

# **IMPROVING IMMUNIZATION RATES IN LOUISIANA: A COLLABORATIVE APPROACH ACROSS THE HEALTH INDUSTRY**



Center for  
Interprofessional Education &  
Collaborative Practice (CIPECP)



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### **All workshop participants:**

- Scan your badge barcode or sign in to each workshop
- Complete workshop evaluations (paper) and end-of-Summit evaluation (electronic)

### **Those who purchase CE credit:**

- MUST sign in to receive credit
- Will be sent a certificate after the Summit

\*\*\*\*If you would like CE credit but have not purchased it, see Registration

# OBJECTIVES

- Explore non-traditional opportunities within the healthcare delivery system to provide immunization education, referral and follow-up.
- Develop a flow diagram using Donabedian's quality model for a defined non-traditional opportunity to increase immunization rates
- Consider other opportunities to integrate primary prevention opportunities into large-scale interprofessional (IPE) experiences



# INTERPROFESSIONAL COLLABORATION

“When multiple health workers from different professional backgrounds **work together** with patients, families, carers [sic], and communities to deliver the highest quality of care” (WHO, 2010)



# DONABEDIAN MODEL

Donabedian stated *“If it is our purpose to serve the best interest of our patients, we need to inform them of the alternatives available to them, so they can make the choice most appropriate to their preferences and circumstances.”*

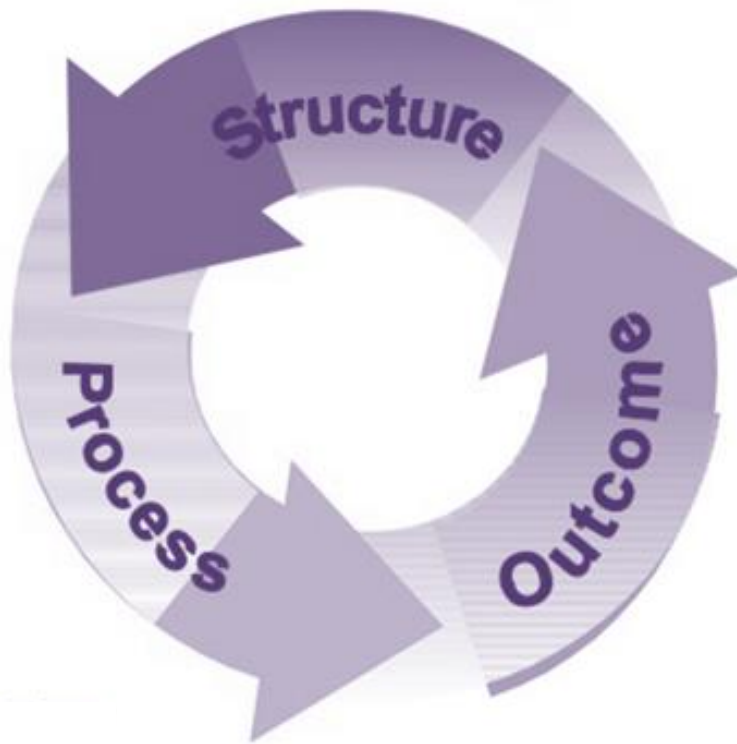
This statement is reflective of IPEC competencies, specifically:

- Patient/Client/Caregiver-centered care (Values and Ethics, VE1: *Place interests of patients and populations at center of interprofessional health care delivery and population health programs and policies, with the goal of promoting health and health equity across the life span.*)
- Informed Decision (Teams and Teamwork, TT4: *Integrate the knowledge and experience of health and other professions to inform health and care decisions, while respecting patient and community values and priorities/preferences for care.*)



# DONABEDIAN MODEL

Model to define and measure quality in health systems



- Hierarchical
- Complimentary
- Equally important

STRUCTURE – characteristics of health professionals, their resources and work environment

PROCESS – methodology of delivery

OUTCOME – final results





# HISTORY OF IPE EDUCATION AT LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER-NEW ORLEANS

- Grassroots effort
  - 2011-2015
- Established the Center for Interprofessional Education and Collaborative Practice (CIPECP) in April 2015
  - Support through Quality Enhancement Plan for reaffirmation of accreditation – The Commission on Colleges of the Southern Association of Colleges and Schools
- CIPECP goal
  - Prepare students to practice in teams
    - Team-based care results in improved community health outcomes



Center for Interprofessional Education and Collaborative Practice



# IPE DAY 2017 OVERVIEW

Faculty liaisons representing all six schools at LSUHSC-NO developed IPE Day for 1<sup>st</sup> year students

- Focus - Immunizations (improving rates for pediatrics and adults)
- Approximately 750 students representing 25 health professional programs
- Case presented to IPE teams
- IPE teams developed office policies and procedures related to clinical operations surrounding immunizations
- Teams developed posters reflecting creativity, teamwork, and unity in immunization education and policy inclusive of all team members



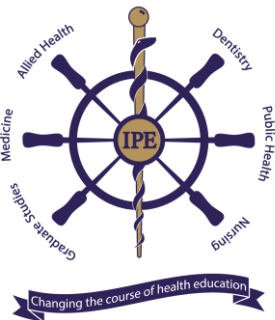
# IPE DAY 2017- STUDENT COMMENTS

*“I understand that a team approach would be the best way to educate patients on the benefits of vaccinations. All healthcare professionals have the ability to impact patient decisions through education.”*

