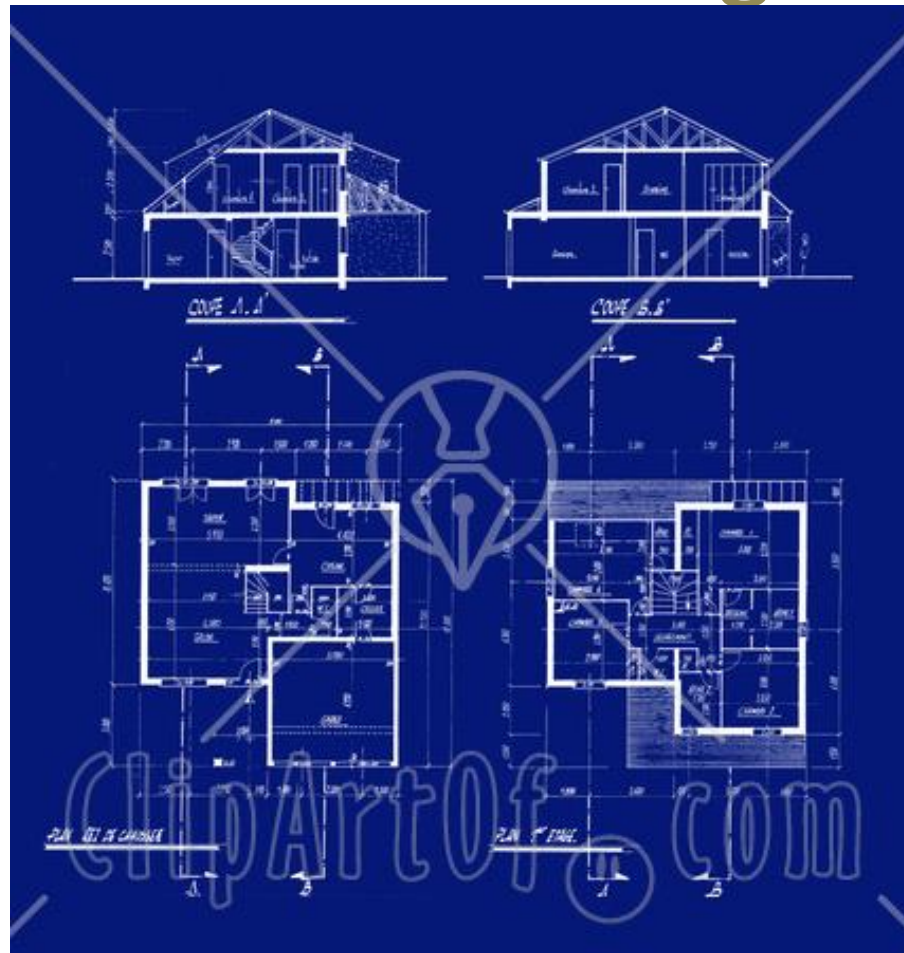


Risk Assessment

Developing an Infection
Prevention plan

Success Depends on Preparation and Planning



OBJECTIVES:

- **Identify at risk services, populations, and procedures at your hospital**
- **Construct an IC Risk Assessment for your facility**

Why Perform an Annual Risk Assessment



- **Helps focus IC activities on those tasks most essential to reducing critical infection control risks**
- **Changes to guidelines related to infection control and prevention from CDC and other agencies and professional organizations.**
- **New IP need to do this to understand the processes and working of their hospital and identify greatest priority for surveillance.**
- **If you are new to the IP job, be sure and perform the risk assessment. Don't rely on the previous IP.**
- **Make it your own**

Goal of an Effective IC Program

- Reduce risk of acquisition and transmission of health care-associated infections (HAIs)
 - Design and scope of program is based on risk that organization faces related to acquisition and transmission of infectious disease
- The Joint Commission & DNV Standard IC Program identifies risks for transmission of infectious agents on an ongoing basis
 - Review it annually at a minimum, maybe more often depending on facility – quarterly .

