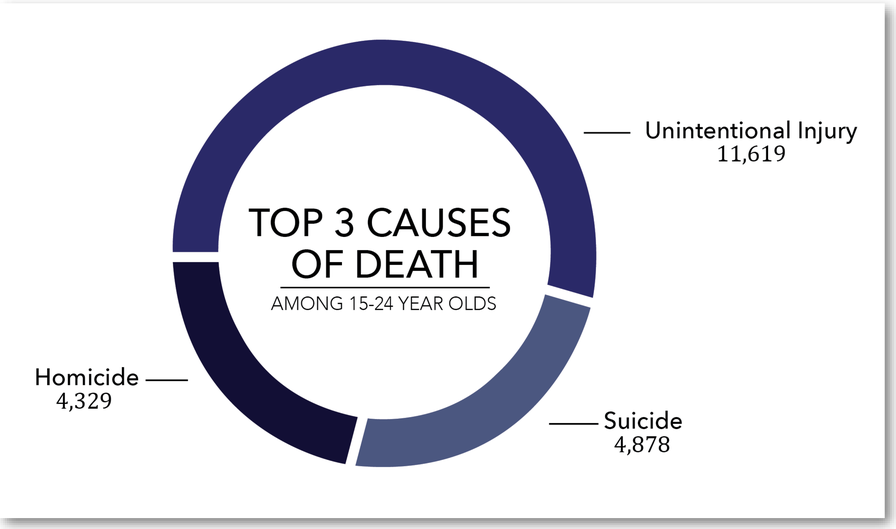
•This cost the US $24 Billion in 2010

Depression and Mental Health

• Suicide is the 10th leading cause of death in the US and the 2nd leading cause of death for people aged 10-34

•More than 90% of people who die by suicide exhibit symptoms of a mental health condition

•Health care professionals can help identify those at risk by carrying out mental health screening programs



Primary Prevention Assessment Tool

Medicine	• Behavioral health self-report questionnaire (PHQ-9) • Alcohol abuse questionnaire (CAGE) • Self-report questionnaire (AUDIT)	CPT 96127 ($4.91) G0442 ($17.33)
Public Health	• Quality of life • Health education intervention and advocacy	
Dentistry	• Comprehensive Oral Examination	CDT 00150 ($48)
Speech-Language Pathology	• CLQT+ • SCATBI • ASHA • QCLS • Awareness Questionnaire	CPT 96125 ($112.44)
Physical Therapy	• Red flag monitoring for referral • CESD-R	CPT 97162 ($96.66)

- Based strictly on the aforementioned coding, the cost associated with this primary assessment would be $279.34
- This is not fiscally viable. Furthermore, these codes are for the individual assessments; most of which are 30 minute to hour long office visit tests.
- If an assessment like this one was to be put into practice, new coding at a lesser cost would be necessary to reflect the collection of assessments as a singular screening tool

Challenges/Barriers

•Holistic versus individual perspectives

•Resistance to diagnosis

•Non-compliance with planned treatment interventions

•Psychosocial distress

Solutions

•Encourage health care professionals to ask questions regarding depression during assessments

•Encourage physical activity to decrease sedentary lifestyles

•Improved interprofessional communication

•Improving patient education

IPEC Reflection

IPEC Sub-Competency CC8:

Communicate the importance of teamwork in patient-centered care and population health programs and policies

•Published data has consistently shown that healthcare delivered by an interprofessional team improves efficiency and patient outcomes

•Care delivered by an interprofessional team allows for better rationing of medical resources and specialized care

Acknowledgements

Team Up Group 43 is comprised of Brynner Bonnette, Chase Cheramie, Emily Kornman, Erika Haydel, Morgan McDougal, Pratibha Shrestha, and Casey Spinelli.

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Depression in 22-29 Year-Olds

Group 44

Team Members:
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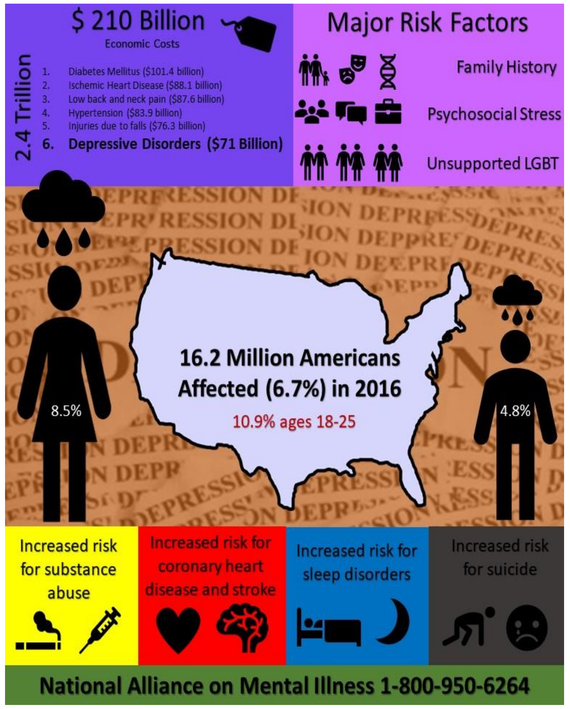
Kate Werner

TEAM UP™
COMPASSION, COMMUNICATION, COLLABORATION

Background

Depression is a growing national concern affecting an increasing number of U.S. adults each year. According the to the National Institute of Mental Health, around 7% of U.S adults have had a depressive episode in their life. This correlates to about 16.2 million people in the United States. When compared between age groups, depression has the highest prevalence among individuals 18-25 with a 10.9% prevalence rate. Depression is also more prevalent among females with an 8.5% prevalence rate compared to 4.8% in males. Other risk factors for depression include stressful life events/trauma, family history, and serious medical illness. Untreated depression puts patients at a greater risk for various other medical illnesses including coronary artery disease, stroke, heart attacks, substance abuse and insomnia/sleep disorders. Depression is not only a concern due to its increasing prevalence but also due to its increasing effect on the economy.
In 2013, the U.S. spent 2.4 trillion on healthcare, overall. Of this 2.4 trillion, 71 billion was spent on depression which makes it the 6th most costly illness in the U.S. Without proper screening protocols in place, it is estimated that nearly half of all patients suffering from depression are not identified. Therefore, screening and detection of depression are essential in order to reduce the economic costs and the growing patient population affected by depression.

Depression Infographic



Interprofessional Secondary Prevention Assessment Tool

Discipline	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Medicine	Patient Health Questionnaire (PHQ-9 or 2)	Beck Depression Inventory for Primary Care (BDI-PC)	WHO-5	BDI-PC has highest sensitivity and specificity for identifying MD but only available by license – other assessments are available in public domain	99203	$106.63
Nursing	Patient Health Questionnaire (PHQ-9)	Beck Depression Inventory	Take patient's medical/social history	Screens for MD	Services incident to MD, PA, NP. If an established patient: 99211	N/A
Physical Therapy	Patient Health Questionnaire (PHQ-9)	Center for Epidemiological Scale Depression-R Scale	General Mobility Assessment (ROM, MMT, etc.)	Screens for MD – not within normal limits triggers a referral	97161	$66.79
Speech Language Pathology	Quality of Life Scales	ASHA FACS	Voice Handicap Index	Screens for MD - not within normal limits triggers a referral	97127, 96125	~$45.00
Dentistry	Patient Health Questionnaire (PHQ-9)	Patient's Medical/Dental History	Comprehensive Oral Exam	Screens for MD—not within normal limits triggers a referral Treatment of side effects/symptoms	D0150	$47.37
Public Health	Statistical Analysis to discover target population for depression	Center for Epidemiological Scale Depression-R Scale			96127, Z13.89	N/A

IPEC Competencies

CC 8: Communicate the importance of teamwork in patient-centered care and population health programs and policies

Depression affects all aspects of a patient's life; (physical, cognitive, emotional, spiritual and community/environment). It is vital that all team members of the patient's care team are informed and united against depression. All members should be competent with the prevention and screening that is involved in order to provide the best outcome of care for each patient. Going beyond the individual assessments, team members should communicate among each other regarding the signs or symptoms that could potentially affect the patient, overall. Communication could not only improve the quality of life but could save lives, as well. The use of an interprofessional assessment tool will hopefully help patients to be diagnosed with depression faster and more efficiently, eliminating those 22-29 year-olds that have been ignored or mis-diagnosed previously. Early diagnosis and intervention could lead to better quality of life for these patients for the remainder of their lives. Population-based health programs and policies are important aspect to mental health. If one individual is suffering from mental illness, then there are other individuals in the population who is suffering from mental illness as well. The age group 22-29 is generally considered to be a healthier population; therefore, they are often ignored regarding depression. This age group is exposed to more societal and risk factors which will increase their risk for depression compared to past generations. Depression should not be ignored and stigmatized. An unhealthy population leads to a growing cohort of ignored and undiagnosed group of individuals who may suffer long-term effects of depression. Public Health Programs and Policies will help increase the awareness of a taboo subject such as depression. Increasing the awareness will help individuals who were once scorned by the social stigma, to be open and willing to receive the help that is needed.

Challenges/Barriers

Challenges/Barriers for Implementation of Interprofessional Assessment Tool:

1) The assessment is administered consistently each time
2) how each professional/patient interprets the question
3) Lack of communication/time to communicate between professions

Identification of Possible Solutions to Challenges/Barriers:

1) Workshop to teach all interprofessional members how to use the tool
2) Have questions asked a few different ways to make sure clarity in answers
3) Create 15-minute long interprofessional meetings daily to discuss patient caseload

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Cardiovascular Disease in ages 30-39: A Collaborative Assessment of Prevention

25-34	35-44
Unintentional Injury 23,984	Unintentional Injury 20,975
Suicide 7,366	Malignant Neoplasms 10,903
Homicide 5,376	Heart Disease 10,477

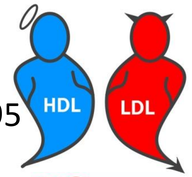
Getting to the Heart of the Matter

- Heart disease is the **leading cause of death** for both men and women; **1 in every 4 deaths** are from heart disease each year.
- Heart disease is the **leading cause of death** for most racial/ethnic groups in the US, including African Americans, Hispanics, and whites.
- **Every minute a person dies** from heart-related disease event in the US.

Easy Ways to Prevent Heart Disease in your 30's:

- Make heart-healthy living a family affair.
- Know your family history.
- Tame your stress.

Medicine:
Lipid and glucose labs
Cost: $255 + $40 = $295

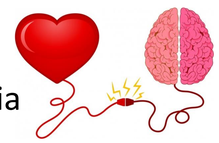


Dentistry:
Comprehensive oral exam with caries screening & oral hygiene instructions
Cost: $63

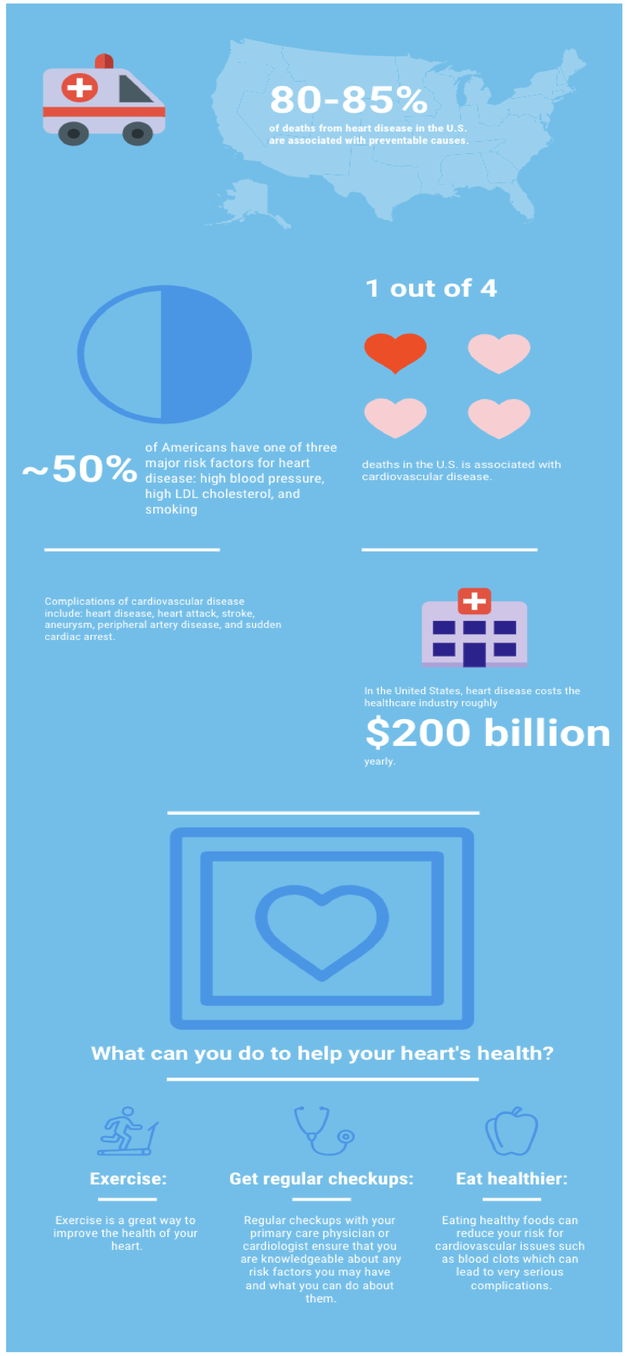
Nursing:
Vital Signs, Blooding Pressure Screening, Weight & BMI screening
Cost: NA

Physical Therapy:
Graded Exercise Testing
Cooper Bicycle Test
Cost: NA

Language Pathology:
Cognitive Mental Status Examination via Cognistat Test
Cost: NA



Public Health:
Identify risk factors for heart disease, survey environmental factors (stressors/ living conditions), assess nutrition/physical fitness
Cost: NA



Did you know?

High BP, high LDL, & smoking are key risk factors for heart disease & about *half of Americans* have **at least** 1 of these 3 risk factors.