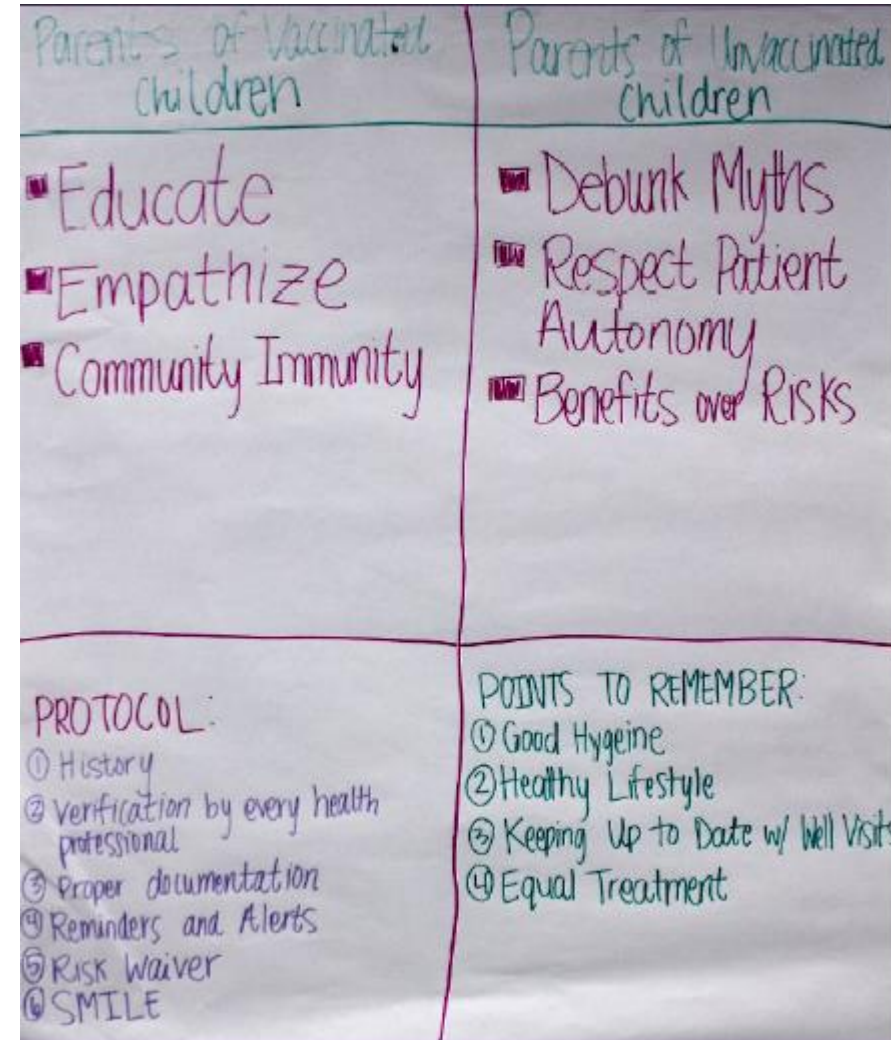
*“We all have to play a collective role in vaccination education.”*

*“Many do not directly deal with vaccinations, but it is important that all health professionals work as a team (even when not in the room together) to accomplish the missions of public health.”*

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# IPE DAY 2017- POSTER EXAMPLES



# IPE DAY 2017 EVALUATION

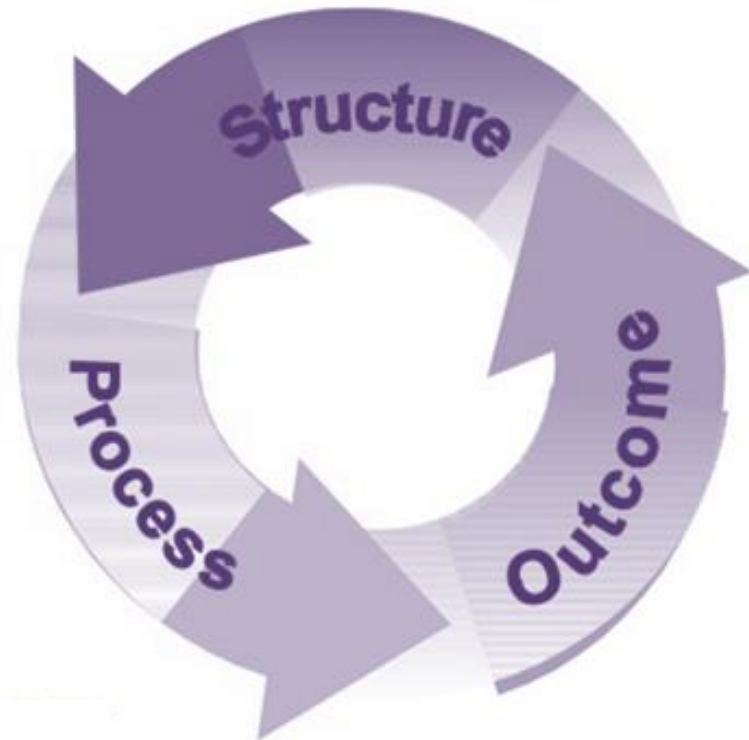
- Pre and post-survey administered for evaluation of IPE Day 2017
- LSUHSC-NO has expanded IPE experiences beginning September 2017
- Team Up
  - Team Up is a two-year longitudinal IPE experience integrated within the curriculum of all six Schools for first and second-year students.
- Based on results of IPE Day 2017 surveys:
  - Case used in Team Up as a make-up session for students in Spring 2018
  - Now embedded into Team Up in November session for 1<sup>st</sup> year students



# DONABEDIAN MODEL - OUTCOME

## OUTCOME

- Increase immunization rates
- Decrease barriers through non-traditional opportunities



# SUPPORTING IMMUNIZATIONS IN LA

Following LSUHSC-NO IPE Day on Immunization the questions arose:

- How can the interprofessional/interdisciplinary approach to health professions education contribute to improving immunization rates in Louisiana?
- Are there system-related barriers to the team approach to population health as it relates to improving immunization rates?
- What can LSUHSC-NO do to address identified system-related barriers to population health?





# LOUISIANA DEPARTMENT OF HEALTH: CENTER FOR COMMUNITY AND PREVENTIVE HEALTH

## *Louisiana Immunization Network for Kids Statewide program (LINKS)*



web application allows doctors, nurses and **other health professionals** to search for their patients' vaccination records in a central location. In addition, authorized users can add and edit patient records and vaccination records, as well as maintain facility, physician, and lot number data

## *LA.MyIR.net*

application that allows consumers access to health records and information. A parent or guardian can register and add access for family members or dependents using a simple and intuitive web interface.