The Joint Commission

- **IC.01.03.01** The hospital identifies risks for acquiring and transmitting infections.
- **EP1** The hospital identifies risks for acquiring and transmitting infections based on the following: Its geographic location, community, and population served.
- **EP2** The hospital identifies risks for acquiring and transmitting infections based on the following: The care, treatment, and services it provides.
- **EP3** The hospital identifies risks for acquiring and transmitting infections based on the following: The analysis of surveillance activities and other infection control data.
- **EP4** The hospital reviews and identifies its risks at least annually and whenever significant changes occur with input from, at a minimum, infection control personnel, medical staff, nursing, and leadership.
- **5** The hospital prioritizes the identified risks for acquiring and transmitting infections. These prioritized risks are documented.

DNV NIAHO Standard

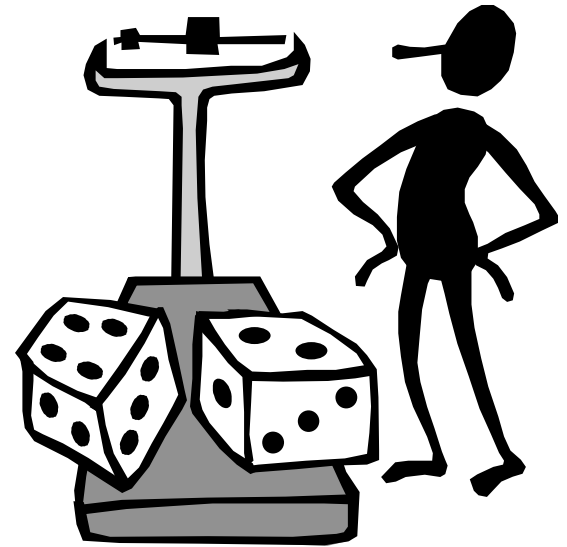
- IC.1 Infection Prevention & Control System
- SR.1 The organization shall have a process in place, as required and/or recommended by the CDC and related professional organization, to main a sanitary environment for organization, patient, staff & others.
- SR.2 The organization shall have a documented process, policies and procedures to define how infections and communicable diseases are prevented, controlled and investigated throughout the organization

DNV NIAHO Standard cont...

- SR. 3 The IP & C System shall be evaluated at least annually. This evaluation shall be forwarded to the QM oversight group.
- SR. 5 Infections and communicable diseases shall be measured and analyzed to identify any patterns or trends.
- SR.8 Surveillance methodology shall be appropriate for the populations served and approved no less than annually by the IC committee.