LSU Health NEW ORLEANS

Team Reflection:
Collaboration across disciplines will:

- Reduce redundancy with tests &/or assessments
- Open communication of results
- Allow different perspectives for better health outcomes

Challenges to the Assessment:

- Limited time to discuss results: Spread out over two different appointments or have work done prior to visit (labs, exams, surveys)
- Disorganized sequence of assessments: Be cognizant of the differing types of evaluations, to prevent repetition & assure ease for the patient

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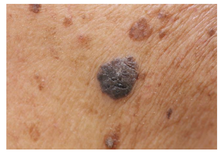
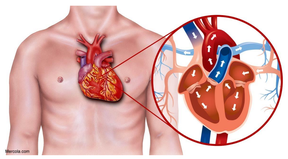
Malignant Neoplasms

- Affects 43,054 people in this age group a year
- Risk factors include age, alcohol, chronic inflammation, diet, hormones, immunosuppression, obesity, radiation, and tobacco use



Heart Disease

- Affects 34,248 people in this age group a year
- Risk factors include high blood pressure, high cholesterol, smoking, diabetes, obesity
- Affects more men than women



Accidental Trauma

- Affects 19,488 people a year
- Risk factors include cognitive communication deficit, alcohol consumption, drug abuse

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- https://www.hopkinsmedicine.org/healthlibrary/conditions/nontraumatic_emergencies/unintentional_injury_statistics_85,P00862

Leading Causes of Death in Ages 40-49

Heart disease	Accidental Trauma	Malignant Neoplasms

Interprofessional Assessment:

	Assessment	Assessment	Assessment	CPT Code and Cost
Medicine	Order labs: Comprehensive Metabolic Panel (CMP), CBC w/ diff, Lipid Panel	Full Physical Exam	Electrocardiogram	80053; $90 99381-99387; $220 93010; $70
Nursing	Monitor Blood pressure	Collect personal and family health history.	Food diary, and dietary education; Referral to registered dietician	No billable code, services incident to MD, PA, NP
Dentistry	Comprehensive Oral Evaluation	Intraoral Full Mouth Series (Radiographs)	Dental Case Management – Patient Education	D0150; $53 D0210; $150 D9994; N/A
Physical Therapy	Monofilament testing	6 MWT	Referral to MD if screens produce red flags	97161; $66.79
SLP	Follow sequential commands	Name 12 items in a given category in 1 minute.	Clinical bedside swallow evaluation	92610; $87.48. 96125; $120.96
Public Health	Smoking Cessation	Assess the patient's tobacco use and willingness to quit.	3 to 10-minute counseling	99406 - $27.93 99407 - $14.32

Meet The Team

- Medicine: Taylor & Michael
- Nursing: Elizabeth & William
- Dentistry: Lennon
- Physical Therapy: Taylor
- Speech Pathology: Emily
- Public Health: Caroline

Challenges

- Redundancy
- Time constraint
- Scheduling conflicts
- Overwhelming patient

Solutions

- Team communication
- Screening only in key areas
- Video calls, synchronized calendars, patient portals,
- Continually explaining to patient the evaluation process

IPEC Core Competency CC8

"Communicate the importance of teamwork in patient-centered care and population health programs and policies."

We achieved the core competency because the team collaborated and developed a 45-minute assessment tool with a patient-centered state-of-mind, with an attention to available prevention services available in health care today across all health professions, and with awareness of the most advance evidence-based supported practices.

Prevalence[1,2,5]:

Breast cancer affects 12.4% of women in the United states. At this time, 1 in 8 women will receive a diagnosis during their lifetime, with likeliness increasing with age. As women reach their 50s, a ratio of 1 in every 42 women are diagnosed with breast cancer.

Risk Factors[1,2,3,4,5]:

- Female
- Age = 65+
- Family history of breast cancer
- Personal history of cancer
- Non-child bearing or first child over 30 years old
- Menstruation prior to 12 years old
- Menopause after 55 years old
- Overweight (esp. upper body)
- High caloric/fat diet
- Carrier for BRCA1 or 2 gene
- Prolonged Hormone treatment
- Radiation Therapy
- Heavy alcohol intake
- Low physical activity level
- Race: Caucasian more likely than African American, Asian American, Hispanic, and/or Native American
- Other:
  - Socioeconomic factors – lack of transportation, income, access to health care facilities/insurance
  - Language/communication barriers
  - Education level & understanding of health – may not be aware of risk factors, warning signs, protective measures, etc.
  - Cultural practices/beliefs - may treat ailments with more holistic measures and do not believe in modern medicine

Health Screening for 50-59 Year Olds: Breast Cancer

Health Care Profession	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Medicine	**Molecular Screening**: testing for the presence of a mutation in BRCA1 and BRCA2 is common, other mutations such as ones found in p53 and PTEN are more rare	**Proper Breast Physical Examination**: assess for breast symmetry, pain, lumps, nipple discharge and inquire about patient's breast development (from adolescence)	**Mammogram**: patient's age range (50-59) suggests yearly mammograms that should have begun at the age of 40 or as early as 25 depending on the family history/molecular screening	Explain **risk:benefit** of mastectemy for prevention based on gene makeup (BRCA+ individuals are good candidates of prophylactic surgery). Biopsy suspicious lumps if present. Order genetic makeup of samples since HER2+ tumors can be targeted with therapy. **Assess lumps** in local lymph nodes especially axillary as common targets of metastases. Be up-to-date on **new therapies** beyond chemotherapy and radiation such as hormone therapy (tamoxifen) and targeted (trastuzumab).		**81162** – Code for molecular screening of BRCA1/2 (Breast and Ovarian Cancer) **81433** - Hereditary breast cancer-related disorders (e.g., hereditary breast cancer, hereditary ovarian cancer, hereditary endometrial cancer); duplication/deletion analysis panel, must include analyses for BRCA1, BRCA2, MLH1, MSH2, and STK11	$1,615.00
Physical Therapy	**Cognition** and/or **Neuro Screen:** to determine if a more serious or non-msk pathology underlies symptoms	**ROM, MMT Screen:** to look at general mobility and strength and note any deficits, asymmetries, etc.	**Bed Mobility & Transfers:** to determine independence level and level of assistance required to mobilize safely	**Gait Analysis, Outcome Measures**: to determine baseline temporospatial parameters and fall risk • i.e. TUG, 10MWT, 6MWT	If hx and/or neuro screen demo's **serious pathology**, a **referral** is indicated and PT may be withheld until cleared by MD **Hx red flags**: night pain unrelieved by positional change, unexpected weight loss, B&B changes, CV symptoms, dysarthria/dysphagia, sensation changes	**97163** - PT EVAL HIGH COMPLEX 45 MIN	$66.79
Dental	**Extractions** done before chemo & radiation	**Caries Risk Assessment:** chemo & cancer meds cause xerostomia (low salivary flow/function), concentrated fluoride toothpaste	Encourage pt to take advantage of **free cancer screenings** offered by some medical centers and programs. Also **encourage self-examinations** monthly and mammograms yearly.	Questions about the social history regarding overall health, exercise, diet, vitamin intake, tobacco and alcohol use, and cancer in family members are also important and allow the dentist to globally assess the risk of cancer in the patient.		**D0150** – Comprehensive Oral Examination – New Patient **D1110** – Prophylaxis – Adult (12 through 20 years of age) **D1208** – Topical Application of Fluoride	$43.37 $48.01 $19.50
Nursing	Assess use of **contraceptives/hormonal therapy, family history** (breast and/or ovarian cancer)	**Signs and Symptoms**: Pt should report any abnormal findings: lumps, thickenings, nipple retraction, discharge	**Early Detection** (Annual mammograms; Breast Self-Examination)		**Patient Education:** Women should maintain a healthy weight, exercise regularly, limit alcohol intake, nutritious diet, never smoking to reduce risk factors	**No billable code**, services incident to MD, PA, NP	NA
SLP	**Cognition**, **Speech**, **Language**, or **Swallowing Difficulties**	**Brief Congntive-Linguistic assessments:** Mini-Mental State Exam, Cognistat, Montreal Cognitive Assessment, Beside Swallow if warranted	Assess possible difficulties with **confusion**, **memory**, or **word finding** due to chemotherapy (if appropriate)			**92610** – Evaluation of oral and pharyngeal swallowing function **96125** – Standardized cognitive performance testing.	$87.48 $120.96

Challenges & Barriers:

Physical Therapy: A PT evaluation typically takes a full hour to complete which would be difficult to accomplish thoroughly when sharing only 45 minutes with several other health care professionals. A solution to this problem would be to gather as much information through observation whilst others are performing their evaluations while prioritizing the most pertinent PT-oriented measures that must be done during the first meeting with a patient.

Dental: A dentist may need 2 weeks to complete preventative dental treatment on the cancer patient, but oncologist likely will give you more or less two days. Working together for the patient's best interests and doing necessary work to make the patient most comfortable before, during, and after chemotherapy and radiation treatment is key.

Nursing: Implementing a tool with other medical fields may be overwhelming for the patient and ultimately lead to non-compliance and reduction of adequate and relevant information gained from the assessment. To overcome this, health care professionals should implement problem-focused assessments and gather information that is relevant to the patient's chief complaint.

Medicine: The obvious barrier to interprofessional assessment of the patient is scheduling. The typical approach to an assessment begins with medicine and then consults with other specialties such as PT or dental. With this approach, the patient's schedule would need to match the availability of the consulted professionals. Alternatively, a team of health care providers could schedule a convenient time to meet and have the patient present to this team in a 45-minute block rather than during individual evaluations. See examples of cleft team assessment as a model for this type of comprehensive, all-in-one-office assessment strategy.

Speech & Language Pathology: While a 45 minute interprofessional assessment tool is comprehensive, it may not be appropriate for a patient that is not in a stable medical condition who would not be able to tolerate that long of an evaluation due to fatigue. If needed, a solution to this may be to break up the assessment and administer in portions. Specifically with Speech Language Pathology, dependent upon the setting, evaluations can last from 15 minutes to an hour. As part of my involvement, I can observe the patient's speech, language, and cognition skills while my team is administering their portions of the assessment. This will allow me to select the most appropriate and individualized assessment approach.

Our team's reflection of the IPEC sub-competency CC8:

- Worked well together by creating a Google Doc for individualized and collaborative work
- We discussed in person our understanding of the project and addressed any questions we had with each other either in person or via our group message
- Each team member provided input and helped decide on the focus of our topic of breast cancer based on our understanding of the project
- Each team member listened well to each other and was open-minded about others ideas
- We avoided any group member becoming over-shadowed or over-bearing

Alexandra Drumm, PT
Julia Daigle, DDS
John Brown, MD
William Wall, MD
Ashkan Saljoghi-Badlo, MD
Laura Puente, SLP
India Conerly, RN

References:

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7. https://www.google.com/url?sa=i&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwiCvuGwia3hAhUESK0KHXp-AYkQjRx6BAgBEAU&url=https%3A%2F%2Fbreastcancer-news.com%2F2015%2F07%2F09%2Foverdiagnosis-prominent-side-effect-breast-cancer-screening-us%2F&psig=AOvVaw1uwDsuWIFslLcDsOTq1IKR&ust=1554145341017174

TEAM UP™
COMPASSION, COMMUNICATION, COLLABORATION

Group 48

Background Information

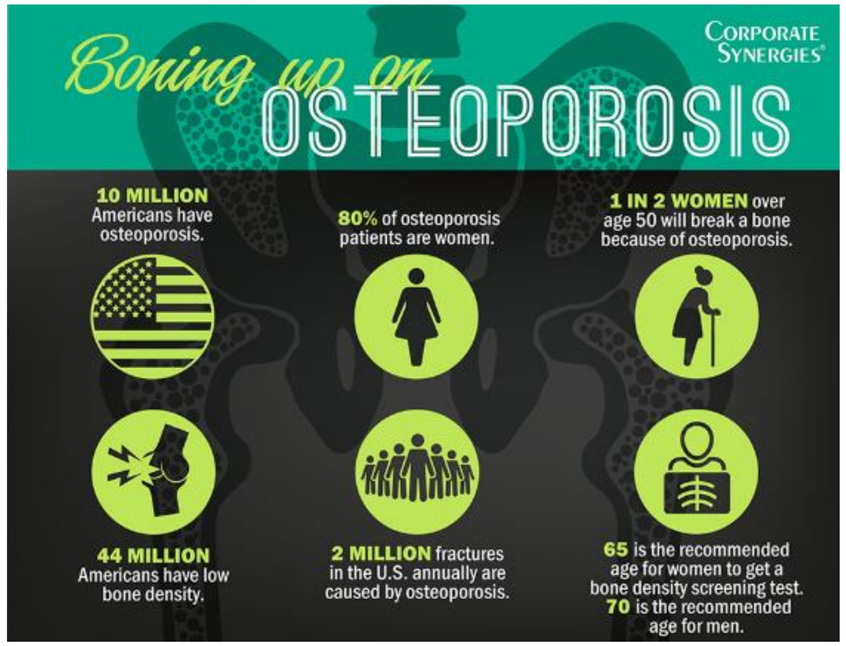
Osteoporosis has a great impact on the lives of the elderly population. The most significant medical consequence of osteoporosis is the increased risk of fragility fracture, which without proper treatment can lead to serve medical complications. It is a silent progressive disease that becomes clinically evident when there is a fracture. Osteoporosis is defined as a " progressive systemic skeletal disease characterized by low bone mass and micro-architectural deterioration of bone tissue". According to the WHO, about 30% of postmenopausal women suffer from osteoporosis and the incidence of osteoporosis is increasing yearly. Patients with osteoporosis who take medications such as Denosumab and Prednisone are at a greater risk of developing osteonecrosis.

Challenges and Barriers

1. There may be scheduling difficulties in getting all specialties involved at the same time.
   - Solution: Have specific days set for screening/treating certain types of diseases where all the specialties involved would be there.
2. Different specialties and their societies they belong to may have different ways of approaching a medical problem.
   - Solution: Have clear institutional policies in place based on consultation between all involved specialties that are used when evaluating/treating a given medical problem.

Age Group 60-69 Osteoporosis

	Assessment	Assessment	Assessment	CPT code/ Fee
Physical Therapy	TUG test	Falls Efficacy Scale	Berg Balance Scale	97161
Nursing	Family history and medication history	Physical exam and history- history of height loss and bone fractures	FRAX tool assessment	Services incident to MD, PA, NP
Medical	DEXA scan	Labs- TH, TSH, PTH, vit D, ALP, Ca, P_i,	Cognitive and gait assessment for falls	77080/ $330 80053/ $40
Dental	Full Mouth X-ray Series to assess bone level/ density	Medication list	Tooth mobility test/ periodontal disease e valuation	$37
Public Health	Screening with bone density for women at age 65.	Screening PM women below the age of 65, or with family history		
SLP	Swallowing Quality of Life Questionnaire	Oral Mechanism Exam	Swallow Evaluation	92610/ $87.48



Risk Factors

- Postmenopausal women
- Race
- Small body frame
- Unhealthy lifestyle
- Medications- Steroids
- Inflammatory diseases

IPEC sub-competency CC8

Teamwork is an essential part in delivering patient-centered care. It helps improve patient health and lower the cost of their care by lowering the amount of unnecessary tests and medications that may be added to their care without consultation between the healthcare team. This assessment tool reflects this idea of logical and cost-effective tools that allows every aspect of the medical team to get the information necessary to develop their plans of care.