**MyIR**





<b>NIS 4:3:1:3:3:1:4 Coverage Rates (%)</b> <b>19-35 mos.</b>			
<b>Year</b>	<b>National</b>	<b>Louisiana</b>	<b>LINKS</b>
<b>2012</b>	68.4	68.5	
<b>2013</b>	70.4	69.1	
<b>2014</b>	71.6	73.2	72.7
<b>2015</b>	72.2	70.8	71.2
<b>2016</b>	70.7	66.8	69.0

<b>School Year</b>	<b>Kindergarten Series Coverage Rates (%)</b>	
	<b>Non-Public</b>	<b>Public</b>
<b>2014-2015</b>	93.1	96.6
<b>2015-2016</b>	94.4	96.8
<b>2016-2017</b>	92.9	96.2

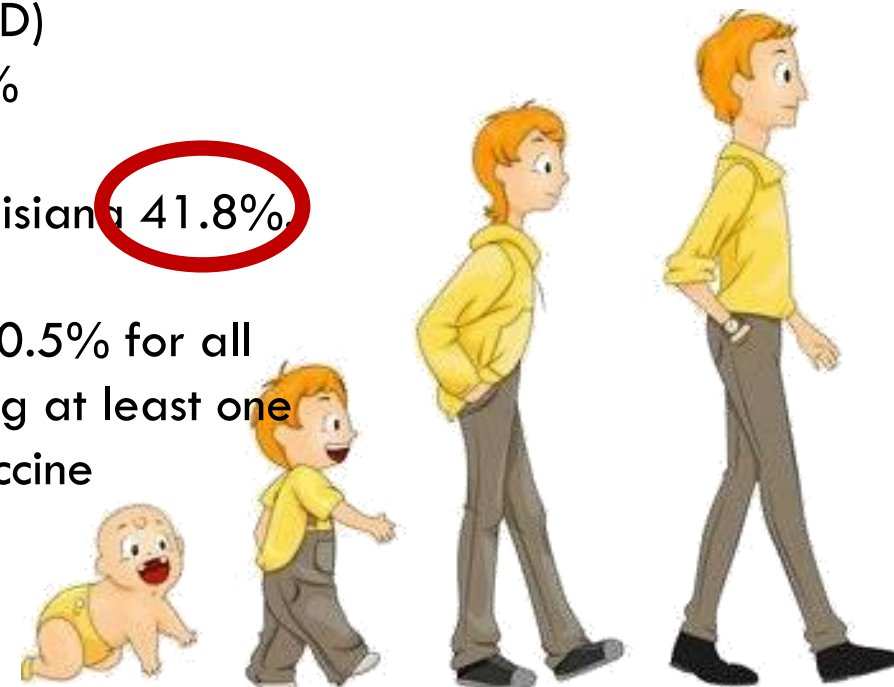
<b>School Year</b>	<b>6<sup>th</sup> Grade Series Coverage Rates (%)</b>	
	<b>Non-Public</b>	<b>Public</b>
<b>2014-2015</b>	84.1	89.3
<b>2015-2016</b>	86.0	90.3
<b>2016-2017</b>	87.2	87.9

HPV up-to-date (UTD)

- females is 50.8%
- males is 33.2%

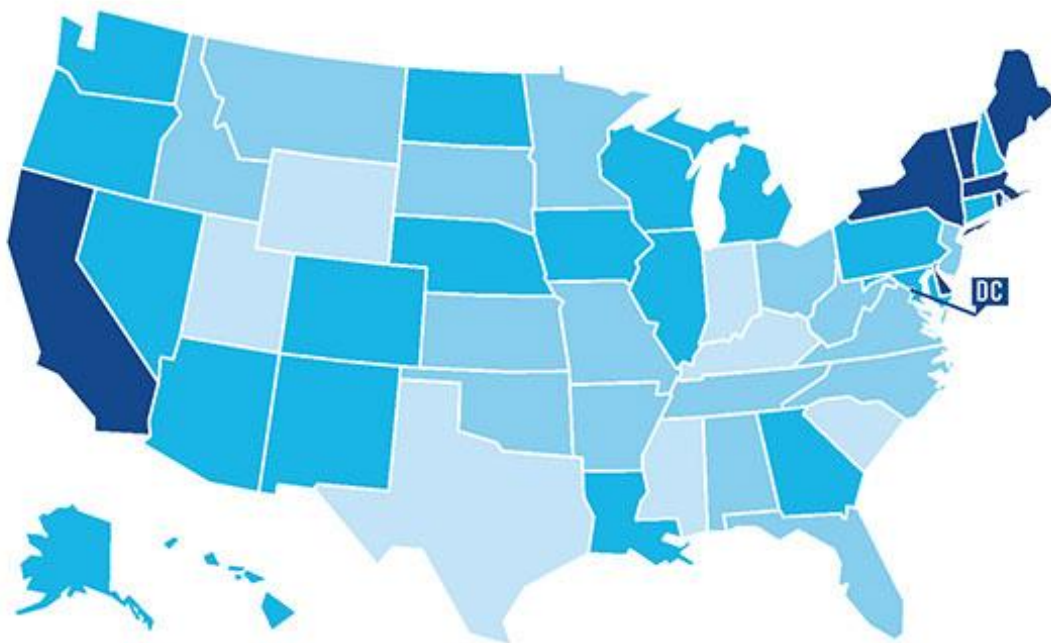
Overall rate for Louisiana 41.8%

Coverage rate of 60.5% for all adolescents receiving at least one dose of the HPV vaccine



# [ HPV vaccination is the best way to protect your children from cancers caused by HPV ]

Percentage of adolescent boys and girls who have received one or more doses of HPV vaccine\*

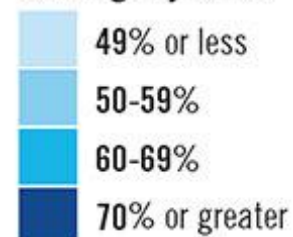


## NATIONWIDE 6 OUT OF 10

parents are choosing to get the human papillomavirus vaccine for their children.