Assumptions of Risks

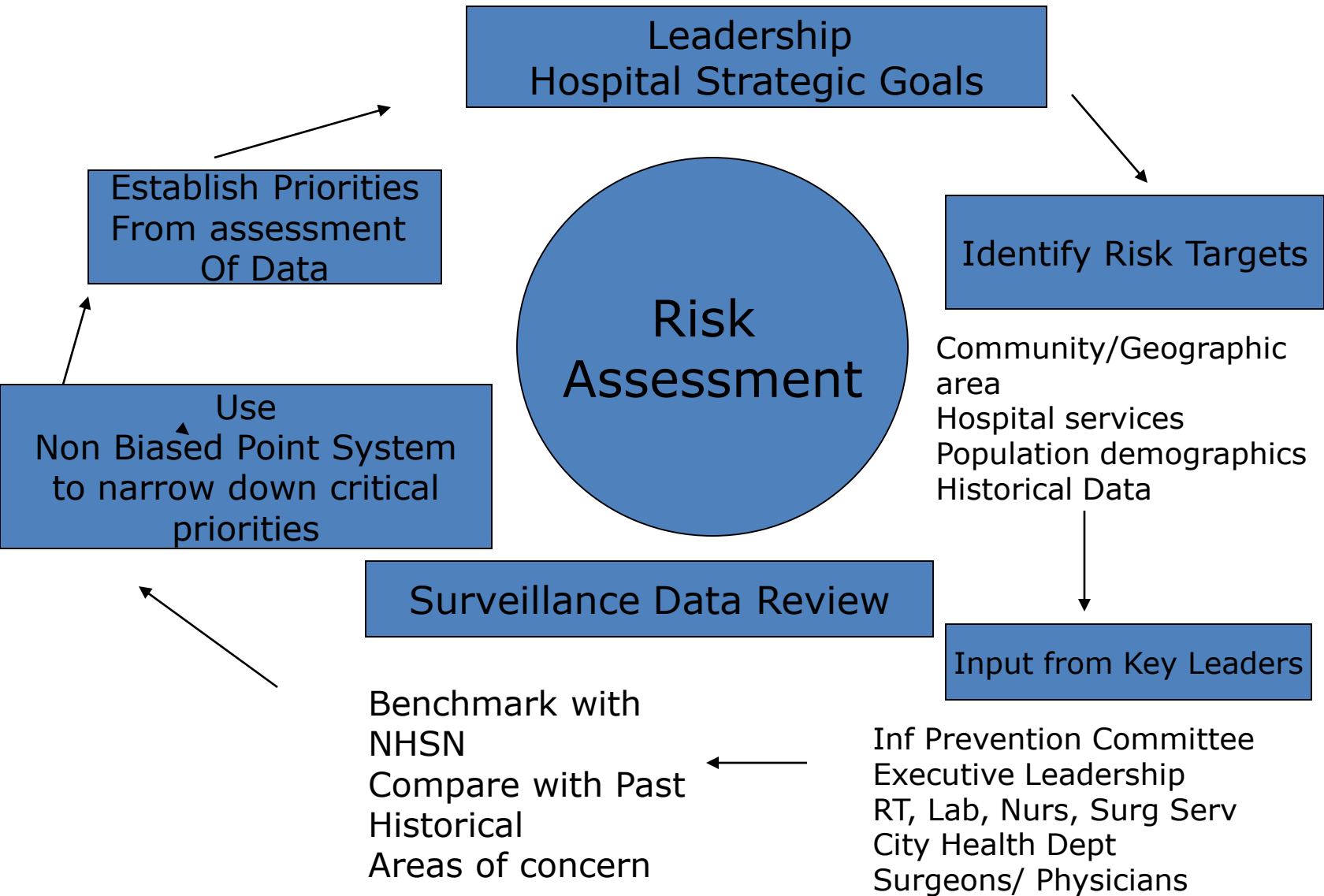
- Risk is inherent to people and processes
- Not all risk is equal
 - High incidence – low risk (urinary tract infection)
 - Low incidence –high risk (influenza pandemic)
- Balance data and experience to determine risk and priorities



What is a Risk Assessment

- Assessment performed to determine potential threats associated with equipment and devices, treatments, location and patient population served, procedures, employees, and environment.
 - Examples
 - Infection Control Risk Assessment (ICRA) Construction
 - TB Risk Assessment (Category of TB risk for your hospital)
 - Blood borne Pathogen Job Risk Category
 - Hospital Surveillance Risk Assessment ****

Performing the IC Risk Assessment



Identifying Risks

- Identifying Risks for acquisition and transmission of Infectious Agents – Select Targets or Groups
 - External (Call Health Dept as Resource)
 - Community-related Flood/Hurricane area; Large immigrants
 - Disaster-related
 - Community outbreaks of transmissible diseases
 - Location issues Tornados, Floods, Hurricane, Ticks
 - Internal
 - Patient related (Pedi, Geriatric, Women's/Children, Surgery
 - Employee related
 - Equipment/ device related
 - Environment related
 - Treatment Related

External Risks

- Community outbreaks of transmissible diseases
- Review your reportable diseases ask Health Dept about city/county trends
- To find your individual Community information:

GO to DSHS

<http://www.dshs.state.tx.us/>

Click Data and Reports

<http://www.dshs.state.tx.us/datareports.shtm>

Click Center for Health Statistics

<http://www.dshs.state.tx.us/chs/default.shtm>

Building a IC Plan [Compatibility Mode] - Microsoft PowerPoint... Drawing Tools

DSHS Center for Health Statistics - Windows Internet Explorer

http://www.dshs.state.tx.us/chs/default.shtm

File Edit View Favorites Tools Help

DSHS Center for Health Statistics

Home Feeds (1) Print Page Tools

 **TEXAS**
Department of State Health Services

Change font size: **SMALL** **LARGE**

[Find Services](#) | [News & Information](#) | [Rules & Regulations](#) | [Business Information](#)

Search (Buscar)

DSHS Center for Health Statistics

CHS Organization

CHS Reports »

- Texas Health Facts (County Fact Sheets)
- Vital Statistics Reports
- Healthy People Report
- Migration for Birth Report
- Health Professions in Texas Report

CHS Query Systems »

CHS Activities »

CHS Data

FAQs

Links

Useful Information

Contact Information

Center for Health Statistics

The Portal for Comprehensive Health Data in Texas



The DSHS Center for Health Statistics was established to provide a convenient access point for health-related data for Texas. Our objective is to be a source of information for assessment of community health and for public health planning. Our data are used to support research, grant applications and policy development and to provide rapid needs response to health emergencies. We also offer technical assistance in the appropriate use of the data we provide, and in the development of innovative techniques for data dissemination. We support the development and application of consistent standards for privacy and statistical validity.

Through the links on the sidebar, and within these pages, you will find statistics on vital events like birth and death, population and demographic information, geographic material and survey data on risk factors and disease prevalence. We also provide information on supply trends for health professions, including nurses, as well as hospital discharge records, and surveys of Texas hospital facilities and charity and community benefits.

We respond to requests for data from a variety of users, both inside the Agency and external stakeholders. If you can not find what you need on these pages, or have suggestions for improvement, please use the contact information in the sidebar to let us know.

What's New at CHS ?

Internet | Protected Mode: Off 100%

Slide 9 of 31 "template"

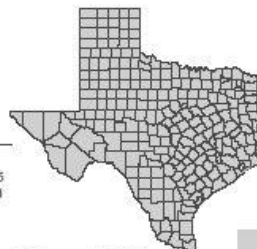
Norton PC Checkup Microsoft PowerPoi... DSHS Center for He...

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Sample in Handouts

ProtectTexas
Texas Department of Health

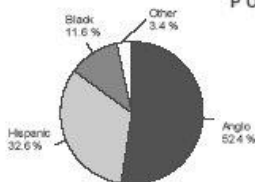
Selected Health Facts 2001 Texas



Demography

Population Estimate: 21,325,018
Number of Counties: 254

Population Per Square Mile: 81.5
Area in Square Miles: 261,797.1



POPULATION INFORMATION

Age	Females	Males	Total	Percent
0 - 4	808,834	844,946	1,653,780	7.8 %
5 - 14	1,625,793	1,700,209	3,326,002	15.6 %
15 - 44	4,822,977	5,020,388	9,843,365	46.2 %
45 - 64	2,239,935	2,154,470	4,394,405	20.6 %
65 +	1,226,183	881,303	2,107,486	9.9 %
Total	10,723,702	10,601,316	21,325,018	100.0 %
State	50.3 %	49.7 %		

Socioeconomic Indicators

Indicator	State
Unemployment Rate	4.8 %
Average Monthly TANF (Temporary Assistance to Needy Families) Recipients	349,803
Average Monthly Food Stamp Participants	1,394,384
Unduplicated Count of Medicaid Eligibles	2,695,259
Per Capita Personal Income	\$ 28,472