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Pneumococcal Pneumonia

Background[1,2]

What is it?
- An infection caused by a type of bacteria called streptococcus pneumoniae

Epidemiology
- Pneumococcal pneumonia disease kills thousands of people in the US each year, most are 65 years or older
- Per CDC, about 900,000 people in the US get pneumococcal pneumonia each year

Symptoms
- Bone-shaking chills, fever, productive cough with rusty colored sputum, dyspnea, tachypnea, tachycardia

Diagnosis
- Laboratory Test
  - Gram Stain, Hemolysis, Urine Antigen Test, Optochin Test
- Radiograph

Treatment
- Antibiotic medications
- Gram-stain testing can help direct the choice of initial antibiotic treatment

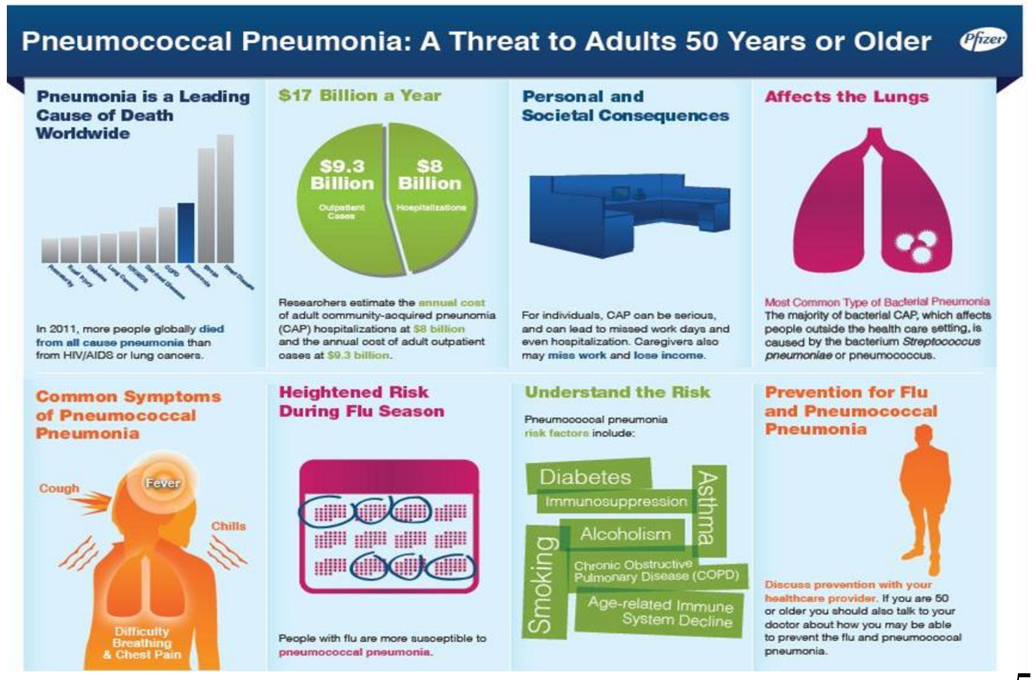
Primary Prevention
- A single dose of the pneumococcal vaccine (PCV13) is recommended for adults 65 years and older
- Education

Risk Factors[2,3]

INDIVIDUALS AT RISK
1. Adults 65 years and older
2. Individuals with COPD, diabetes, asthma, chronic heart disease, or a weakened immune system
3. Smokers and Alcoholics

TEAM UP
commit to
COMPASSION, COMMUNICATION, COLLABORATION

GROUP 49 MEMBERS
Gabrielle, Bodet, Minh Do, Kathryn Ernst, Abby Olinde, Wendemi Sawadogo, Jake Stover, Veronica Trombetta



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5,6,7,8

Secondary Prevention Assessment Tool

Program	Assessments	G-Code	Cost
Medicine	Preventative health exam Antibiotic prescription Radiological examination, chest	99201-99215, 4120F, 71045	$45.40-147.22, Variable, $22.56
Nursing	History – past illnesses, current meds, allergies, mental status Head to toe assessment – vitals, skin check, cough, breath sounds	Same as Medicine	Same as Medicine
Physical Therapy	Chest Wall Excursion Screen ROM/MMT for non-MSK provoked pain 6MWT	97161	$66.79
Speech Language Pathology	Bedside Swallow Evaluation to screen for dysphagia and determine if an instrumental assessment is needed	92521	$45.00
Public Health	Public Health's role is mostly primary prevention strategies	N/A	N/A
Dentistry	Comprehensive oral evaluation	D0150	$47.37

Challenges & Barriers

1. Type of pneumonia misdiagnosed
2. Time to complete lab tests results and imaging
3. Incomplete vaccinations of at-risk populations

Solutions

1. Higher fidelity testing and algorithms
2. Point of care rapid urine antigen testing
3. Vaccine drives for at-risk populations

Interprofessional Communication

IPEC CC8 -Communicate the importance of teamwork in patient-centered care and population health programs and policies.

Collaboration and communication between healthcare professionals increases team members awareness of each others knowledge and skills which leads to improved clinical-decision making and better patient outcomes

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Screening Tools

Medicine
- Neurological and Physical exam
- Order and interpret EKG
- Hypertension assessment

Nursing
- Perform Geriatric Depression Scale
- Dietary assessment
- SPICES Assessment

Rehab
- Fall Risk Assessment
- Mobility Assessment
- Cognitive-Linguistic Assessment
- Comprehensive Speech and Language Evaluation

Dentistry
- Comprehensive Oral Examination D0150
- Complete Series of Radiographic Images D0210

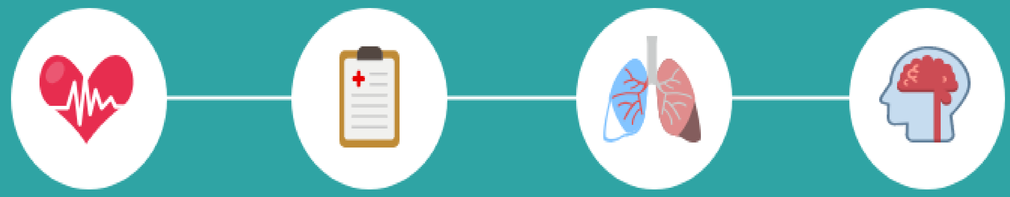
Total Cost: $659.76

Ages 80-100

Demographics/Statistics

- In the United States, the leading causes of death in the elderly are chronic diseases, largely replacing acute infection as the major cause of death. Approximately three-fourths of all deaths in the US are in people ages 65 and up. The leading causes of death in the elderly include heart disease, malignant neoplasms, chronic lower respiratory disease, and cerebrovascular disease.
- The quality of life of the elderly can largely depend on the prevention and management of a number of chronic diseases and conditions.

Deaths in 2017



#1-Heart Disease	#2-Malignant Neoplasms	#3-Chronic Lower Respiratory Disease	#4-Cerebrovascular Disease
519,052 people	427,896 people	136,139 people	125,653 people

IPEC CC8

In this age group, many proposed components of this assessment span across multiple providers. For this reason, it is essential for the different specialties to communicate results of these exams to ensure that patients receive the best possible care and follow-up. Screening for various problems that can affect the elderly can be used to reduce morbidity and mortality in this high-risk group.

References: https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_02.pdf; https://www.asha.org/uploadedFiles/Interprofessional-Collaboration-Core-Competency.pdf

Barriers for Implementation of a Team Approach

At this age, patients see multiple providers due to declining health.

- Ensure you obtain records from various providers
- Be mindful of other appointment schedules when determining plan of care
- Be mindful of assessments and treatments of other providers to prevent overlap

Often, patients of advancing age have difficulty getting to and from various appointments.

- Medicaid offers transportation to and from health care appointments
- As providers, we can be mindful of how often we see patients to decrease transportation needed

Down Syndrome

Risk Factors and Health Conditions From Birth to 5yrs

Assessment

Dentistry
Treatment: Panoramic Radiograph
Time: 3 minutes
Cost: (D0330) $57.05

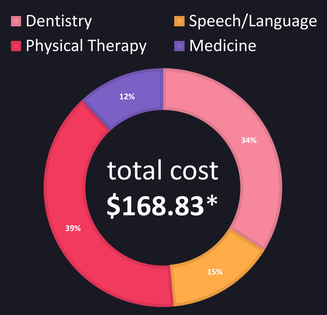
Speech & Language
Treatment: Hearing Screening
Speech and Language Screening
Time: 12 minutes
Cost: (Gn96110/92551) $25

Physical Therapy
Treatment: Strength Screening
Developmental Milestones Screening
Time: 15 minutes
Cost: (97162) $66.79

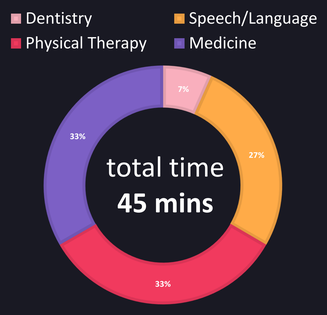
Medicine
Treatment: Cardiology Screening
Ophthalmology Screening
Lab Tests (T4, TSH, CBC & differential)
Time: 15 minutes
Cost: (HR483/92225/84439/85008/85009) $20.08

*while each discipline is performing their assessment, others will discuss patient history with the parent(s) for more efficient time management of the visit

Cost & Time

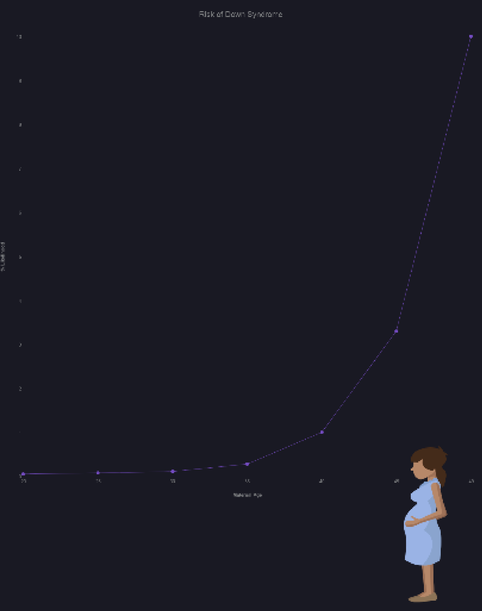


*Cost can fluctuate based off hospital lab fees



Risk with Maternal Age

Risk for Nondisjunction or Mosaicism Increases with Maternal Age



Down Syndrome By Cause

Down Syndrome is most commonly due to Nondisjunction or Mosaicism which is not hereditary. But Down Syndrome can be caused by translocation in which 1/3 of cases are hereditary.

95%	4%	1%
Trisomy 21	Translocation	Mosaicism

Health Conditions Associated with Down Syndrome

- Congenital Heart Conditions
- Expressive, Receptive Language Delays, Decreased Intelligibility
- Problems with Memory, Judgment, and Concentration
- Sensorineural Hearing Loss
- Farsightedness, Nystagmus, Strabismus, and Cataracts
- Low Muscle Tone, Delayed Ambulation
- Delayed Eruption, Crowded or Missing Teeth

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Challenges & Barriers

- Cooperation of child during assessment
- Distractions from several people in the room
- Coordinating schedules of medical professionals

Solutions to overcome

- Create an inviting environment
- Enlisting the parent to help keep the child engaged
- Having a designated time and location set up for collaboration and assessments

IPEC Sub – Competency CC8

- An IP assessment cuts the cost and time to benefit both the patient and the providers
- Puts the emphasis on patient centered care
- Work with public health to advertise the availability of an IP assessment tool

Group 51

Chris Toups
Megan Duhon
Michelle Wetzel
Michelle Stevenson
Sukhi Doyle
Zach Lerner

Speech Pathology
Physical Therapy
Dentistry
Medicine

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Team Demographics

Assessment Tool (45 mins)

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Nursing	ASSIST and The 4 P's	Urine Toxicology Screen	Opioid Risk Assessment Tool (ORAT)	CAGE-AID		Services incident to MD, PA, NP	N/A
Medicine	Drug use complicating pregnancy: unspecified trimester	Urine Toxicology Screen	DAST-A Drug Use questionnaire	EPDS Mental Health questionnaire	Referral to PT is OUD prevention.	O99.320 80307 94420 96127	$71.83, $29.70
Public Health	#ChoosePT Initiative				Referral to PT is OUD prevention.	N/A	N/A
Dentistry	Comprehensive Oral Exam	Oral Hygiene Instructions	Motivational Interviewing			D0150 D1330 D9993	$47.37
Physical Therapy	#ChoosePT Initiative	LE Scanning Exam	Pelvic Floor Exam	FABQ	Referral to PT is OUD prevention.	97161	$66.79

Program	CPT Code(s) Description (Evaluation Codes)
Nursing	No billable code, services incident to MD, PA, NP
Medicine	O99.320, 80307,94420, 96127
Public Health	N/A
Dentistry	D0150, D1330, D9993
Physical Therapy	97161

Louisiana Medicaid Fee Schedule for Reimbursement of Services -
Medicine - $71.83, $29.70
Physical Therapy - $66.79

Total Cost = $215.69

Other Necessary Team Members:

- Psychiatrist/Psychologist
- Behavioral/Mental Health Counselor
- Social Worker

#ChoosePT Campaign

https://www.moveforwardpt.com/Default.aspx

Opioid Use Disorder in Pregnant Women

Group 52

What is Opioid Use Disorder (OUD)?[1]

OUD is defined by the DSMMD as a problematic pattern of opioid use leading to problems or distress, with at least two of the following occurring within a 12-month period:

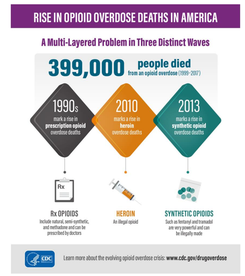
1. Taking larger amounts or taking drugs over a longer period than intended.
2. Persistent desire or unsuccessful efforts to cut down or control opioid use.
3. Spending a great deal of time obtaining or using the opioid or recovering from its effects.
4. Craving, or a strong desire or urge to use opioids
5. Problems fulfilling obligations at work, school or home.
6. Continued opioid use despite having recurring social or interpersonal problems.
7. Giving up or reducing activities because of opioid use.
8. Using opioids in physically hazardous situations.
9. Continued opioid use despite ongoing physical or psychological problem likely to have been caused or worsened by opioids.
10. Tolerance (i.e., need for increased amounts or diminished effect with continued use of the same amount)
11. Experiencing withdrawal (opioid withdrawal syndrome) or taking opioids (or a closely related substance) to relieve or avoid withdrawal symptoms.

