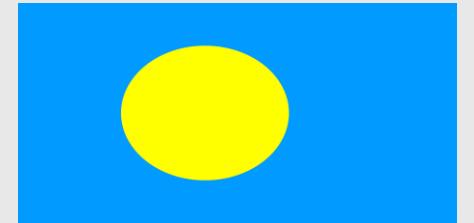
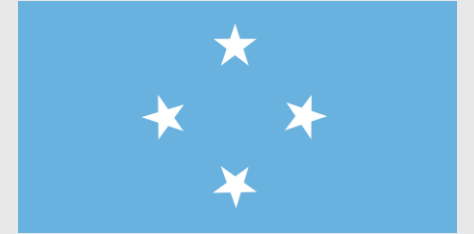


# Fundamentals of Tuberculosis Nursing Case Management

Shea Rabley, RN, MN

Nurse Consultant | Mayo Clinic Center for Tuberculosis



# Learning Objectives



Identify the domains of TB Nurse Case Management.



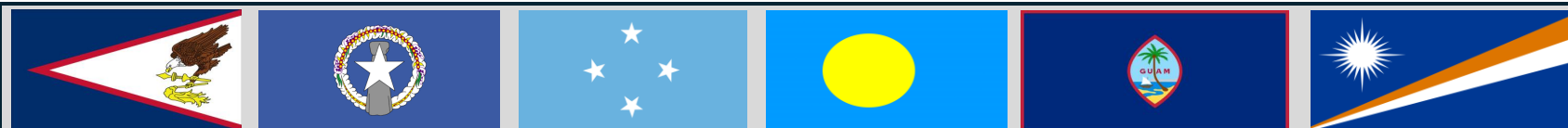
Recognize the most important strategy during the initial interview



Implement strategies to enhance treatment adherence

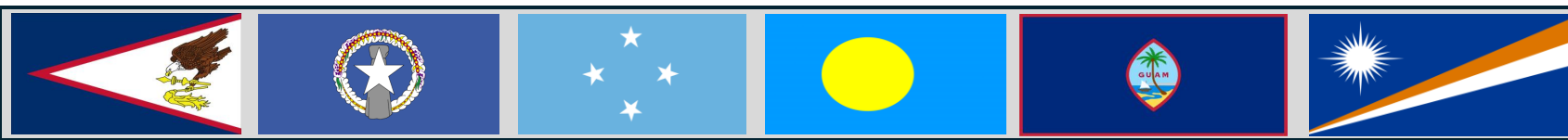


List the priorities for TB contact investigations



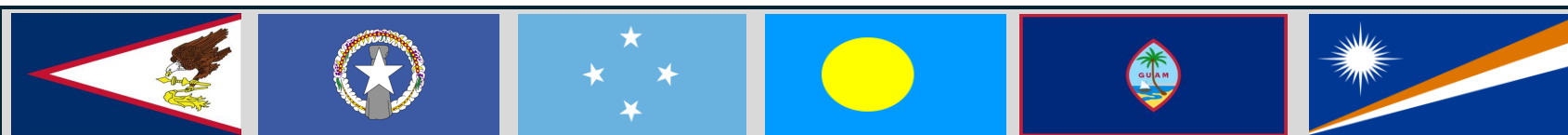
# Goals of Nursing Case Management in Tuberculosis Programs

- Identification of persons with active TB disease
- Continuity of care in transition from hospital to community
- Prevention of disease progression & drug resistance through effective treatment of persons with active TB disease
- Receive care according to current national standards
- Complete TB treatment in appropriate time frames and with minimal interruption in lifestyle or work
- Effective, comprehensive contact investigations through identification and screening of all contacts of active TB cases



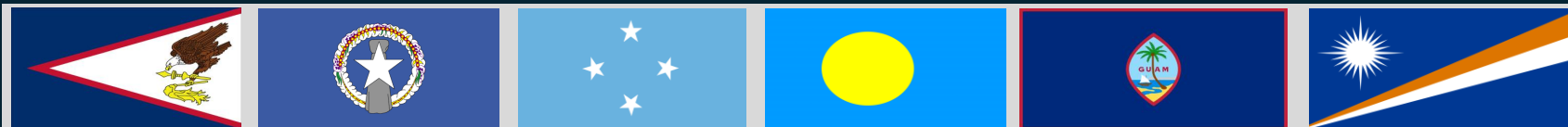
# Goals of Nursing Case Management in Tuberculosis Programs Cont'd

- Effective treatment of all contacts identified with TB infection
- Patient, family and/or community is educated about TB infection, TB disease and treatment of both
- Individuals diagnosed with or suspected to have clinically active tuberculosis are reported according to regulations, laws, etc.
- TB program activities are implemented according to national standards
- Nurse case managers participate in policy development and studies