Indicator	Number	Percent
Kids Enrolled in the Children's Health Insurance Program (CHIP)	383,588	
Persons Living Below Poverty - 2001		
Total	3,041,115	14.6 %
0 - 17 Years	1,237,628	20.7 %
18 Years and over	1,803,489	12.1 %
Medicaid covered births	175,643	48.2 %

Natality

Indicator	Births ¹	Percent
Total Live Births	395,059	
Adolescent Mothers (<18)	19,754	5.4 %
Unmarried Mothers	113,280	31.0 %
Low Birth Weight ¹	27,985	7.6 %
Late or No Prenatal Care ¹	69,420	19.7 %
Fertility Rate ²	State: 75.4	

Communicable Diseases - Reported Cases

Disease	Cases	Rate ³
Tuberculosis	1,643	7.7
Sexually Transmitted Diseases		
Primary and Secondary Syphilis	479	2.2
Gonorrhea	30,116	141.2
Chlamydia	69,934	327.9
AIDS	2,981	14.0
Hepatitis A	1,154	5.4
Varicella (Chickenpox)	5,741	26.9

Mortality² (See note below)

Indicator	Deaths ¹	Rate ³	Indicator	Deaths ¹	Rate ³
Deaths From All Causes	152,526	888.3	Diabetes	5,445	31.9
Cardiovascular Disease	57,096	344.2	Unintentional Injury (Accidents)	7,854	39.4
Heart Disease	43,100	258.7	Motor Vehicle Injury	3,922	18.7
Stroke	10,596	64.9	Homicide	1,407	6.4
All Cancer	33,437	192.6	Suicide	2,214	10.8
Lung Cancer	9,396	54.2	Work-related Injury	475	3.0
Female Breast Cancer	2,477	24.9	Infant Deaths ¹	2,181	6.0
Chronic Lower Respiratory Diseases	7,735	46.7	Fetal Deaths ¹	2,192	6.0

Note

¹ All births and deaths are by county of residence. Low birth weight represents live-born infants weighing less than 2,500 grams at birth. Late prenatal care refers to mothers who did not receive prenatal care during the first trimester of pregnancy. Fetal deaths are those occurring after 20 weeks gestation and prior to birth.
² Mortality data reported for 2000 are not comparable with data reported prior to 1999. Since 1999, TCH has followed the National Center for Health Statistics guidelines for reporting mortality statistics that include coding data using the International Statistical Classification of Diseases and Related Health Problems, 10th Revision and age adjustments using the 2000 Standard Population.
³ Fertility rates are per 1,000 women ages 15 - 44. Infant death rates and fetal death rates are per 1,000 live births. Work-related injury death rates are per 100,000 population age 16+. The remaining death rates have been age-adjusted to the 2000 U.S. standard population per 100,000 population. Communicable disease rates are also per 100,000 population. Rates have not been calculated if 20 or fewer births, deaths or cases occurred, as indicated by "—".

Internal Risks

Patient Related Risks

- **Characteristics and behaviors of populations served**
 - Type of patients
 - Women and Children
 - Adult acute care
 - Ambulatory Surgical
 - Service mix
 - Medicare patient mix
 - Special Needs Populations
 - Behavioral Health
 - Long Term Care
 - Rehab

Employee-Related Risks

- Sharp or Exposure rate
- Transmission based Exposure
- Knowledge understanding of disease transmission and prevention
- Degree of compliance with infection prevention techniques
- Inadequate screening for transmissible diseases
- Influenza Participation Rate



Procedure-Related Risks

- Degree of invasiveness
 - CABG vs Cataract or Plastics
- Scopes, Endoscopic, Robotic Surgery
 - Special cleaning of all
- Risk Related Operations
 - Bariatric, Colon, Transplants
- Adequate preparation of patient
 - Education, Preoperative bathing, nasal screening
- Adherence to recommended prevention techniques