Prevalence

General Population[2,3]

In 2016:

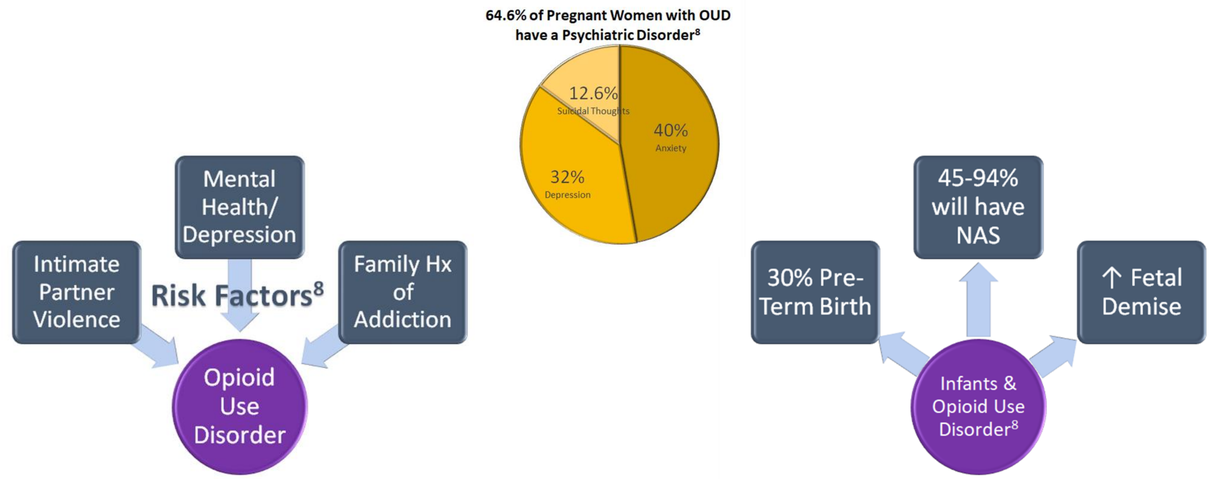
- More than 3 out of 5 drug overdoses involved an opioid
- Over 42,000 people died from opioid overdose and 40% were caused by prescription opioids
- Overdose deaths from prescription opioids and heroin increased 5-fold since 1999
- Approximately 78 deaths per day caused from prescription opioids



Pregnant Women

- From 1999- 2014, babies born to women with OUD increased from 1.5 to 6.5 per 1,000 deliveries, a 333% increase.[4,5]
- Pregnant women using opioids has increased 5-fold.[6]
- Of pregnant women on Medicaid, 21.6% filled a prescription for opioids[1]
- Out of all illicit drug users during pregnancy, Opioids are the most common reason for seeking treatment at 55.2%. followed by marijuana (20%), methamphetamines (15.6%), cocaine (7.4%), tranquilizers and sedatives (1.2%), and hallucinogens and PCP (0.6%).[7]

Common Risk Factors and Effects



Cost to Society

- Healthcare costs increase annually by $29.4 billion, criminal justice costs increase by $7.8 billion, and reduced productivity from misuse increase by $20.8 billion. Total = $58 billion. Average cost = $30,000/opioid misuse from prescription.[2]
- The average healthcare cost of a newborn with NAS is $65,000, compared to $5,000 for a healthy newborn. Medicaid covers 87%.[9]

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Women Demographics[10]

- Greatest Increases of OUD in the Southern U.S.
  - fewer women had medical insurance, education beyond high school, or were married than up north

Assessment Tool: Implementation Challenges

- Each assessment could take a long time
- Need access to tools/instruments needed to perform assessments (ex: dental instruments, lab tests, etc)

Assessment Tool: Implementation Solutions

- Determine overlap between different professions assessments - don't perform the same assessment twice
- Perform assessment within a clinical space that has access to necessary instruments/tools (hospital where dentist has privileges and labs can quickly be ordered, etc)

Team Reflection: IPEC sub-competency CC8

Strong interprofessional teamwork and communication is an important factor when developing an assessment plan for the prevention and/or treatment of any disease, including OUD in pregnant women. When the goal is patient-centered care, a number of different tools across disciplines can be involved in both the assessment and treatment of OUD; however, patients may not communicate synchronous information with all providers of different healthcare fields. Therefore, good communication between team members from different areas of healthcare should be emphasized. With collaboration, information that may significantly improve long-term outcomes for patients can be shared. This aids professionals across all fields to provide pregnant women suffering from OUD the best, most consistent care possible.

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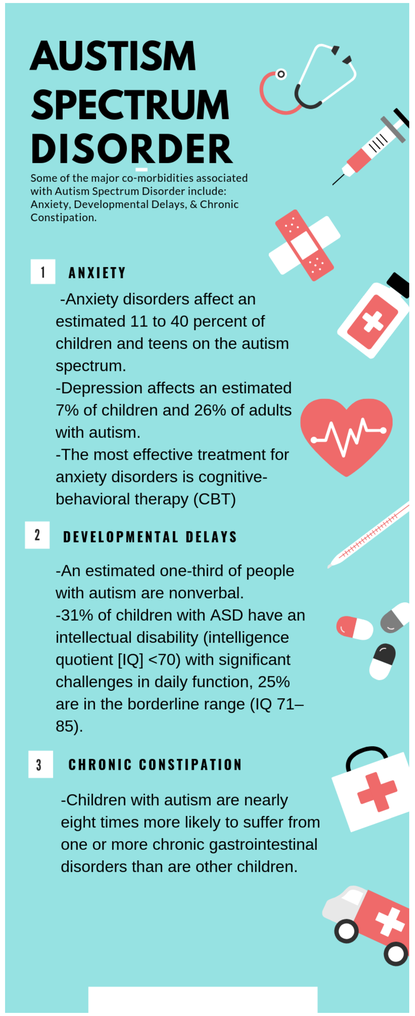
Background of ASD:

- Developmental disorder that affects communication and behavior
- DSM-5 criteria:
  - Difficulty with communication and interaction with other people
  - Restricted interests and repetitive behaviors
  - Symptoms that affect functioning
- It's a "spectrum disorder" meaning there are many variations in the type and severity.
- Autism spectrum disorders (ASDs) now affect approximately 1 in 88 American children (CDC, 2012).

•The different types of treatments can generally be broken down into the following categories:

- •Behavior and Communication Approaches
- •Dietary Approaches
- •Medication
- •Complementary and Alternative Medicine



Autistic Spectrum Disorder

Team Member Roles:

Dentistry- Oral health screening and diagnostic x-rays (3)

Public Health- Discuss ASD background knowledge with parents/guardians and recommend resources related to ASD (1)

Nursing- Teach parents to establish and maintain routines, provide community resources and support groups for patient and family (5)

Medicine- Assess for need of pharmacological intervention for anxiety/ADHD and assess for dietary deficiencies (Vit D, Calcium, Fiber) (4)

Physical Therapy - Assess gross and fine motor skills (i.e. gait, coordination, balance, and postural control impairments) (2)

45 minute assessment:

1. Introduce patient to healthcare team. Assess parent's knowledge of ASD and recommend resources. Let patient acclimate to new setting. **(5 min)**
2. Assess for growth and fine motor skills. **(10 min)**
3. Perform oral health screen. Take diagnostic x-ray. **(10 min)**
4. Use a GAD-7 for anxiety assessment. Screen for ADHD. Provide pharmacological treatment as needed. Ask caregiver about dietary and bowel habits and look for symptoms of dietary deficiencies **(10 min)**
5. At the end of the session teach parents to establish and maintain routines. **(10 min)**

Cost assessment:

Dentistry- $107.54
Medicine- $110.28
Nursing- N/A
Public Health- N/A
Physical Therapy- $66.79

Total cost: $284.61

Challenges/barriers to the implementation of a 45-minute interprofessional and solutions:

Challenges:

- Not an adequate amount of time to acclimate the patient to the office and care team
- Introducing the patient to a new situation
- Child with ASD typically have difficulties with communication and relaying information
- Sensory aversion to tests that would be performed

Solutions:

- Communicate with caregiver before visit for determine strategies to optimize patient compliance
- Familiarize patient with the office and clinic on a "practice visit"
- Use simple instructions and visual cues to increase understanding of task or information needed
- Avoid tests that may be overstimulating for the patient

Team's reflection of IPEC sub-competency CC8:

In accomplishing this goal of a 45 minute assessment teamwork and communication will be crucial. Providing patient-centered care with the help of multiple healthcare professionals will work if there is open communication and commitment between every individual involved.

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Group 54

Jewel Datri, Casey Duvall, Abby Earles, Julia Kuntz, Kristin Kurtz, Travis Lindsey, Leslie Saucier, Meaghan Sheehy & Betty Lou Starnes

Background

Type I diabetes is caused by the autoimmune destruction of the β cells of the pancreas. These cells are responsible for the production of insulin, a hormone that is normally secreted after meals to decrease serum levels of glucose. This is achieved through increased uptake of glucose into skeletal muscle and adipose tissue, increased synthesis of the storage of glucose, and a decrease in glucagon release which opposes the actions of insulin. In type I diabetes, the destruction of β cells and lack of insulin secretion leads to a rise of glucose levels in the blood. Type I diabetes typically presents in children and adolescents and has a relatively weak genetic predisposition.

Screening is not currently recommended for type I diabetes. There is no established cutoff value for antibody screens that can detect the common destructive antibodies of β cells. Also, there is no existing treatment that can prevent the progression of the disease. The diagnosis of type I diabetes can be made through two lab values over the established diagnostic cutoff, either by the same test from two different samples or two different tests of the same sample. The tests and diagnostic cutoffs include HbA1c levels greater than or equal to 6.5%, a fasting plasma glucose greater than or equal to 126 mg/dL, or a 2-hour oral glucose tolerance test greater than or equal to 200 mg/dL. The diagnosis can also be made by a random glucose greater than 200mg/dL in the presence of hyperglycemia symptoms. Early signs and symptoms of hyperglycemia include frequent urination, increased thirst, increased hunger, dry mouth increased appetite, weight loss, headaches, and fatigue. Late signs of hyperglycemia are the result of diabetic ketoacidosis. These symptoms include delirium, rapid and deep respirations, nausea, vomiting, abdominal pain, dehydration, and fruity breath odor.

Early recognition of the signs and symptoms of type I diabetes can help prevent the occurrence of life-threatening complications. Doctors, nurses, dentists, and physical therapists should all be taught to recognize Type I diabetes and help the patient receive the appropriate care for the disease. Doctors and nurses are involved in teaching the patient how to manage their diagnosis. Dentists should monitor blood glucose levels of known diabetics at each appointment. Physical therapists help patients participate in effective exercise programs to help lower their blood glucose levels, as well as improve their ability to move and perform daily activities, reduce pain if present, and aid in the healing of skin lesions. Public health is involved in efforts to increase research in type I diabetes to better our understanding of the disease and possible find a way to prevent its occurrence.

Juvenile Type 1 Diabetes

Type 1 Diabetes

What You Need to Know

1.3 million American's living with T1D

Estimated 40,000 new diagnoses each year

Only 5%

of Diabetes Mellitus diagnoses are Type 1

Signs & Symptoms

- Frequent hunger + thirst
- Unintended weight loss
- Blurry vision
- Frequent Urination
- Weakened immune system
- Tired often
- Tingling in extremities

Causes of T1D

Age: hormonal changes while aging can influence onset

Genetics: family history of T1D puts you at higher risk

Environmental Exposures: exposure to certain viruses has been shown to influence T1D

Preventing T1D

There are no known preventative measures for T1D: unlike T2D, exercise and diet do not influence T1D onset

Diagnosis & Treatment

Diagnosis: Glycated Hemoglobin (A1C) Test

Treatment: Insulin therapy and blood sugar monitoring

Management

Healthy Food Choices

Physical Activity

Blood Pressure Control

Cholesterol Control

T1D Complications

Heart Disease

Neuropathy & Nephropathy

Damage to skin, eyes, and feet

	Assessment	Comments	CPT Code	Fee Schedule
Nursing	Vitals (HR, BP, RR, Temp), Diet habits, types of insulin used, sites of administration of insulin, rotation of administration, blood sugar, at home glucometer use and exercise patterns Assess for signs and symptoms of hypo- and hyper-glycemia. Check height, weight, and BMI percentiles. Assess if the child is using rapid-acting and long-acting insulins appropriately If using an insulin pump: Check to see if it is working properly Recommend an insulin pump if noncompliance is an issue	Nurses work closely with patients to screen, diagnose, and treat diabetes. Nurses teach these patients how to manage a condition they are going to have for the rest of their life and are there for them when they need additional information and help.	Services incident to MD, PA, NP	N/A
Medicine	Screen is not recommended for Type 1 Diabetes. There is no established cutoff for the antibody screen. There is no treatment for asymptomatic patients and no treatment to prevent the progression of the disease.	Presentation of type I diabetes may occur after an infection as diabetic ketoacidosis. Diabetic ketoacidosis presents as delirium, Kussmaul respirations, nausea/vomiting, dehydration, and fruity breath odor.	99381-99384 Depending on age of patient	$120.13-160.85
Physical Therapy	Observation (posture, biomechanical restraints, bony alignment) Sensory (Light touch/monofilament) Skin Integrity ROM/MMT Gait assessment Functional Testing, Endurance Testing (6MWT, graded ex test), Balance Testing Assessment Tool (Sensory): Monofilament Testing (Semmes-Weinstein monofilaments)	Physical therapists help people participate in safe, effective exercise programs, improve their ability to move, perform daily activities, reduce their pain, lower glucose levels, and can help heal any associated skin problems faster than they would without treatment.	97162 PT Eval Mod Complex	$69 for 30 minutes
Dentistry	Medical consultation with physician is required if patient presents with poor glycemic control or undiagnosed condition. Routine dental treatment may be performed if diabetes is well controlled. Morning appointments are usually best Screening/oral exam, Fluoride education, Oral hygiene instructions A diabetic patient presenting with acute oral infection: • Warm intraoral rinses • Incision and drainage • Pulpotomy, pulpectomy, extractions • Antibiotics	Dentist should monitor blood glucose levels of known diabetics at each appointment, inquire about adverse reactions to insulin therapy. If a patient is an undiagnosed diabetic, and the dentists notes signs/symptoms such as polydipsia, polyuria, polyphagia, weight loss, and weakness, the patient should be referred to a physician for diagnosis and treatment. Acute dental or oral infection T1D patients is usually more severe and can throw off the patient glycemic control. The dentist should consult the patient's physician during such instances.	D0150 Comprehensive Oral Exam D0412 blood Glucose Rapid Check	$47.37 Fee left to the discretion of the provider
Public Health	Assess access to healthcare: • Does your insurance allow you/your child to reasonable seek preventative and/or specialized healthcare? Family History: • Has anyone in your family been diagnosed with T1D?	Very little is known about the causes of T1D and nothing is known about preventative measures. There are many national programs and surveillance systems established to tract trends in diabetes prevalence, but the data does not distinguish between type 1 and type 2.		N/A

IPEC Competencies

In order to increase positive patient outcomes, healthcare professionals must work together as a team when treating patients. Type 1 DM is a disease that could benefit from collaboration in healthcare in order to provide the best care possible to these patients. The assessment tool allowed for collaboration in the sense that each profession was able to communicate what was important in the care of a patient with Type 1 DM. Collaboration on the assessment tool provided learning opportunities for each student to understand what the others professions felt were most important in this population. After completing two years of TeamUp our group has grown as a whole and has a better understanding of the importance of inter-professional collaboration in health care. We have made many positive strives as a group and have enjoyed working together.

Challenges & Barriers

Implementing Assessment & Diagnosis

1. Level of cognitive development of patient, regarding understanding diagnosis and follow up on educational needs.
2. Local access to all of these healthcare teams that would expedite the assessment in a timely manner.
3. Patient follow through on referral to physician for treatment and care planning.