National coverage is 60%

Coverage by state:



## [ CDC RECOMMENDS THE HPV VACCINE AT AGES 11-12 ]

Talk to your child's doctor about HPV cancer prevention

\*Estimated coverage with ≥1 dose of human papillomavirus (HPV) vaccine among adolescents aged 13-17 years, National Immunization Survey-Teen (NIS-Teen), United States, 2016. Source: MMWR August 25, 2017

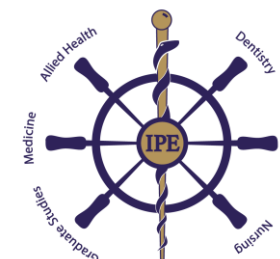
[www.cdc.gov/hpv](http://www.cdc.gov/hpv)

NCIRD1g604 | August 25, 2017

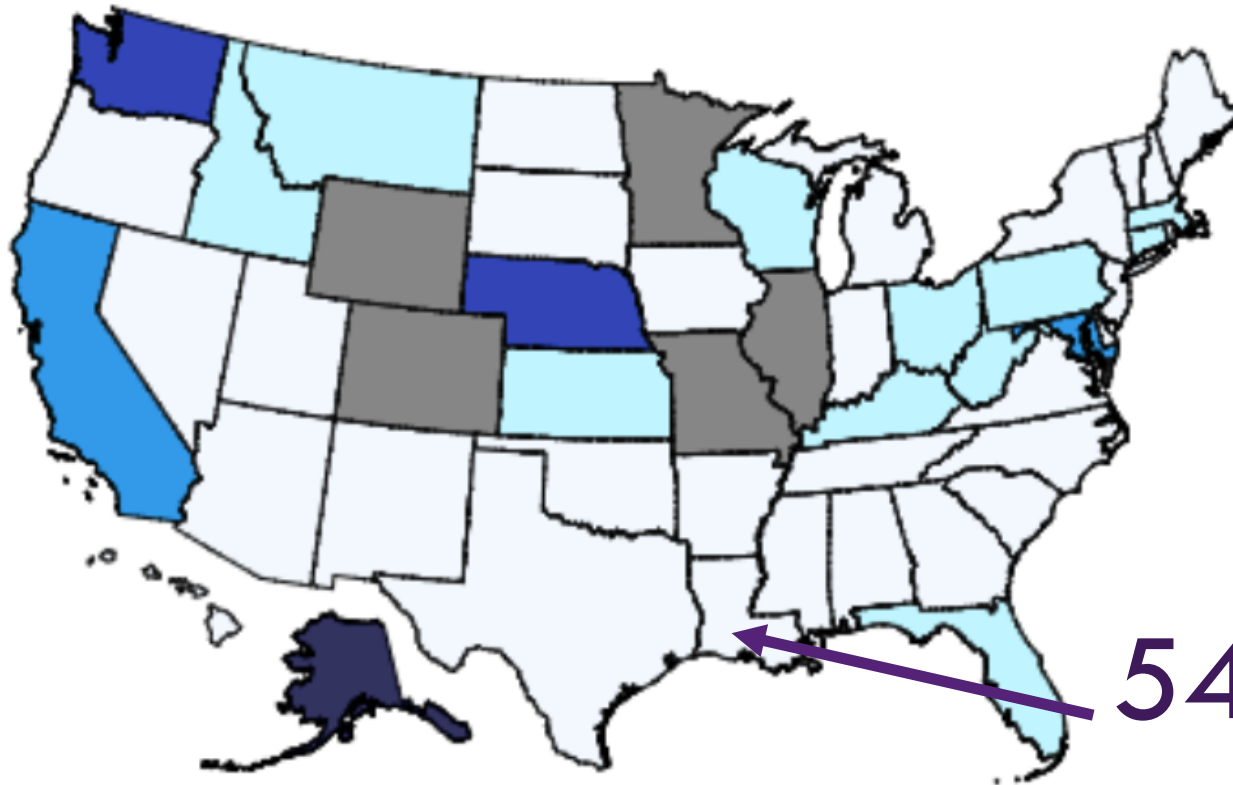


U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention

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Changing the course of health education