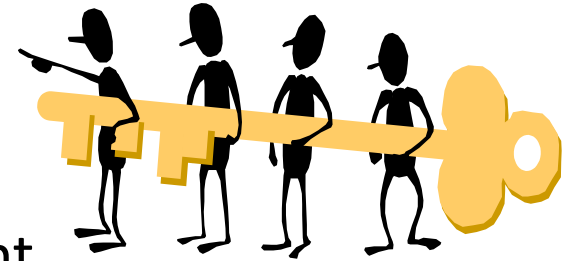
MDRO in Community and Hospital

- Partner with Lab to review Antibigram
- Look at # of MDRO per 1000 patient admissions per year is it increasing/decreasing:
 - MRSA (community and HAI)
 - VRE (community and HAI)
 - *C.difficile* (community and HAI)
 - *Acinetobacter/CRE* (community and HAI)
 - *Example:*
 - 250 cases of MRSA
 - 50,000 pt admissions = .006 X 1000 =
 - yearly average of 6 MRSA cs/1000 pt admissions

Reviewing all Data for Risk Assessment

- Try to review in one spreadsheet to analyze all data
- Can include Risk Assessment and Prioritization Grid in same document

Strategies for Success



- Involve leadership for support and endorsement
 - Educate leadership, RT, Nursing, Pharmacy, Lab
 - Plan appointed time to meet for added information,
 - Involve patient safety and PI staff to help
 - Documentation for additional FTE
- Take time to develop good methods and use evidence based literature
- Include community resources for data and information
 - Local Health Dept is a great resource
- Conduct risk assessment based on
 - Populations served
 - High-volume, high-risk procedures
 - Community risks

Determine Priorities for coming year

- Place importance on a change in risks that need to be considered for review and update
 - New surgical procedures
 - New services
 - Stakeholder input (MDs, nursing, lab, respiratory, environmental services, etc.)
 - Needs assessment or gap analysis
 - Use data to determine spike seen in surveillance for the year
 - Comparison with previous year and NHSN

Rules of Prioritizing Surveillance

- Review your assessment –
 - What are your biggest patient safety issue
 - What is Leadership “ Buzz Word “
 - What are your biggest employee safety issue
 - What areas need improvement
 - What things can be changed by focus and surveillance. (ex. UTI low focus for some hospitals)
 - Be Realistic... Plan for success/not failure
 - Prioritize to assure the most critical areas are completed

PRIORITIZE



- Prioritize using a grid with importance
 - Probability of occurrence
 - Impact
 - Importance to Pt Safety and Organization
- Prioritized grid will take out biases
- Prioritize using Team input not just you
- Prioritize knowing the number of FTE that will be completing surveillance

Priority – Goal - Objective

Priority from Risk Assessment (identified as a concern):

Total Knee, CABG and Hernia services above NHSN or elevated above historical data

TJC /DNV Required Goal: Minimize risk associated with procedures, medical devices

CMS Reporting Requirements: CLABSIs, CAUTIs, surgical procedures, etc.

Organization Goal: Reduce Surgical Site Infections

Objective: Reduce CABG, Total Knee and Hernia SSI by at least 25% by December 2017