Possible Solutions

1. Education for health care team regarding stages of development and understanding of educational needs for groups within this patient population in regards to care for T1D.
2. Seeking out and advertising local medical facilities that might house most if not all of these health care teams on site.
3. Follow up with patient and primary caregiver after initial diagnosis to establish care planning and schedule visits with physician that work with their needs.

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Understanding Medical Care for Transgender Individuals

Zoe Alexander; Thomas Cunningham; Nicole Dominique; Lily Fahrenwald; Todd Firmin; Danielle LeBlanc, Bohyung Park; Anna Suydam

Background

- Transgender persons are likely to encounter harassment, abuse and violence[1].
- Identity documents, like passports and driver's licenses, often do not match their gender identity which reveals their transgender status[1].
- Transgender persons have an HIV prevalence rate **49 times greater** than the background rate[1].

- A US study found that **44%** of trans people displayed clinical depression, **33%** had anxiety, and **41%** attempted suicide[1].
- Transgender persons often experience providers who lack skills to serve them properly or actively discriminate against them[1].

45 Min Primary or Secondary Prevention Interprofessional Tool

	Assessment	Assessment	Assessment	Comment	CPT Code	Fee Schedule
Medicine	STI/STD Screening	Depression/ Psychiatric Needs Screen	Health and Hormone Health Check-In		99204 (psychiatric screen) 87491 (Chlamydia and Trichomonas screen) 87521 (Hep C) 87591 (Gonorrhea) 87535 (HIV) 99395 (Check-up for health)	$99.52 $38.39 $38.39 $38.39 $38.39 $69.69
Dentistry	Comprehensive oral evaluation				D0150 (comprehensive exam)	$47.37
Physical Therapy	Pelvic Floor Screen or Pelvic Floor pre/post rehab	Depression Screen	Gait/Mobility	A general evaluation and pre rehabilitation to prepare for transition surgery	97162	$66.79
Nursing	Transgender needs assessment	Depression screening	Health screenings based on biological sex		99211	N/A
Total cost:						**$436.90**

Challenges/ Barriers to Implementation

- Small amounts of clinical facilities have all our medical disciplines in one location
- Having only 45 minutes is a limitation to properly screening for mental and physical health.
- In some locations, not all staff might be capable or trained in a culturally competent manner to address the needs of this high-risk population.

Reflection of IPEC sub-competency CC8

- With a high-risk population, the importance of interprofessional training on cultural competency is clear.
- Also, transgender people may need psychiatric counseling due to many stressors in their life, so each medical provider would have to be sensitive to their distress, also necessitating interprofessional training.
- Due to psychiatric needs, STI screening, and hormone treatment, many providers can often be involved with one transgender patient and would need to communicate effectively.

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LSU Health NEW ORLEANS

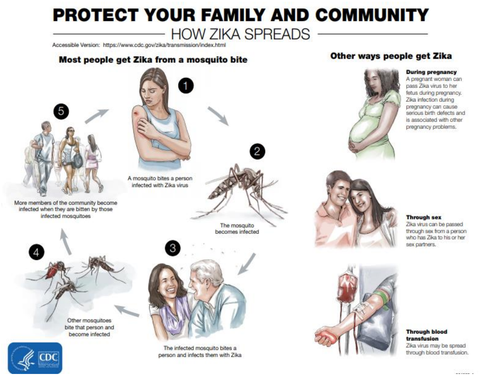
Background[2,5,6,7,8,9]

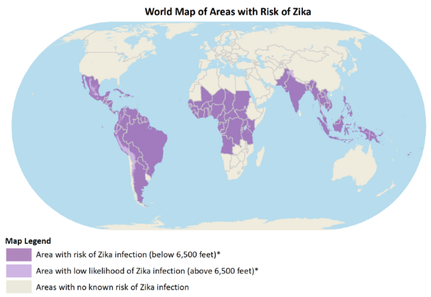
- **Vector:** Mosquitos
- **Transmission**
  - Spread through blood transfusion
  - From pregnant woman to fetus or birth period
  - No reports of virus spreading by touch or by bacteria
  - From Zika infected person (lived or traveled to) to non-infected through unsafe sexual encounters
- **Symptoms**
  - Muscle/joint pain, fever, headache, rash, conjunctivitis
  - Congenital Zika Syndrome: microcephaly, subcortical calcifications, macular scarring, arthrogryposis
- **Diagnosis**
  - Laboratory treatments of blood, urine, and/or semen
- **Treatment**
  - Currently no treatments available for Zika infection
  - Symptoms managed with rest, fluids, and NSAIDs
- **Prevent Strategies of Travelers**
  - **All travelers** prevent mosquito bites
  - Pregnant women or women planning pregnancy
    - ✦Do not travel. If decide to travel, prevent sexual exposure to Zika.
    - ✦ If traveling without male partner, wait 2 months after return before becoming pregnant.
  - Men with pregnant partners or planning pregnancy
    - ✦Use condoms, do not have sex for the rest of the pregnancy, or do not have sex for at least 3 months after return.

Risk Factors[1,2]

TOP THREE RISK FACTORS

- Living in or traveling to places where Zika outbreaks currently exist (see map)
- Living in or traveling to tropical and subtropical climates with prevalent mosquitos
- Having unprotected sex





ZIKA VIRUS

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Secondary Prevention Assessment Tool[1,3,4]

Program	Assessments	G-Code	Cost
Medicine	Primary care visit, history and physical exam	99201	$26.24
	If pregnant, U/S of fetus for deformities	76801	$85.16
	ZIKA Virus IgM Serology within 14d of symptom onset	86794	$15.60
Nursing	History: pregnancy, travelling of self and sexual partners to an affected area Recognizing signs and symptoms: arthralgia, maculopapular pruritic rash, non-purulent conjunctivitis, muscle/joint pain, Headache, low grade fever > 38.5˚	Same as Medicine	Same as Medicine
Dentistry	Comprehensive oral exam, screen for palatal petechial lesions and aphthous ulcers Collection/preparation of saliva sample for diagnostic testing	D0150 D0417	$47.37 $142.90
Physical Therapy	Integumentary check Screen ROM/MMT for non-MSK provoked pain 6MWT for endurance	97161	$66.79
Public Health	Public Health prevention strategies are mostly accounted for in primary prevention strategies	N/A	N/A

Challenges & Barriers

1. Time required to collect samples and retrieve results for bodily fluid tests
2. Blood and urine tests need to be done within 14 days of onset of symptoms for accurate diagnosis
3. Zika is commonly misdiagnosed and confused with dengue and chikungunya

Possible solutions to overcome challenges:

- Consultation with physician before travelling
- Initiate prompt diagnostic testing by educating healthcare providers on:
  - Signs and symptoms
  - Methods of exposure & prevention
  - Modes of transmission
- Multi-factorial tools to achieve accurate diagnosis

IPEC Competencies

IPEC CC8 - Communicate the importance of teamwork in patient-centered care and population health programs and policies.

As a healthcare team, we can use teamwork to deliver holistic care. We can utilize our individual strengths to improve patient outcomes and decrease repetitiveness of assessments by communicating with other healthcare professionals. Multifactorial diagnostic testing will ultimately prevent misdiagnosis.

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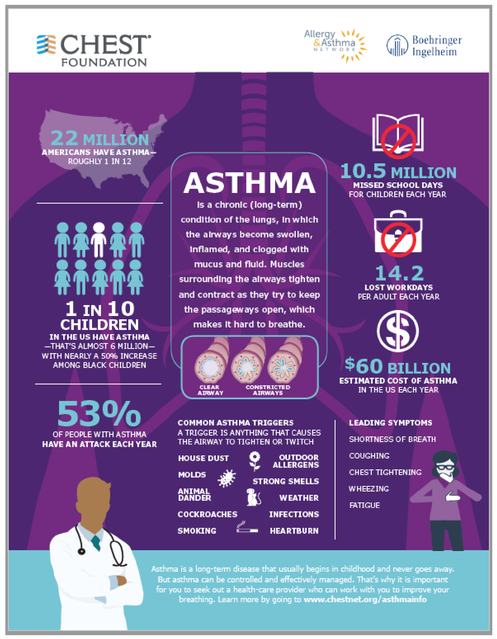
9. https://wwwnc.cdc.gov/travel/page/zika-travel-information

TEAM UP GROUP 56 MEMBERS:

Branson Cambre, Trey Fruge, Paige Guillory, Mary LaHaye, Elizabeth LeBoeuf, Kia Sayers, Kylie Sheppard, Nichelle Taylor

Background



Interprofessional Reflection

Teamwork among interprofessional groups is extremely important for helping a patient get the best care possible. A functional healthcare team that communicates and works together can help cut time and money spent by both the patient and healthcare facilities. It is essential for each member of the healthcare team to perform to the best of his or her ability and do the most their license allows them to do. For our assessment tool for asthma, we kept the ideas of CC8 competency in mind and focused on the importance of interprofessional communication. In developing this brief, early detection assessment tool for asthma, we found a multi-professional approach superior to any one specialty screening alone. We determined that the population being assessed for asthma may more frequently visit their dentist or other type of provider in a given year than their pediatrician or primary care physician alone. Furthermore, this assessment tool can be administered by ANY level of provider, underscoring the principal that medical providers must practice more near the limit of their medical licenses. After screening or diagnosing with asthma, all medical professionals can still be a part of the patient's treatment plan as well. For example, a doctor should complete a full history and physical on a patient during their yearly wellness visits. Appropriate follow-up pulmonary exams may also be necessary if the physician suspects a potential case of asthma. After diagnosing a patient with asthma, the nurse should help teach the patient medication administration, making sure the patient understands how and when to use the inhaler. When picking up the medications, the pharmacist can again review the administration and the potential side effects of each medication. If the patient receives any sort of PT or OT, it would be important for the patient's asthma diagnosis to be communicated to them (via electronic medical record, EMR) so they can be sure to administer appropriate exercises that would not aggravate the patient's symptoms. They should also be on the lookout for SOB or breathing difficulties in their patients that may not even realize they have a respiratory problem. Public health professionals can administer questionnaires and gather data about the patient population, diving deeper into some of the potential aggravators for asthma within that area. All the data gathered is extremely beneficial for physicians and nurses so that they may be better aware of potential risk factors in their patients.

Asthma Assessment Tool

	Assessment	Assessment	Assessment	Assessment	Comments	CPT Code	Fee Schedule
Physical Therapy	Listening to breath sounds: before and after physical activity or in patients complaining of SOB	Chest excursion	Asking about age-appropriate exercise regimen, if applicable, and educating on such	6 MWT	Endurance assessment (6 MWT) may be warranted in adults with asthma due to possible decreased physical activity levels	97161	$66.79
Public Health	Occupational History	Environmental History	Asthma Questionnaire			N/A	N/A
Medicine	Physical Exam Includes: Vital Signs, Medical/Asthma History	Pulmonary Function - Spirometry				94010 94060	$35.24 $59.04
Nursing	Patient Education	Medication Administration	Lifestyle Modification	Use peak flow meter to get an estimate of current breathing capabilities in comparison to normal breathing capabilities		94640	$17.87
Dentistry	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Challenges/Barriers

Challenges / Barriers

- Access to healthcare or screening services
- Environmental stressors at home or in the workplace
- Maintaining clear, consistent communications between healthcare providers
- Completing a comprehensive assessment that encompasses several health care fields in a 45-minute time period
- Identifying irritants, other factors which may exacerbate the symptoms of asthma

Possible Solutions to Overcome barriers:

- Work to maintain constant yet efficient communication at all times
- Ask relevant questions about the patient
- Educate patients on environmental stressors and possible irritants
- Be efficient with tests and measures to allot adequate time for other providers' assessment tools

Offer free asthma screenings in schools and/or work places

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Oral Cancer Screening Tool

Alaina Beauchamp[1], Kyle Gresham[2], Brekel Kemp[1,3], Annabelle Laville[4], Conner Luscy[5], Rod Paulsen[3], Mckayla Sheppard[4], Charity Slyvester[3]
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Background

Figure 1. Oral Cancer Infographic

- Men are more likely to develop oral cancer than women[1]
- Oral cancer rates are higher for Black and Latino males than for White males[1]
- Oral cancer rates increase with age[1]
  - The increase becomes more rapid after age 50 and peaks between ages 60 and 70[1]
- About 10% of men and 3.6% of women have oral HPV, and oral HPV infection is more common with older age[1]
- Smoking and alcohol consumption are major risk factors in oral cancer development[2]
- The risk of developing oral cancer increases with the frequency (i.e. number of cigarettes or drinks per day/week) and duration (i.e. years of smoking or drinking) of alcohol and tobacco use[2]
- Moderate drinkers have 1.8-fold higher risks of oral and pharyngeal cancers, and 1.4-fold higher risks of laryngeal cancers than non-drinkers[3]
- Heavy drinkers have 5-fold higher risks of oral and pharyngeal cancers, and 2.6-fold higher risks of laryngeal cancers[3]
- Alcohol and tobacco use have synergistic effects on the development of oral cancer[2]
  - The majority of oral (64 %), pharyngeal (72 %), and laryngeal cancers (89 %) are associated with concomitant use
- Compared with current drinkers, a decreased risk of oral cancer is associated with alcohol cessation for about 10–15 years[4]

Signs and Symptoms

Figure 2. Ulcerated Lesion of the Tongue

- Persistent ulcers/sores in mouth
- Tongue pain
  - Exacerbated by spicy foods
- Difficulty swallowing/chewing
- Oral cavity swelling
- Red-Brown discolored mucosa
- Leukoplakia/erythroplakia
- Malignant neoplasms:
  - Poorly defined borders
  - Unencapsulated
  - Rapidly growing
  - Invade adjacent tissues
  - Painful

Figure 3. Leukoplakia Patches

Screening Tool

To be implemented by oral cancer screening task forces

- The screenings will target alcohol drinkers in the city of New Orleans by offering free oral cancer and risk factor screenings outside of bars
- The task forces will be trained on intraoral soft tissue exams by licensed dentists
- Oral screening will be conducted after completion of a risk factor assessment questionnaire
- The risk factor assessment questionnaire will be compiled using validated tools and questions (Table 1)
- Abnormal oral screening results will be referred to LSUHSC Dental Clinic
- High risk factor assessment questionnaire score will be referred to community alcohol cessation resources

Table 1. Oral Cancer Screening Assessment Factors

Health Component	Screen for	Use	Validated Tools	Interprofessional Team
Physical	Leukoplakia, erythroplakia, erythroleukoplakia, and papilloma	Early detection for referral to oral surgeon	Intraoral soft tissue exam	Dentistry Medicine Nursing Physical Therapy
Cognitive	Motivation for change	Indication for referral to behavioral change interventions	Readiness to Change Questionnaire	Public Health Medicine Nursing
Emotional	Alcohol use disorder	To assess risk of sequelae from alcohol use	CAGE Questionnaire	Public Health Medicine Nursing
Community/ Environment	Social support	Understanding how to best facilitate alcohol use intervention for the patient	Multidimensional Scale of Perceived Social Support	Public Health Nursing
Spiritual	Religious preferences	Identification of religious/spiritual objections to screening/ intervention	Brief Multidimensional Measure of Religiousness and Spirituality	Public Health Nursing

Barriers and Solutions

Barriers:

- Oral cancer screening at a bar may be a buzzkill
- Nonadherence to follow up if lesions are detected
- Fear of diagnosis

Solutions:

- Increase ubiquity of screenings
- Provide low cost referrals
- Decrease stigma by providing information in non-judgmental, compassionate manner

Collaboration

- **Dental**:
  - ✓ Comprehensive intraoral / head and neck screening at recall appointments
  - ✓ Identify suspicious lesions
  - ✓ Compile differential diagnosis and biopsy or refer for biopsy depending on location of lesion
- **Public Health**:
  - ✓ Reduce incidence of oral cancer through risk factor interventions
  - ✓ Decrease prevalence of risk factors in the population
  - ✓ Increase rates of early detection
- **Medicine**:
  - ✓ Monitor for evidence of cancer development
  - ✓ Refer to oral cancer specialists
- **Physical Therapy**:
  - ✓ Oral cavity screening if the patient is coming to therapy for TMD symptoms
- **Nursing**:
  - ✓ Patient history and physical
  - ✓ Identify risk factors
  - ✓ Educate patient on reduction of risk factors
  - ✓ Educate patient on signs and symptoms of oral cancer
  - ✓ Provide referrals

***IPEC CC8**: Communicate the importance of teamwork in patient centered care and population-health programs and policies.*

- From identification to treatment, our healthcare team works together to eliminate oral cancer. The involvement across disciplines prevents missed diagnoses in patients who may just see one member of the team sporadically, while the breadth of expertise ensures underserved populations will not be neglected either.