Healthy People  
2020 Core Topic:  
*Immunizations and  
infectious diseases.*

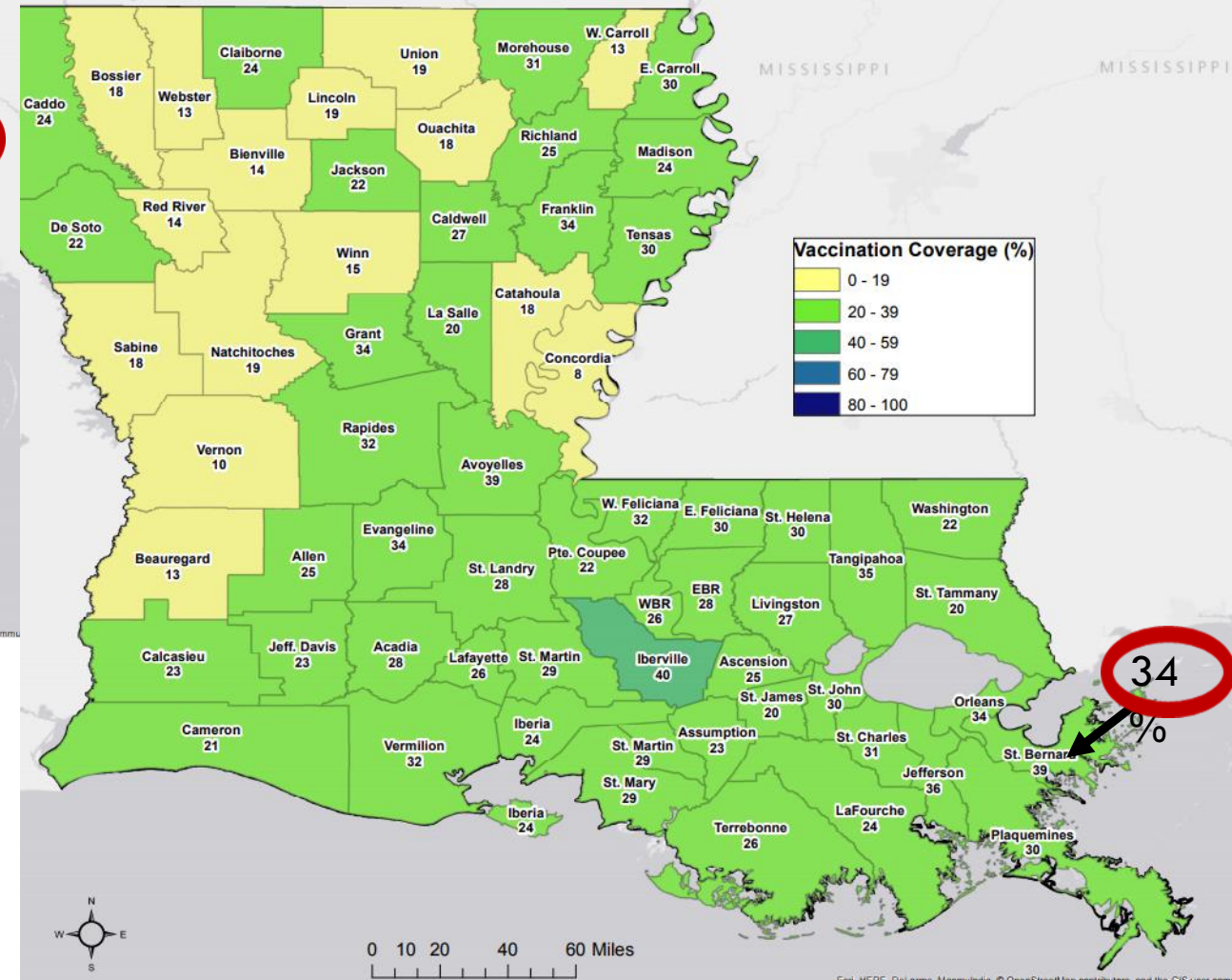
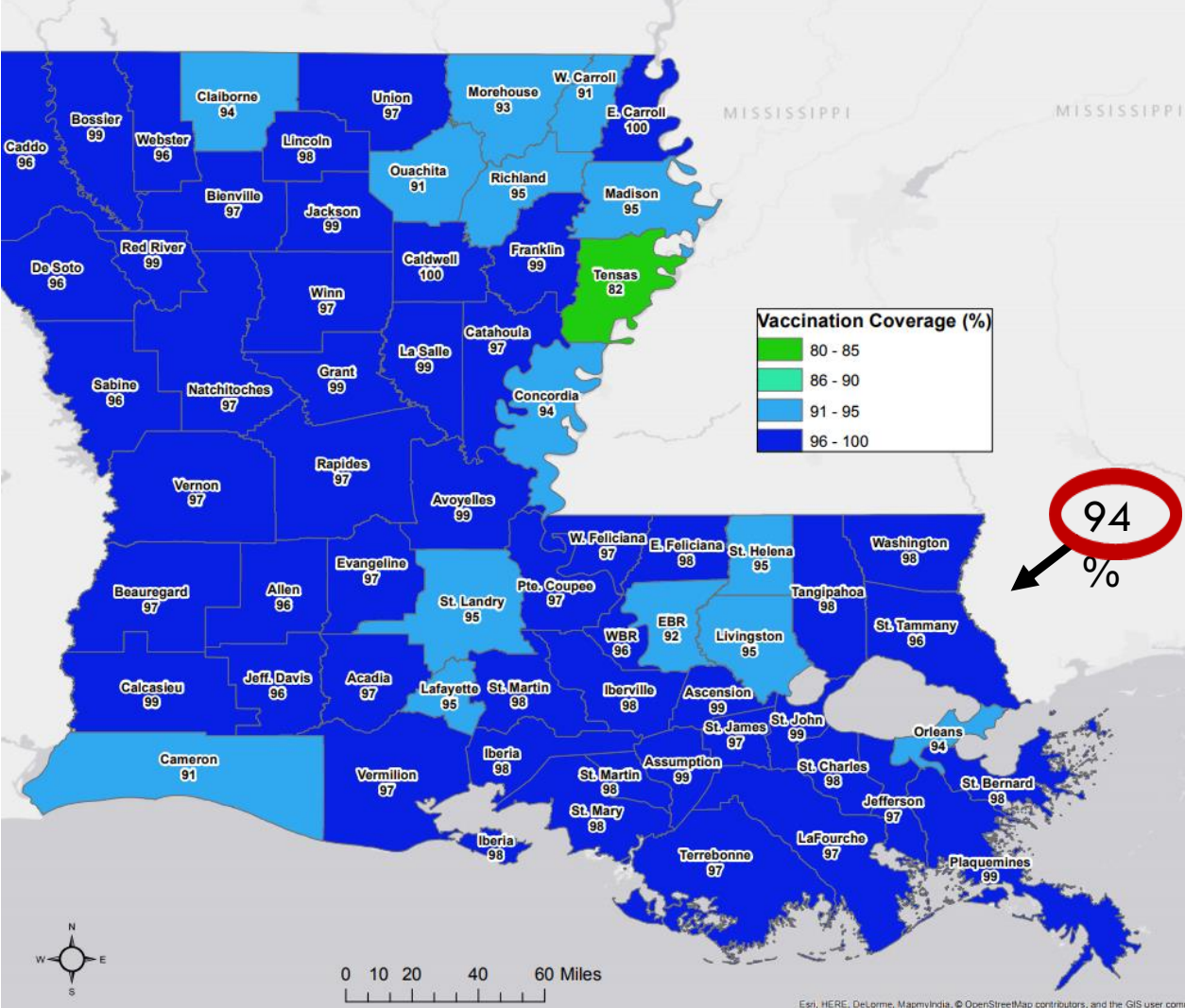
$54/55,257=0.09\%$   
exemption rate