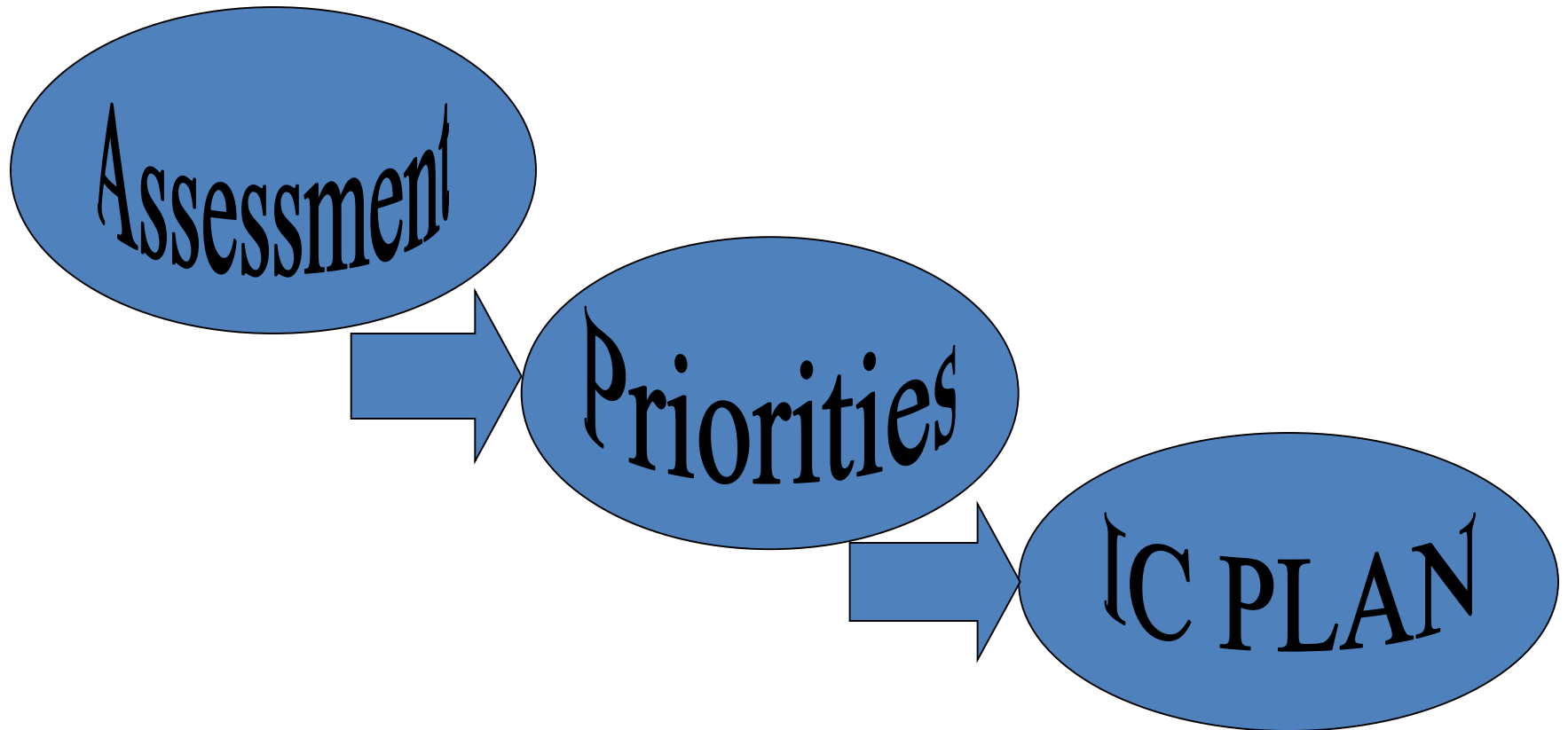
Strategy: Identify and implement evidence-based procedures to minimize SSI. Ex SCIP bundles, Decolonization of surgical patients.

Evaluation: Report SSI rates quarterly to IPC, Exec Staff, surgery department and surgery physician section quarterly