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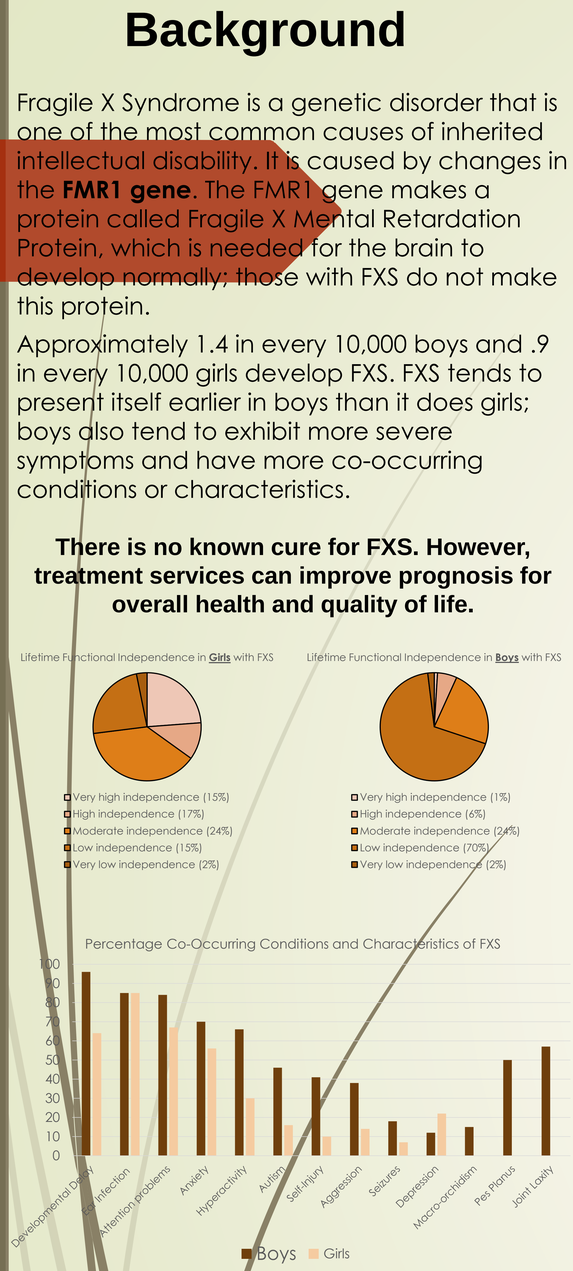
Background

Fragile X Syndrome is a genetic disorder that is one of the most common causes of inherited intellectual disability. It is caused by changes in the **FMR1 gene**. The FMR1 gene makes a protein called Fragile X Mental Retardation Protein, which is needed for the brain to develop normally; those with FXS do not make this protein.

Approximately 1.4 in every 10,000 boys and .9 in every 10,000 girls develop FXS. FXS tends to present itself earlier in boys than it does girls; boys also tend to exhibit more severe symptoms and have more co-occurring conditions or characteristics.

There is no known cure for FXS. However, treatment services can improve prognosis for overall health and quality of life.



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An Interdisciplinary Assessment Tool for Fragile X Syndrome (FXS)

Group 59: Elaine Brown (MPH Epidemiology), Kayla Devellis (BSN), Kristen Hamilton (DDS), Nikka Khorsandi (MD/MPH, Amanda Martinez (PT), Jerry Sepulvado (MD, Rural Track), Maury Williams (MD), Abby Mahl (BSN)

Sample Assessment Measures

FMR1 DNA Test for Fragile X Syndrome

Physician: *Offer/Order FMR1 DNA Test for FXS*

Nurse: *Assess need for support to families upon hearing test results*

Epidemiologist: *Include test results in state-level surveillance of FXS to assess for associations or trends. Publicly disseminate newly understood associations and/or trends to inform treatment*

Cognitive/Behavioral

Physician: *Assess cognitive function both directly and from caregiver reports (e.g., NIH Toolbox Cognition Batteries, Child Behavior Checklist). Assess for possible Autism Spectrum Disorder (e.g., ADI-R, ADOS-G, etc…)*

Nurse: *Assess patient's special needs for each visit (e.g., if patient is reactive to sudden changes or loud noises)*

Dentist: *Assess behavioral status and determine if sedation should be recommended*

Speech Therapist: *Assess for speech impediment*

Epidemiologist: *Include results of cognitive assessment tools as part of surveillance of FXS, to assess for associations or trends. Publicly disseminate newly understood associations and/or trends to inform treatment*

Emotional and Spiritual Health

Physician: *Listen to complaints, counsel family, and refer to social work for support services, advocacy groups, or support groups*

Social Worker: *Assess social support and educational needs of both patient and family. Ensure family is connected with social support programs, counseling, and caretaker support*

Nurse: *Collect information on spiritual or religious practices; assess if chaplain is needed for further assessment*

Physical Therapist: *Assess need for temporary or respite care for guardians*

Physical Health

Physician: Assess current health from head to toe, and maintain routine medical management (as needed) of strabismus, ear infections, reflux, seizures, mitral valve prolapse, and/or hypertension

Dentist: *Assess patient's ability to perform oral hygiene (e.g., motor skills for flossing/brushing teeth), and make recommendations based on patient's capacity to perform these functions (e.g., recommend electronic toothbrush or involve caretaker's assistance)*

Physical Therapist: *Perform gait analysis, and assess patient's functional mobility and motor movements*

Nurse*: Assess fall risk by utilizing MORSE fall scale*

Epidemiologist: *Include results from all providers' physical health assessments as part of surveillance of FXS, to assess for associations or trends. Publicly disseminate newly understood associations and/or trends to inform treatment*

Education

Physician, Nurse: *Assess then educate family on common health comorbidities or ailments to FXS (e.g., ear infections), how to prevent or mitigate them, and how to identify them*

Physical Therapist: *Assess and educate patients and family of common connective tissue problems, exercises to strengthen muscles that may reduce fall risk, and the relationship between exercise and brain-derived neurotropin factor*

Dentist: *Assess then educate patients and family about risk for supernumary teeth or partial anodotia, and their implications. Assess current oral hygiene and preventative care routine*

Epidemiologist: *Develop and administer survey to assess patient and family's readiness for medical management for FXS; utilize results to inform interventions or treatment*

Social Worker: *Assess and educate about longterm social, education, and health needs; provide ongoing education through program management*

Expected Cost

Initial new patient preventative care with hospital outpatient facility fee ($197), FMR1 DNA Test ($400), assessment/Care planning for patient with impaired thought processing ($308), developmental testing ($121), behavior observation ($96), physical therapy evaluation ($74), dental exam for new (unruly) patient ($280), evaluation of speech production, language comprehension, and language expression ($230)

Total Expected Cost: $1706

Challenges and Barriers

1. **FXS patients often have communication challenges**
    1. *Affects providers' ability to educate patients directly*
        1. *Emphasis on alternate means of communication or caregivers' role in treatment*

2. **Low public medical awareness or literacy of FXS**
    1. *Challenge to educating caregiver (e.g., starting at square one to explain condition)*
        1. *Emphasis on low-demand education models and social services*

3. **FXS is associated with cognitive/behavioral challenges**
    1. *May impose obstacles to assessment (e.g., limited ability to self-report experiences) and treatment compliance*
        1. *Emphasis on treatment models that emphasize alternate means of communication or caregiver's reports*

4. **Cultural stigma**
    1. *Stigma may reduce family's willingness to seek or comply with treatment*
        1. *Emphasis on nonjudgmental approach and encouragement*

5. **Cost limitation**
    1. *Interprofessional assessment, ongoing symptom monitoring, and prescription treatments may not be affordable to low-income populations*
        1. *Emphasis on integrated care (known for cost reduction) and nonprofit partnerships*

Team Reflection

FXS affects a broad range of factors related to patients' and families' quality of life. Addressing the condition inter-professionally not only ensures that the patient's health needs are met, but that all aspects of care are more informed about each patient's individual needs.

LSU Health NEW ORLEANS

Background

There are 322 million people worldwide who live with depression (Our World Data). The prevalence of depression in children is low with no sex differences and rises substantially throughout adolescence. This is thought to be contributed to puberty and brain and cognitive maturation (Thapar). In 2017, an estimated 3.2 million adolescents aged 12 to 17 in the United States had at least one major depressive episode. This represents 13.3% of the U.S. population aged 12 to 17. The prevalence of major depressive episode was higher among females (20%) compared to males (6.8%) and highest among adolescents reporting 2 or more races (16.9%) (NIH).

Challenges/Solutions in Interprofessionalism

- **Challenges**
  - Understanding each profession's role in the care of the patient
  - Different approaches on procedures
  - Communicating with other professionals in a timely manner
  - Taking criticism from one another

- **Solutions**
  - Have an interprofessional lunch to discuss expectations
  - Create a concise section on the intake form that mentions the importance of comprehensive medical, dental, emotional and social wellbeing
  - Work with other professions to set up an incentive/discount that can be claimed upon completion of a referral
  - Have a designated employee whose job it is to manage referrals (both incoming and outgoing)

DEPRESSION *in Adolescents*

BY THE NUMBERS

Prevalence
(J Am Acad Adolesc Psych 2010)

12% overall prevalence **ages 13-18**

8.4% prevalence **ages 13-14**

12.6% prevalence **ages 15-16**

15.4% prevalence **ages 17-18**

Gender Differences

Girls are at increased risk

Emergency Room Visits
(Arch Pediatr Adolesc Med 2008)

20% of adolescents admitted to the Emergency Department met criteria for moderate-to-severe depression

RISK FACTORS

Genetic Factors
(Arch Gen Psychiatry 2002)

Major Depressive Disorder in parents is associated with increased risk of *depression, anxiety disorders,* and *substance abuse disorders*

Bullying
(J Adolesc Health 2013)

Bullying associated with higher prevalence of *depression, suicidal ideation,* and *functional impairment*

Concurrent Illnesses

Mental health conditions
or
Chronic physical illnesses

Other Risk Factors

Hormonal changes
Parental Conflict
Childhood Trauma
Low socioeconomic status

Group 60

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TEAM UP

Assessment

Profession	Assessments			CPT Code	Fee Schedule
Medicine	PHQ-2	PHQ-9 Modified for Teens	Family/Social/ Medical Hx	96130, 99213	$119.13, $74.72
Nursing	Head-to-Toe Physical Assessment	Family History Assessment	Social History Assessment	N/A	
Dentistry	Oral Examination	Tooth decay Screening	Oral Hygiene Instruction	D1110	$48.01
Psychologist	Social and Family Hx	Beck Depression Inventor	Columbia-Suicide Severity Rating Scale (C-SSRS)	90832	$68.54

IPEC sub-competency CC8

Prevention of depression in adolescents must include interventions targeting individual, community, and structural determinants. Current collaboration across health professions in regard to depression is limited. In part, this is due to depression only being addressed by psychology and psychiatry. The interventions used by these health professions primarily focus on individual treatment approaches for depression and not prevention.

In order to facilitate collaboration between disciplines, all health professions will need to continue to develop universal preventive interventions through conducting research. In addition, we need to aid mental health professionals in evaluating the effects of universal preventive interventions on the population level.

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TRANSGENDER

Transitioning From Male to Female

Marc Breaux, Jacob Doll, Tyce Hebert, Keiko Leong, Penny Metzger, Nick Poche, Ansley StPierre & Mary Tanner

Background

- Estimated 1.4 million transgender individuals in the US.
- Preventative screenings are based on body parts a patient has and not how they identify.
- Being "transgender" does not require hormones or surgery; patient goals need to be discussed.