# HPV Vaccine Series Completion by Patient Parish of Residence 2016 (Ages 13 – 17)

Source: Louisiana Department of Health



## Louisiana School Vaccination Coverage Assessment 2016-2017

### Kindergarten Public Schools by Parish

Source: Louisiana Department of Health

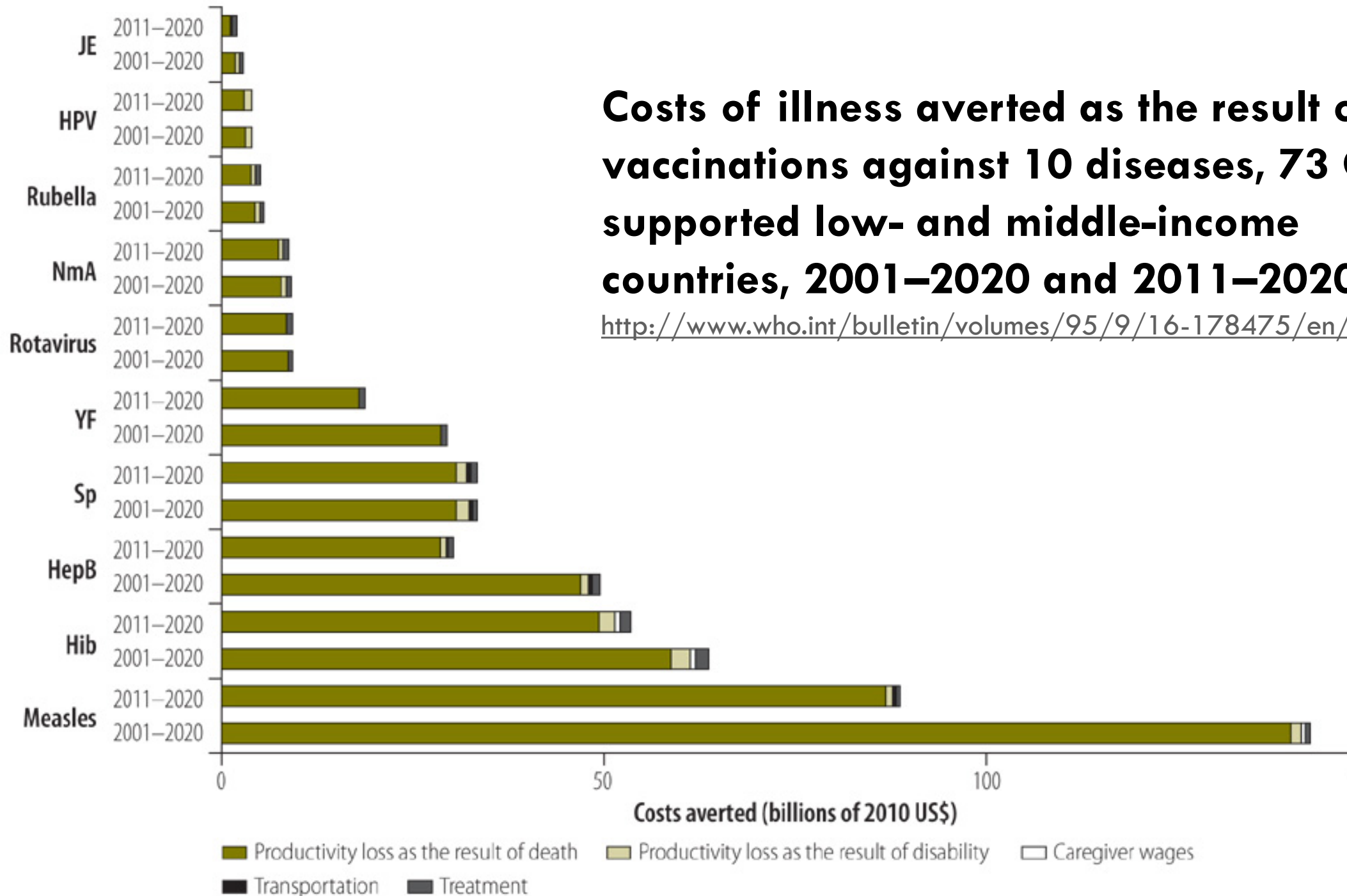
# HPV & CERVICAL CANCER

- About 14 million Americans, including teens, become infected with HPV each year.
- Every year, nearly 12,000 women living in the U.S. will be diagnosed with cervical cancer, and more than 4,000 women die from cervical cancer - even with screening and treatment.
- HPV infections often asymptomatic
  - 90% resolve in 2 years
- High risk HPV genotypes (16 and 18) associated with 80-95% oropharyngeal, laryngeal cancer and 70-90% genital cancer



# Costs of illness averted as the result of vaccinations against 10 diseases, 73 Gavi-supported low- and middle-income countries, 2001–2020 and 2011–2020

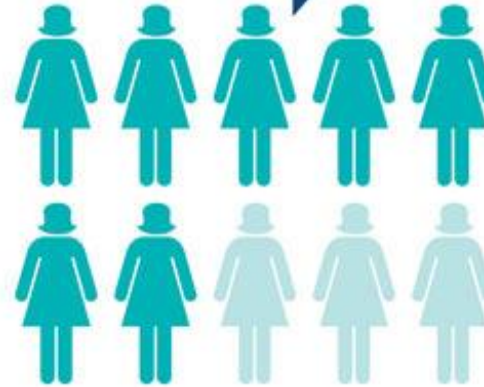
<http://www.who.int/bulletin/volumes/95/9/16-178475/en/>





## Missed opportunities for cervical cancer screening

In 2012, **8 million women** were not screened in the last **5 years**.



**7 out of 10 women** who were not screened had a regular doctor and health insurance.

SOURCE: Behavioral Risk Factor Surveillance System, 2012.

## How HPV infection can lead to cervical cancer

It could take years to decades

Normal cervical cells

Vaccination opportunity  
11-12 years old

HPV infection  
(Most infections do not turn into precancers)

Screening opportunities  
21-65 years old

Precancers  
(May still go back to normal)

Cervical cancer

SOURCE: American Journal of Clinical Pathology, 2012.

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# OUTCOMES

Enhance LSUHSC SOD student education in primary care prevention and population health as related to immunizations

Increase accessibility of LINKS information for viewing rights

Increase student engagement with patients related to immunizations

Improve student/faculty/provider perceptions of collaborative practice as related to immunizations

Expand educational efforts to oral health providers throughout the state (content and clinic processes)

Increase Louisiana immunization rates

Improve overall health of Louisiana citizens



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# APPLICATION OF DONABEDIAN MODEL

In groups, define the **Outcome(s)** for the condition noted on your table



# QUESTIONS ASKED AT LSUHSC-NO

**How can oral health professionals contribute to increasing immunization rates?**

Are all health professional students being educated to ask about immunization history when taking a health history?

- ***Dental and Dental Hygiene students were NOT.***

Do all health professionals have access as providers to LINKS?