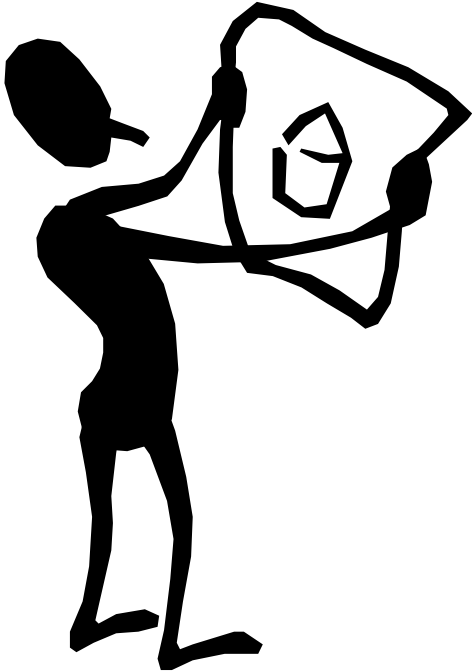
Priority becomes Goals

Priority	Hospital Goals	Inf Prev Goal	Measurable Goal	Method	Evaluate	Staff Involved
Abd Hyst	Provide a safe quality care for all patients	Meet or exceed NHSN 50% decrease by 10%	2015 3.5 2016 Goal 3.15	Surg rate feedback	Monthly review Quart report	Ex Staff, OR, Surgeon ICP

Moving from Risk Assessment to Priorities to Planning



The Importance of Planning



In preparing for battle I have always found that plans are useless, but planning is indispensable."

D. Eisenhower

Joint Commission



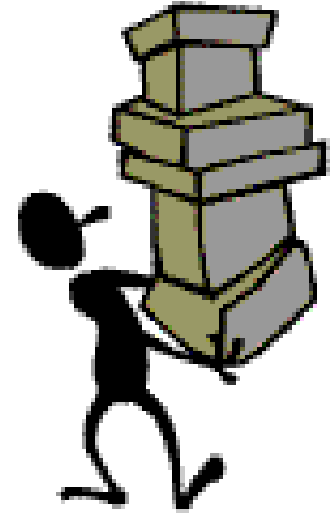
- **IC.01.05.01** The hospital has an infection prevention and control plan.
 - Evidence based or National consensus
 - Description of prioritized risks
 - Statement of goals and objectives
 - Description of strategies to minimize risk
 - Evaluation of strategies and plan
 - Everyone is knowledgeable about plan
 - Infections are reported
 - Outbreaks are investigated
 - Written plan exists

DNV NIAHO Standard

- IC.1 Infection Prevention and Control System
- SR.3 The Infection Prevention and Control System shall be evaluated at least annually. This evaluation shall be forwarded to Quality Management oversight group.
- SR. 8 Surveillance methodology shall be appropriate for the population(s) served and approved no less than annually by IC oversight. The inpatient and outpatient populations shall be reported to this oversight group as an annual summary of reported illnesses.

IC Plan Contents

- Mission Vision of Program
- Infection Control Program
 - Structure, Processes, Scope of Services
 - Relationship/reporting to patient safety and quality
 - Evidence-based (CDC APIC CMC NHSN TJC DNV)
 - Risk Assessment – can be a summary



Core Interventions you do NOT want to leave out

- 1. Organization wide hand hygiene program
- 2. Reduction of infection from procedures, medical equipment and devices (surveillance/sterilization)
- 3. Minimize potential for transmission (Isolation/construction)
- 4. Screening all staff, volunteers, LIP for immunity to infectious disease with potential exposure
- 5. Referral for assessment , testing immunization for those who have, have been exposed to infectious disease
- 6. Minimize risk from animals in healthcare organizations
- 7. Influenza Participation Program

Other Contents of IC Plan

- Surveillance Program
- Education
- Consultation
- Relationship with Environment of Care
- Role in Emergency Preparedness
- Occupational Health
- Program Evaluation Process and Timing
- Other



Summary: Putting it all together



- **Risk Assessments**

- Focus on Crucial activities to reduce risk of infection
- Align IC department with Hospital Goals
- Teamwork – Partner with others for crucial information (The I in IP stands for infection)
- Needs assessment bottom line staff and physicians
- Must be reviewed and revised based with any hospital changes (NICU opens mid-year)

Summary: Putting it all together

- **Written Infection Control Plans:**

- Include goals and objectives for prevention of infections based on risks identified in using risk assessment process
- Provide strategies to be used to reach goals
- Are reviewed and updated at a minimal of yearly
- Are the basis for IC program annual report



Questions?