Tips: Making You and Your Patient More Comfortable

1. Use your patient's pronouns – if you're not sure, ask!
2. Use your patient's chosen name
3. Use proper terminology – just because your patient uses certain terminology doesn't mean you can use that terminology with all transgender patients
4. If you have questions, ask – respectfully! But don't expect your patient to teach YOU about their health
5. Don't be afraid of your transgender patients

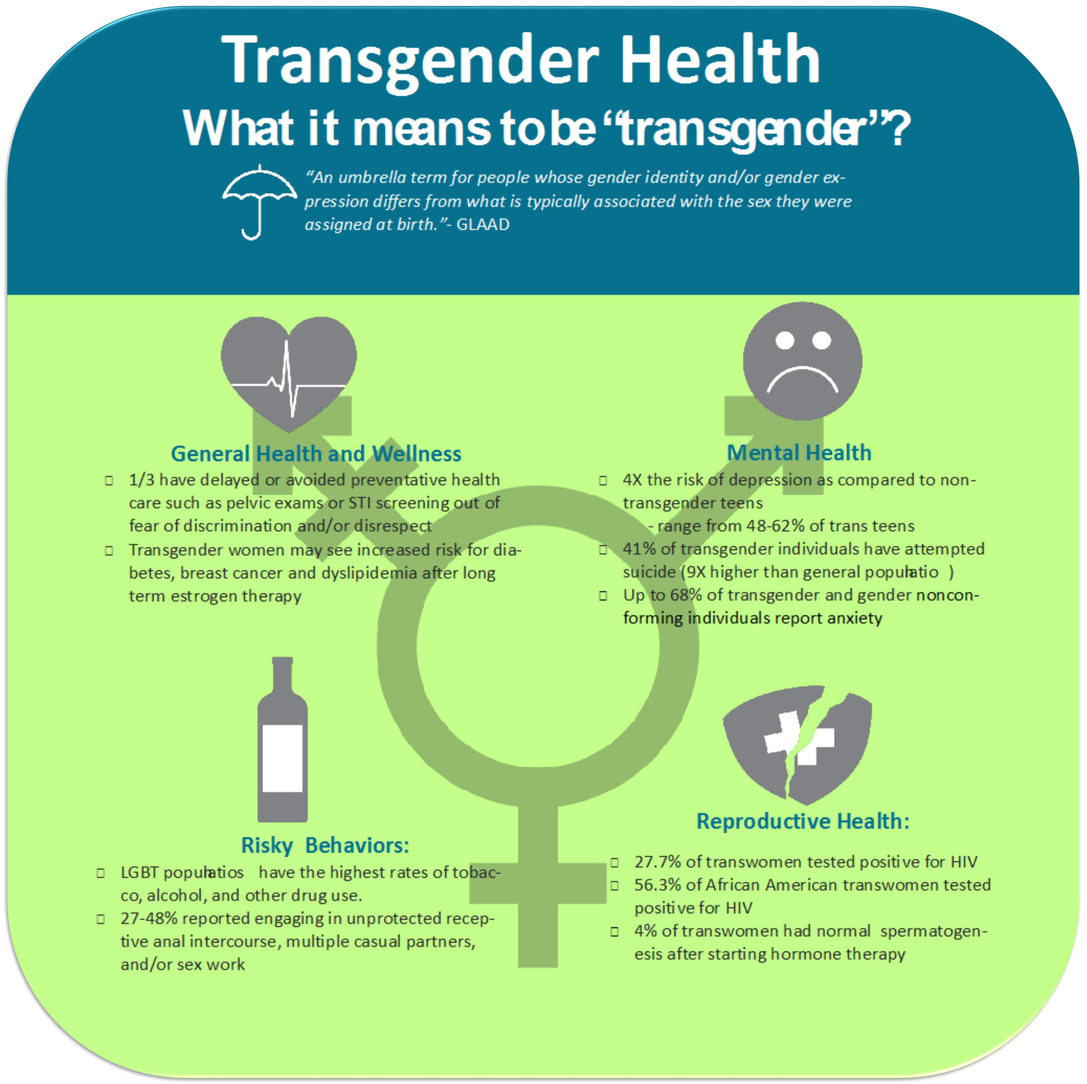
Prevention

Preventing Anxiety And Depression

- Traditional risk factors for anxiety + additional factors (discrimination, rejection, fear of future discrimination, mistrust of others)
- **Healthcare's Role in Prevention**
  - GAMIs (gender affirming medical interventions)
    - GAMIs – reported to lower social anxiety
    - *Consideration:* not all transgender individuals want GAMIs; should not be presented as a cure to anxiety or other mental health issues
  - Social Support:
    - Increased social support is linked with decreased psychological stress

General Health and Wellness

- Transgender individuals face the same health and wellness issues as other adults
- Areas of Relevance for MTF Transition
  - **Cardiovascular screening** (MTF)
    - **Lipid screening:** increased risk of developing dyslipidemia in transgender women on estrogen therapy
    - **Diabetes mellitus:** increased risk of diabetes in transgender women on estrogen therapy due to increased insulin resistance, weight gain, & increased body fat
    - **Smoking:** smoking prevalence is higher among transgender patients
  - **Cancer screening** (MTF)
    - **Breast cancer:** breast cancer risk may increase with longer length of feminizing hormones
    - **Prostate cancer:** the prostate is not removed in feminizing genital surgery
  - **Bone mineral density** (MTF)
    - Transgender patients who have undergone gonadectomy & have a history of at least 5 years without hormone replacement should be screened, regardless of age



Field	Assessment	Assessment	Assessment	CPT Code	Fee Schedule
Nursing - BSN	Mental Health Screening (DASS)	CAGE – substance screen		N/A – Services incident to MD	No billable codes
Medicine	Mental Health Screening (DASS)	Chem7 + Lipid + Total testosterone	HIV screening	80053, 80061, 84403, 86703	$11.74, $14.88, $70.82, $37.60
Physical Therapy	Pelvic Floor Screen	Activity Assessment		97161	$80.80
Dentistry	Comprehensive Oral Examination	Prophylaxis	Provide OHI	D0150, D1110	$59.20; $63.20

Total Cost High Priority Items: $145.02

Total Cost All Inclusive: $338.24

Challenges/ Barriers:

1. Healthcare team internal bias
2. Fear of healthcare system by transgender individuals

Solutions to Challenges:

1. More training for healthcare providers on treating transgender individuals
2. Create an inclusive office environment
   - Provide ability to disclose gender identity privately
   - Intake forms that include spaces for preferred name and pronouns
3. Document pronoun preference if not available in usual documentation system
4. Using patient pronouns with all members of the healthcare team and staff

Interprofessional Collaboration Provides:

- Consistency in information
- Eliminates redundancy of questioning
- Timely referrals for comorbidities
- Increased support network for patient

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ZIKA VIRUS

GROUP 62

Background[1,2]

General Information

- Neurotropic arbovirus that targets neuroprogenitor cells
- Isolated to the *Aedes* species mosquito
- Discovered in 1947 in the blood of a rhesus monkey in the Zika Forest of Uganda in Africa
- First cases of human infection documented in the early 1950s
- Transferred through infected mosquitoes, maternal and fetal transmission, sex, blood products, and organ transplant

Signs/Symptoms

- In adults
  - Fever, rash, headache, joint pain, red eyes, and muscle pain
- In children
  - Vision problems, microcephaly and other brain abnormalities, feeding difficulties, developmental delay, hypotonia, and seizures

Diagnosis of Condition

- Only indicated in individuals presenting with signs and symptoms of the Zika virus
- Confirmed with blood and urine laboratory tests

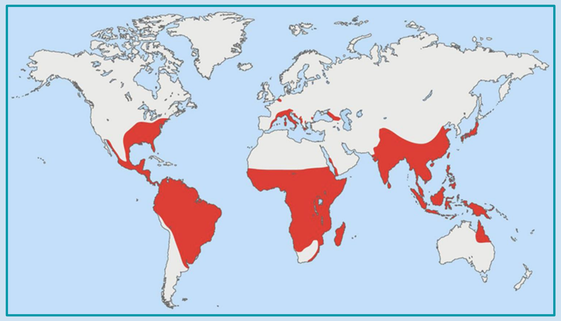
Prevalence/Statistics[3]

In 2018 → United States

- 72 cases reported from travelers returned from affected areas

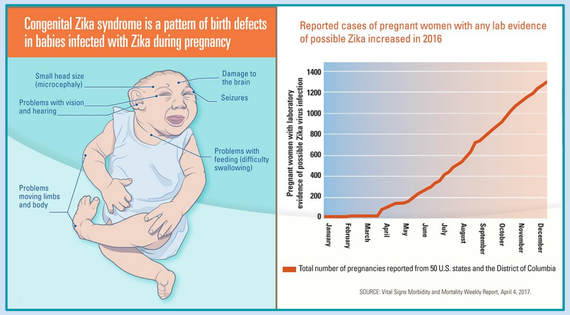
In 2018 → United States territories

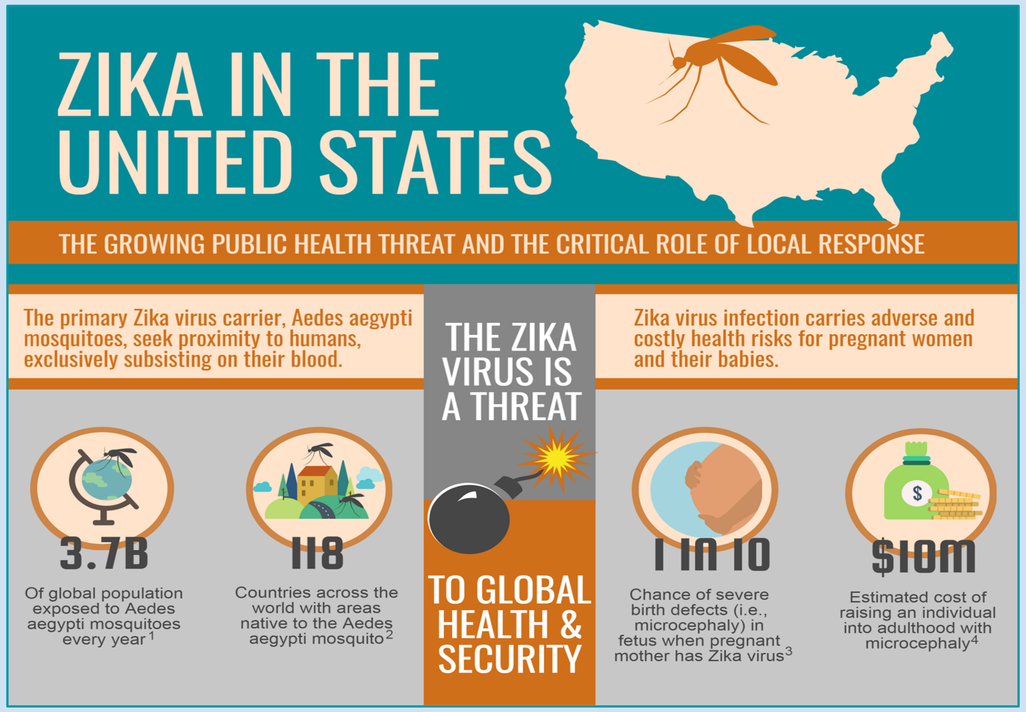
- 147 cases reported from presumed local mosquito-borne transmission



Top Risk Factors[1,2]

1. Residing in or travelling to an area with the *Aedes* species mosquito
2. Sexual transmission
3. Pregnant women infected with Zika virus





Secondary Prevention Assessment Tool[6]

Profession	Assessments	CPT Code	Cost
Medicine	Zika virus testing Primary care visit, history and physical Visual acuity screening test Ultrasound of the head	87662 99201 99173-EP 76506	$53.00 $26.24 $2.00 $910
Nursing	Perform a head-to-toe assessment Measure head circumference Parental education on symptoms and management of condition	Services incident to MD	N/A
Physical Therapy	Screen range of motion Assess tone and spasticity Observe achievement of motor milestones at the appropriate age	97161	$66.79
Dentistry	Caries risk assessment Comprehensive periodontal evaluation Instructions on oral hygiene	D0145 D0150 +D0350	$38.49 $47.37 $27.42
Public Health	Linkage to care Caregiver education Contraceptive education	N/A	N/A

Estimated Total Cost = $1,171.31

Challenges/Barriers[4]

1. Lack of sufficient time to complete all assessments of each healthcare provider.
2. Lack of assessment guidelines and absence of a vaccine decrease the ability to test for current or prior Zika infection.
3. Common misconceptions about Zika virus and its manifestations increase panic in patients.

Solutions[4]

1. Formulate a plan to ensure that each assessment be completed in timely manner and without overlap of assessments between professions.
2. Gather a resource of experienced individuals with the knowledge of assessment and treatment of congenital disorders to guide clinical management.
3. Ensure that professionals are well-versed in the overall knowledge of Zika virus, including differential diagnoses, clinical manifestations, proper prevention techniques, and the different types of transmission.

IPEC Reflection[5]

IPEC Sub-competency CC8

Communicate the importance of teamwork in patient-centered care and population health programs and policies.

Research has repeatedly proven that interprofessional healthcare provides better outcomes by improving efficiency, responsiveness, holistic services, and novel approaches to healthcare. Additionally, interprofessional healthcare improves stewardship of medical resources leading to appropriate use of specialized care. Quality improvement metrics have been shown to improve when healthcare providers adopt a team based approach.

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Team Up Group 62 Members

Adeem Nachabe, Kyle Wilson, Cody Migliore, Nathan Sharfman, Ana Leigh Lopez, Perla Hernandez, Tsion Girmay, Sabrina Smith

Dizziness

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Louisiana State University Health Science Center
Team Up, Group 63

Dizziness is a complex, multisystem disorder that can present with a wide range of symptoms – nausea, vertigo, tinnitus, syncope. For this reason, diverse etiologies must be considered.[1] For many medical professionals, diagnosing the underlying cause of dizziness is difficult, and many of the causes have no treatment or the treatment is undesirable.[2] By far, the biggest concern, especially in the elderly, is falling. Falls often cause a drastic reduction in mobility, quality of life, and general well-being.[2] We have *Teamed Up* to identify our dizzy patients, determine who is at the greatest fall risk, and deliver better treatment including risk-reduction precautions.

Justification

Public Health

- 40% of people experience dizziness at some point during their lifetime.[3]
- As the geriatric population in the United States expands, rates of dizziness will likely increase.
- Polypharmacy has been linked to fall risk.[2]
- 5% of falls result in fracture.[4]
- Fall-induced injuries are the 5th leading cause of death in the elderly.[4]
- Falls account for 80% of injury-related hospital admissions for people 65+.[4]

Cost

- Total spending attributable to older adult falls in the United States in 2015, in dollars:
- The estimated medical costs attributable to fatal and nonfatal falls was approximately $50.0 billion.
- For nonfatal falls:
  - Medicare paid approximately: $28.9 billion
  - Medicaid: $8.7 billion
  - Private and other payers: $12.0 billion
- Overall medical spending for fatal falls was estimated to be $754 million.[5]
- Overall cost of intervention would equate to a combined PCP and PT general visit.