- ***Oral health professionals did NOT.***

**GIVEN THE ORAL-SYSTEMIC CONNECTION AND THE IMPACT OF THE HUMAN PAPILLOMAVIRUS (HPV) VACCINATION IN CANCER PREVENTION – THE INTERDISCIPLINARY APPROACH TO IMMUNIZATION EDUCATION AT LSUHSC SCHOOL OF DENTISTRY BECAME A PRIORITY.**



# OPPORTUNITY FOR IMPACT

## *SCHOOL OF DENTISTRY (LSUSD)*

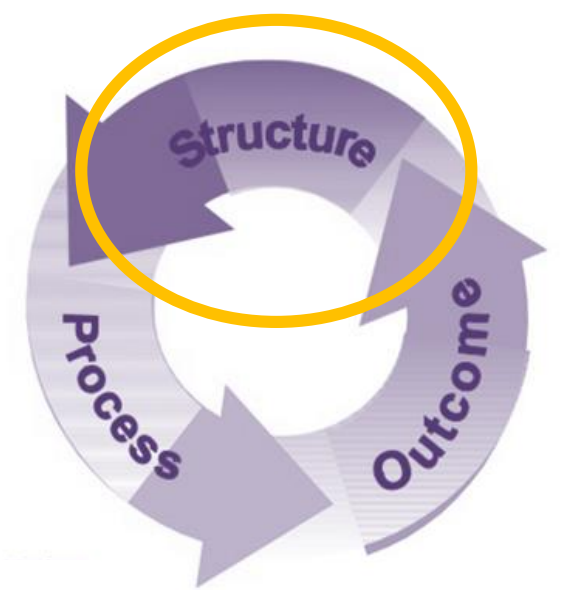


- Only School of Dentistry *in Louisiana*
- Offers Programs in Dentistry, Dental Hygiene, and Laboratory Technology - and seven advanced education programs (*Endodontics, OMFS, Orthodontics, Pediatric Dentistry, Periodontics, Prosthodontics and General Practice Residency*)
- Educates 70% of the oral health professionals practicing *in Louisiana*
- Students and residents responsible for over 90,000 annual patient visits on the LSUSD main campus and *throughout Louisiana*
- Serves as the primary provider of continuing education for oral health professionals *in Louisiana*

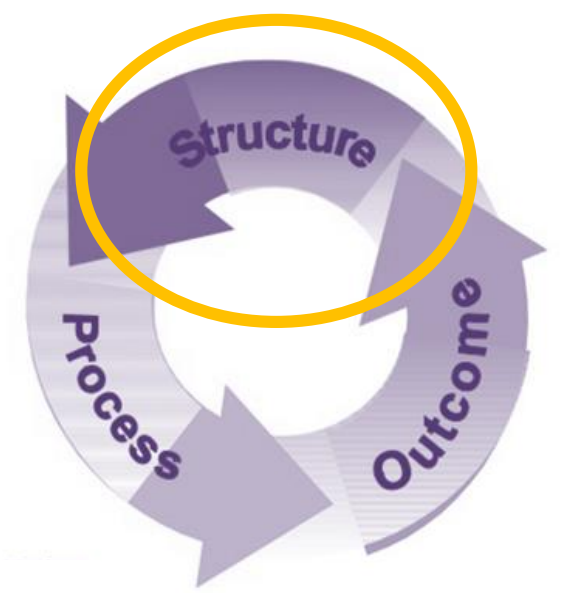


# STRUCTURE AT LSUSD

- Centralized CIPECP
- Curriculum committee
  - Membership across programs and departments
- Engaged Faculty
  - Faculty serve as IPE facilitators
  - Faculty engaged in IPE research/scholarly activity
  - Faculty assist in development of IPE experiences
- Engaged Students
  - Team Up
- Louisiana Immunization Workgroup
  - Seat at the table
- Continuing education courses focused on collaborative practice



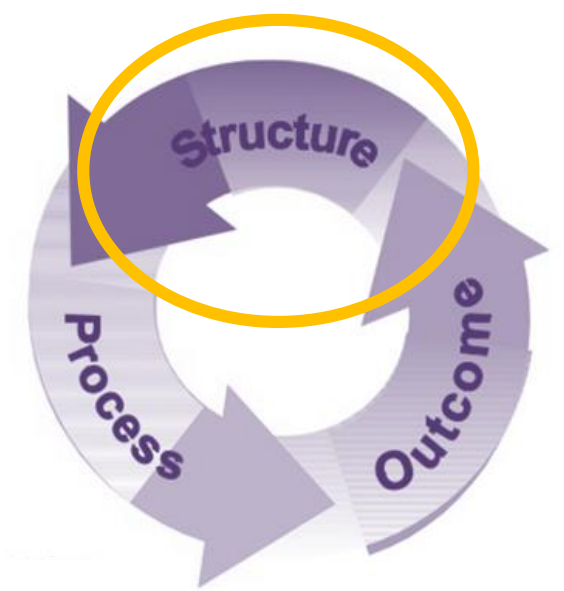
# STRUCTURE AT LSUSD



- Clinical Curriculum Structure
  - Clinic design follows a comprehensive patient care model via the interdisciplinary Mini-Clinic System and Patient Care Coordinators (PCCs)
- Clinics employ electronic sharing platforms including:
  - aixUm - electronic health record system
  - LINKS – state database for immunizations for providers
  - LAMyIR.net – state database for immunizations for community



# STRUCTURE AT LSUSD



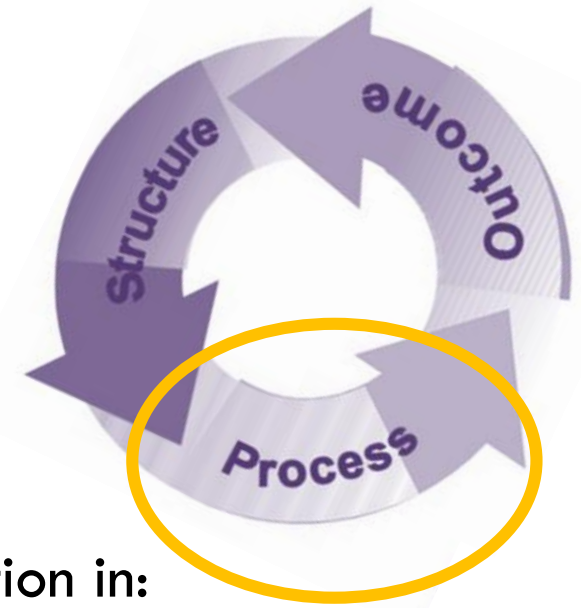
## Patient Base

- 14,000 – average number of active patients treated annually at LSUSD and Children's Hospital-New Orleans
  - Undergraduate clinics (Dental and Dental Hygiene)
    - 2,500 patients ages 12-26 treated annually
    - 4,135 patients over age 26 treated annually
  - Advanced education clinics
    - 6,368 patients treated annually
  - Children's Hospital Dental Clinic-New Orleans
    - 1,706 children treated annually

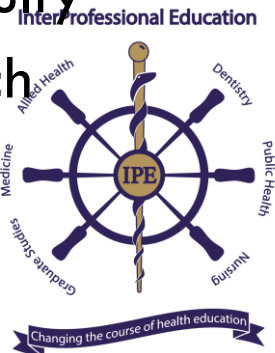
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# PROCESS AT LSUSD



- Integrate immunization education into the curricula of the Programs in Dental and Dental Hygiene to include education in:
  - LINKS program
  - LA.MyIR.net
  - Making appropriate recommendations/referrals
  - Follow-up for compliance with recommendations
- Expand LINKS viewing access for dental and dental hygiene students and faculty
- Include standard and routine assessment of patient immunization status on each patient completed and stored in aixUm



# OUTCOMES

✓ Enhance LSUHSC SOD student education in primary care prevention and population health as related to immunizations

✓ Increase accessibility of LINKS information for viewing rights

Increase student engagement with patients related to immunizations

Improve student/faculty/provider perceptions of collaborative practice as related to immunizations

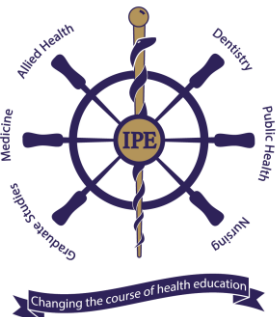
Expand educational efforts to oral health providers throughout the state (content and clinic processes)

Increase Louisiana immunization rates

Improve overall health of Louisiana citizens



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# FUTURE POSSIBILITIES

## Role for Dentists in the primary prevention of oral cancer with HPV vaccines

- Daley, et al performed cross sectional web-based survey to Florida dentists to assess willingness to participate in counseling on HPV with female patients
  - 97% were in stages of readiness to discuss HPV vaccine with patients
  - Perceived role and liability were determinates of readiness
- American Dental Association 2017 Annual Meeting
  - Vice president Dr. Preble discussed importance of role with HPV vaccines
  - Mentions feasibility of dental practice administering vaccines
- American Academy of Pediatric Dentistry Policy statement
  - Follow current literature and consider incorporating other approaches for HPV prevention in their practices so as to minimize the risk of disease transmission.
  - Offering primary prevention in dental clinics seems a logical and clinically-appropriate approach



# FUTURE POSSIBILITIES

## Precedence for Vaccines in Dentistry Clinics

- Minnesota State Law – stat. §150A.055 effective January 1, 2015
  - Allows licensed dentists to administer influenza vaccine to people ages 19 and older meeting certain criteria
  - Law requirements for dentist to give vaccine
    - Complete training course approved by MN Board of Denistry
    - Follow federal recommendations on immunizations from CDC
    - Report flu vaccine doses given to MIIC



# FUTURE POSSIBILITIES

## Structure

- Patients/Parents
- Dentist/Dental Hygienist
- Training on vaccine administration
- HPV vaccine with educational flyer
- Vaccine supplies



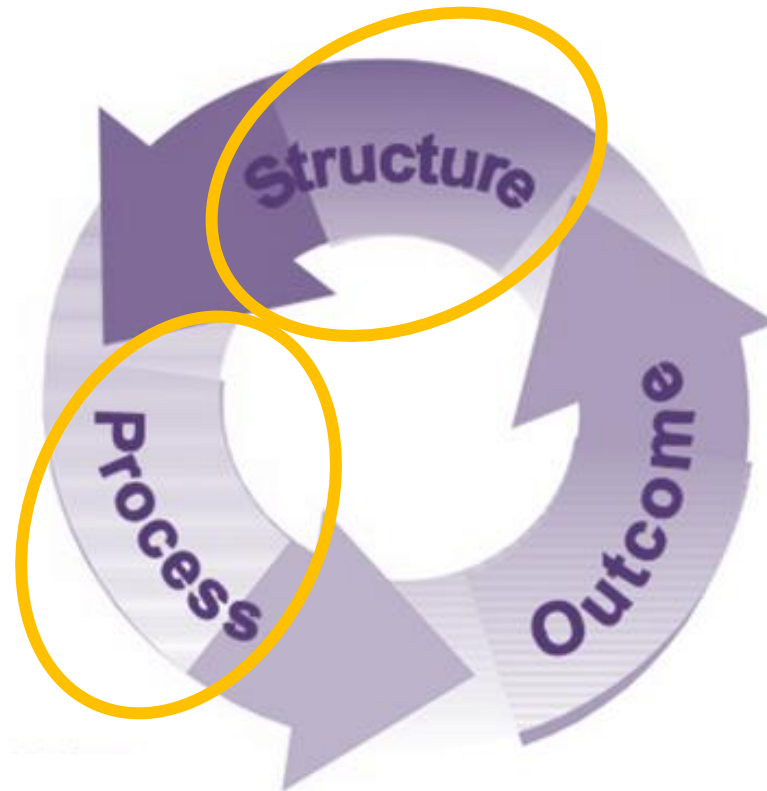
## Process

- Coordination for screening patients eligible and willing for vaccine
- Insurance approval for vaccine administration
- Dentist order for vaccine
- Dental hygienist/dentist administering vaccine
- Notification to state, pediatrician/PCP of vaccine administration



# APPLICATION OF DONABEDIAN MODEL

In groups, define the **Structure** and **Process(es)** for the condition noted on your table



# ACKNOWLEDGEMENTS

- American Cancer Society, South Region (Kaitlin Sylvester, MPA)
- Merck (Brian McDonald)
- Louisiana Cancer Prevention and Control Programs (Donna L. Williams, DrPH)
- The Louisiana Department of Health, Office of Public Health Immunization Program (Stacy Hall, Quan Le, David G. Boudreaux)



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