Causes and Considerations of Dizziness

Specific Medical Profession's Considerations:

Nursing
- Orthostatic hypotension
- Hearing/visual difficulties
- Medication side effects
- History of falls
- Change in mental status or level of consciousness

Medicine
- Benign Paroxysmal Positional Vertigo
- Polypharmacy
- Vestibular neuritis
- Meniere disease
- Postural hypotension

Dentistry
- Anesthesia
- Pre surgery medications

Physical Therapy
- Fall Risk
- Neurologic Conditions
- Orthostatic Hypotension
- Dizziness secondary to exertion

Identify Risk Factors[7]

Intrinsic
- Age
- Previous Falls
- Muscle Weakness
- Vision
- Postural Hypotension
- Chronic conditions (RA, stroke, diabetes, dementia)
- Fear of falling

Extrinsic
- Lack of stair handrails
- Lack of stair handrails
- Lack of bathroom grab bars
- Dim lighting
- Obstacles/ tripping hazards

Secondary Intervention

Physical Therapy
- Strength and ROM testing
- Balance/fall risk outcome measures
- Functional Gait Assessment,TUG, 10MWT

Nursing
- Hendrich II Fall Risk Model
- Morse Fall Scale
- Nonslip socks
- Home environment assessment: lighting, clutter,rugs, and cables
- Orient patient to environment
- Hearing tests
- Vision tests

Medicine
- Head to Toe Assessment
- Polypharmacy review
- Physical Exam with emphasis on Neurologic exam
- Blood pressure assessment
- Psychological assessment about fear of falling

Challenges and Solutions

Challenge: Inability to assess patient home environment

Solution 1: Involve patient caretaker via phone (see Preventing Falls)

Solution 2: Connect patient with social workers

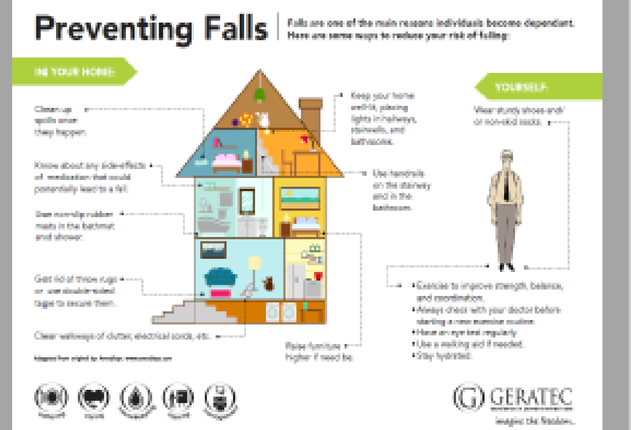
Challenge: Health professional time and patient load

Solution 1: Referral to PT for assessment

Solution 2: Referral to phone psychologist for fall anxiety

LSU Health NEW ORLEANS

Longitudinal Care



- ❑ Discuss patient-directed health goals
- ❑ Assess modifiable risk factors
- ❑ Recruit social workers or remote nurses for evaluation and amelioration of risks
- ❑ Connect patient with dizziness support groups to combat the anxiety of falling – e.g. Parkinson's support group
- ❑ Refer patient to Outpatient Physical Therapy to address causes of dizziness

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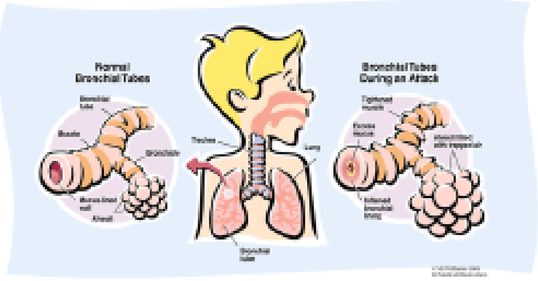
Childhood Asthma

TEAM UP™
COMPASSION, COMMUNICATION, COLLABORATION

Group 64

Background



- Asthma is an inflammatory disorder with airway hyperresponsiveness leading to recurrent episodes of wheezing, breathlessness, chest tightness and coughing, especially during the night and the early morning.
- Asthma develops primarily at a young age, but may also occur in adulthood.
- The prevalence of asthma is about 5–10% in children and approximately 3% in adults.
- Diagnosis is made with methacholine challenge and lung function tests.
- Treatment plans include inhaled beta agonists, muscarinic antagonists, and corticosteroids.

Risk Factors

Family history
Having a parent with asthma makes you three to six times more likely to develop asthma.

Viral respiratory infections
Some children who experience viral respiratory infections go on to develop chronic asthma.

Allergies
Having an allergic condition, such as atopic dermatitis (eczema) or allergic rhinitis (hay fever), is a risk factor for developing asthma.

Occupational exposures
If you have asthma, exposures to certain elements in the workplace can cause asthma symptoms. And, for some people, exposure to certain dusts (industrial or wood dusts), chemical fumes and vapors, and molds can cause asthma to develop for the very first time.

Smoking
Cigarette smoke irritates the airways. Smokers have a high risk of asthma. Those whose mothers smoked during pregnancy or who were exposed to secondhand smoke are also more likely to have asthma.

Air Pollution
Exposure to smog (ozone) and living in urban areas raises the risk for asthma.

Obesity
Children and adults who are overweight or obese are at a greater risk of asthma.

While these factors increase a person's risk for developing the disease, there are additional factors, such as poverty and lack of health insurance, that contribute to more asthma symptoms, emergency room visits and hospitalizations.

Secondary Prevention Assessment Tool

Program	Assessment	Assessment Tools	CPT Code	Fee Schedule
Med	Assess pH, O2 saturation, spirometry, methacholine challenge, sputum sample, DCLO	Thorough medical and family history and physical exam, spirometry, peak air flow, FeNO tests, provocation tests, x-ray, acid reflux test, allergy tests Children under 5: prescribe bronchodilator to help improve breathing; if they improve, it could be a sign of has asthma	94664	$103.64
Nursing	Assess breath sounds, respiratory effort, and chest movement while patient breathes; Ask the patient if they experience SOB, wheezing, and exercise intolerance; Ask patient about smoking habits, diet, and exercise regimen	Personal and medical history, family history, physical exam	99211	Included within medicine cost.
Dentistry	New Patient Comprehensive Oral Examination – including: Tooth Decay Screening, Fluoride Education, Teeth Brushing Education, Oral Examination	Comprehensive oral examination	D0150	$47.37
Physical Therapy	Assess breathing patterns and chest wall excursion Assess endurance and aerobic capacity- 6 MWT	Physical exam, provocation tests, exercise tolerance exam	97161	$66.79
Public health	Refer to patient disease management groups, ensure education of patient including medication usage and avoidance of triggers	Personal and medical history, family history, physical exam	98960	$27.75

Challenges to Implementing Assessment Tool

1. The healthcare team may not be all within the same location, making teamwork difficult.
2. Access to medical care and insurance barriers

Ways to overcome barriers:

1. Following up with the team after seeing patient, keeping all team members up to date regarding patient care.
2. Educating patients' family on community resources to accessing care

Core Competencies

IPEC CC8 - Communicate the importance of teamwork in patient-centered care and population health programs and policies

As part of our healthcare team, each member has worked to understand their role within the team and will do their part to ensure high quality, patient-centered care. Through our work, each member has learned how to communicate effectively within the team to manage patients with childhood asthma.

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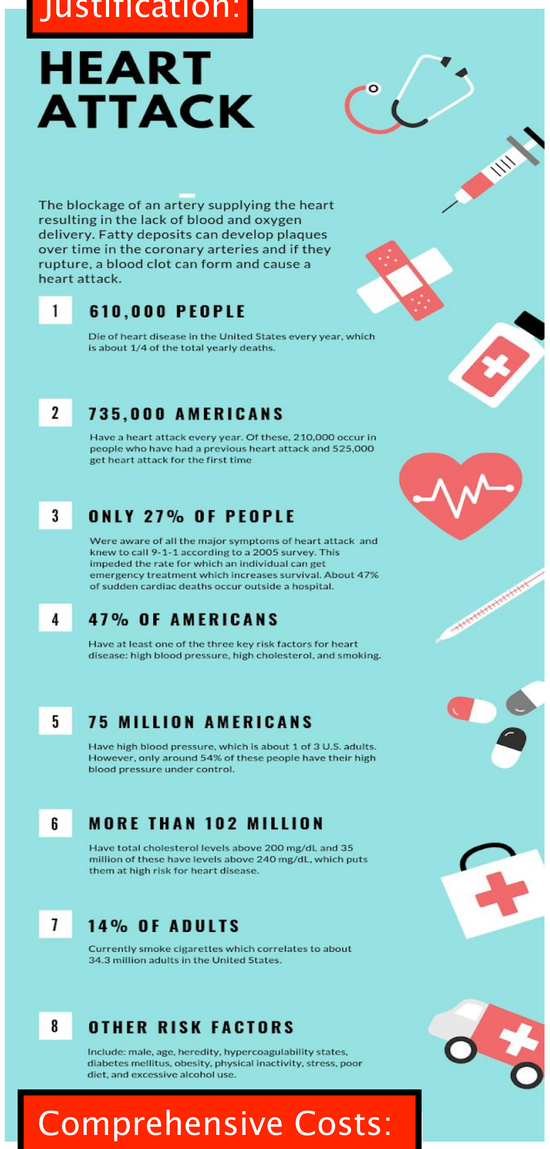
Team Up Crew

Amanda Rushing, David Polhemus, Alex Thibodeaux, Danny Spring, Kelcey Pecquet, Leslie Juban, Jessica Messina, Brittany Foret

Justification:



Comprehensive Costs:

Medicine:
- Office/Outpatient visit: **99203** $34.20
- Cardiac stress test: **93015** $200

Dental:
- Comprehensive Oral Screening, Patient's medical/dental history, Patient Health Questionnaire (PHQ-9) : **D0150** $47.37

OT:
- Occupational therapy evaluation: low complexity: CPT code: **97165** $64.90

IPEC Sub-Competency CC8 & Interprofessional Assessment Tool Development:

Communicate the importance of teamwork in patient-centered care and population health programs and policies – Interprofessional Communication (CC8).

Our assessment tool could facilitate an integrated, holistic approach to preventing heart attacks in high-risk patients. An MD-led team can work to advise the patient on medication use, lifestyle modification, regular check-ups, and uncontrollable risk factor counseling.
MDs, **lab techs**, and **cardiac sonographers** can work to monitor the patient's health and progress. **Pharmacists**, **MDs**, and **nurses** can work together to determine the best medication regimen for the individual patient. **Nurses**, **OT**s, and **social workers** can educate the patient on how to adhere to their plan of care. **Public health** officials can work at the population level to educate patients before they become susceptible to heart attack risk. They can also influence culture as a whole and legislative policy in this way.

Each of these components is necessary for a patient-centered approach to reducing heart attack incidence. Group 65 learned that each of us had overlapping and unique areas of expertise that all contributed to our assessment tool and would be extremely valuable in the delivery of care that meets a patient's needs and wants. The multi-level approach to heart attack prevention made perfect sense to us, as students who have all learned about the topic from different perspectives.

Heart Attack

What is it?

A heart attack occurs when there is insufficient blood flow to the heart. Complete or severely restricted blood flow decreases the oxygen that is delivered to the heart muscle and can cause damage to the heart muscle tissue. Coronary arteries are the arteries that supply blood to the heart. These vessels can become occluded by a build up of fat and cholesterol (plaque), and cause a heart attack. Many individuals have signs such as chest discomfort and shortness of breath that lead them to believe they are having a heart attack. Other signs and symptoms include: discomfort or pain in arms, neck, jaw, back or stomach, nausea, vomiting, and lightheadedness.

1° or 2° Preventions by Professio

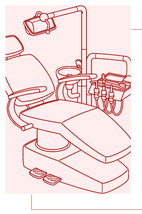
Primary visit:

Doctors
- Risk assessment (10-year and 30-year risk calculators)
- Regular monitoring
  - Heart sounds, blood pressure, lipid panel, EKG
- Medication prescribing
  - Control of hypertension, hyperlipidemia, diabetes mellitus, hypercoagulability
- Motivational interviewing
  - Lifestyle modification, diet and exercise, smoking cessation, moderate alcohol use

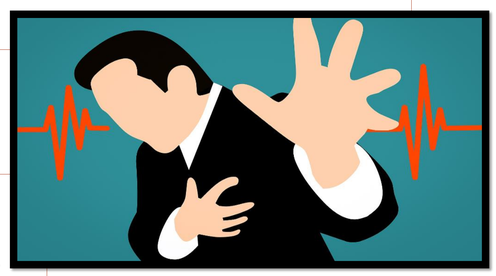
Nurses
- Ongoing monitoring of ABCs, vital signs, level of consciousness, heart and breath sounds, cardiac rhythm, O2 saturation
- Assessing and recording the response to prescribed medications and remediating or titrate medications as needed
- Provide reassurance and emotional support to the patient, family, and caregiver(s)
- Explain all interventions and procedures to patient and caregiver in simple terms
- Educating the patient on a healthy lifestyle such as weight specifications for their height, eating habits (ChooseMyPlate; avoid fad and crash diets; avoid large, heavy meals) and physical activity recommendations (at least 30 minutes of moderate physical activity daily [minimum of 5 days a week])
- Providing the patient with teaching on how to monitor BP at home
- Providing information on how to stop smoking if applicable
- Increase awareness of behaviors that are harmful to health

Objective data to gather from patient by doctor or nurse:

General: anxious, fearful, restless, distressed
Integumentary: cool, clammy, pale skin
Cardiovascular: tachycardia or bradycardia, pulsus alternans (alternating weak and strong heartbeats), pulse deficit, dysrhythmias (especially ventricular), S3, S4, increase or decrease in BP, murmur
Possible Diagnostic Findings:
Positive serum cardiac markers
Increase in serum lipids
Increase WBC count
Positive exercise or pharmacologic stress test and thallium scans
Pathologic Q wave, ST-segment elevation, and/or T wave abnormalities on ECG
Cardiac enlargement, calcifications, or pulmonary congestion on chest x-ray
Abnormal wall motion with stress echocardiogram
Positive coronary angiography



Dentists
- Comprehensive Oral Screening
- Patient's medical/dental history
- Patient Health Questionnaire



Secondary visit:

Doctors
- Monitor BMI, lipid panel, electrocardiogram, stress test changes over time
- Risk determination after an acute MI
  - Thrombolytic in Myocardial Infarction risk score
  - Global Registry of Acute Coronary Events risk score
  - Controlled Abciximab and Device Investigation to Lower Late Angioplasty Complications risk score
  - Framingham 2-year risk score for 2nd event

Nurses
- Suggest patient begin gradually increasing physical activity with close monitoring of cardiac rehabilitation team. (Walking, normal activities of daily living can be resumed 2-12 weeks post MI)
- Create a long-term maintenance program that individualizes treatment to the patient's activity level and resources. (local gym access, rehabilitation centers)
- Encourage therapeutic lifestyle changes to promote a healthy and active lifestyle.
- Monitor progress and medication compliance and report to physician any changes.
- Encourage continued monitoring by physician.

Dentists
- Periodontal cleaning

Risk Factors

Major Uncontrollable Risk Factors	Major Controllable or Treatable Risk Factors
Increasing age	Tobacco and alcohol use
Male gender	Hypertension
Heredity, including race (African Americans, family history)	Hyperlipidemia (high total cholesterol, high LDL, low HDL, high triglycerides)
Hypercoagulability (blood disorders, cancer, oral contraceptive use)	Diabetes mellitus
	Obesity and overweight BMI
	Physical inactivity

Challenges to implementation of assessment tool:

Challenge #1: How will patient's know if they are having a heart attack?
- Solution 1: Educate all patients in the primary care setting at yearly check-up/ visits about signs and symptoms of heart attack.
- Solution 2: Have patient's report to the nearest emergency room if they feel as if they are having a heart attack.

Challenge #2: Screening patients who might be at risk for having a heart attack in the future
- Solution 1: Refer any patient with an overweight or obese BMI to a dietician to create heart healthy diet and exercise program to increase weight loss and reduce risk of heart attack.
- Solution 2: Monitor patients with hypertension, elevated serum lipids, physical inactivity, obesity or diabetes at all health care visits (physician, dentist appointments, etc.) to decrease the risk of developing a heart attack.

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