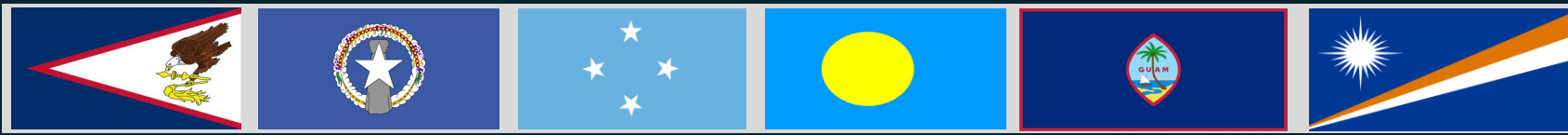


# Elements and Activities of the Case Management Process

1. Surveillance
2. Assessment
3. Plan Development
4. Intervention
5. Evaluation
6. Documentation

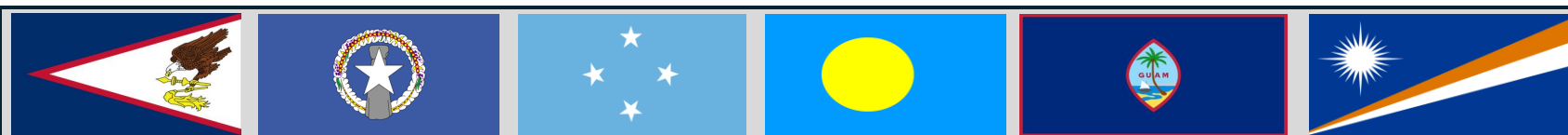


# Surveillance

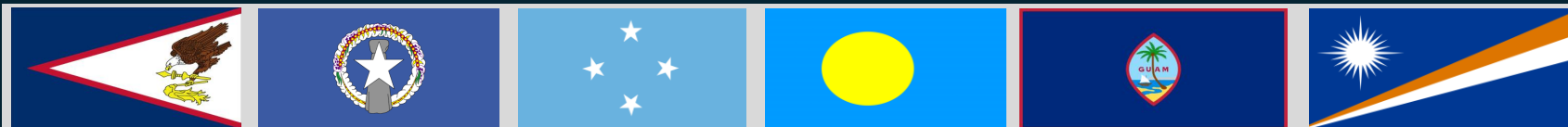


# Surveillance

- Often referred to as Case Finding
- Based upon state and local laws and regulations that assign responsibility to the TB Program for targeted activities to identify cases and their contacts and stop transmission
- Establish collaborative relationships with healthcare providers, local facilities and other agencies to facilitate the exchange of information – maintain open lines of communication
- Track patients who are hospitalized to avoid interruption in care
- Assure reporting regulations are followed
- Assure contact investigations are completed according to policy
- Provide education on TB infection and/or TB disease



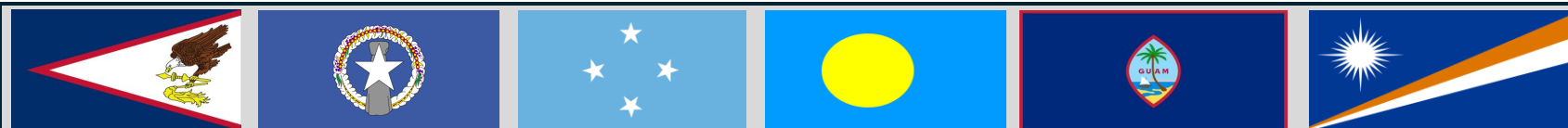
# Assessment





# In what time frame should the initial interview be conducted?

- A. 3 - 5 days after receiving the referral
- B. Within 24 hours of receiving the referral
- C. Within 7 days of receiving the referral
- D. Whenever the case manager gets back from vacation



# The Patient Referral:

## Initiating TB Nurse Case Management



The initial interview should take place within 24 hours of receiving the referral and be conducted in person face-to-face.



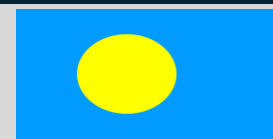
May need to arrange for an interpreter



Provide identification and ensure patient of confidentiality



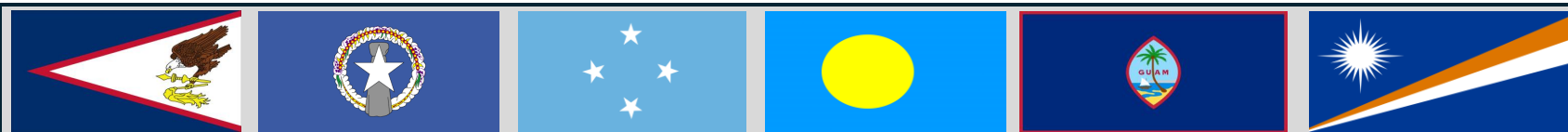
Establish **rappport** with the patient



# Initiating TB Nurse Case Management

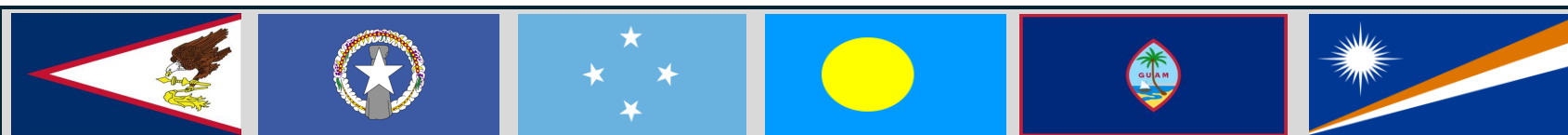
## If hospitalized:

- Initial assessment occurs during a hospital visit and contact investigation is begun:
  - Obtain demographics
  - Obtain copies of hospital records, including diagnostic testing and x-rays
  - Obtain other case related information such as personal and family history, psychosocial and environmental assessment, medical and population risk factors, TB history, and signs/symptoms assessment.
  - Introduce yourself to the patient and begin to establish a relationship



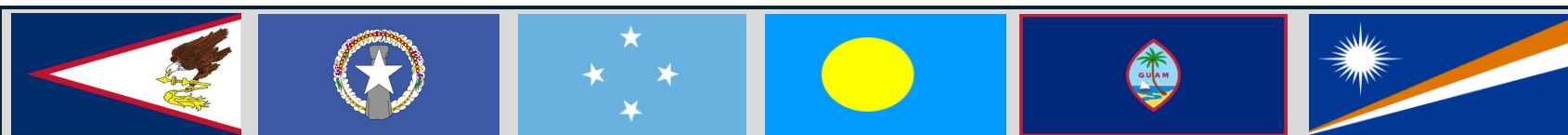
# Home Visit After Discharge

- **Home visit as soon as discharged; continue the assessment which includes:**
  - Determine the extent of illness
  - Previous health history; any other medical diagnosis
  - Determine infectious period
  - Evaluate knowledge & beliefs about TB
  - Administer medications, monitor medication regimen and identify other medications the patient currently takes
  - Identify barriers to adherence
  - Review psychosocial status



# Ongoing Assessment

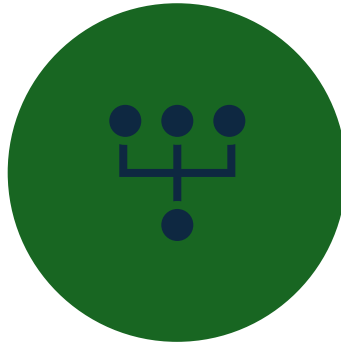
- Monitor clinical response to treatment on a regular basis
- Review the treatment regimen
- Identify positive and negative motivational factors influencing adherence
- Address the educational needs of the patient
- Review the status of the contact investigation to determine further action



# Problem Identification



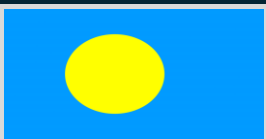
Identifying and addressing existing and/or potential problems (food, housing, transportation, etc)



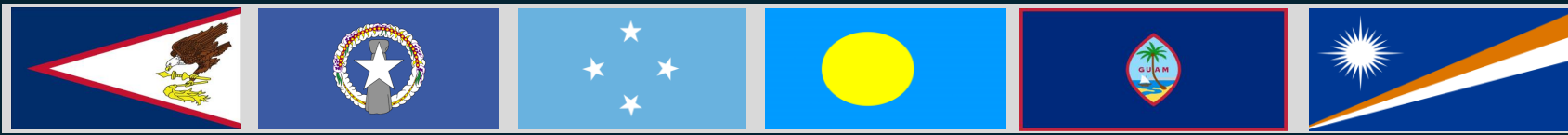
Coordinating with other team members to assure new and/or potentially new problems are addressed



Monitoring the problem

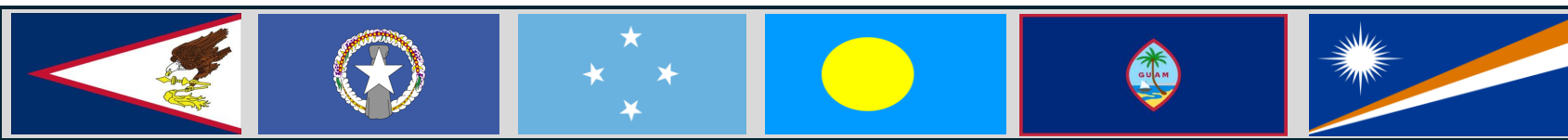


# Plan Development



# Plan Development

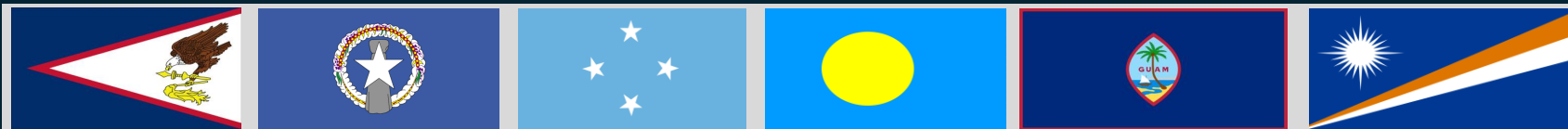
- Establish the plan of care in conjunction with the TB Medical Clinician and other team members, with a focus on completion of treatment
- Monitoring the plan of care and the patient's response
- Adjust the plan of care as needed
- Establish the infectious period and develop a plan for the identification and evaluation of contacts
- Establish a plan to address any psychosocial, environmental and educational issues
- Plans may include the use of other licensed or unlicensed personnel





# Directly Observed Therapy:

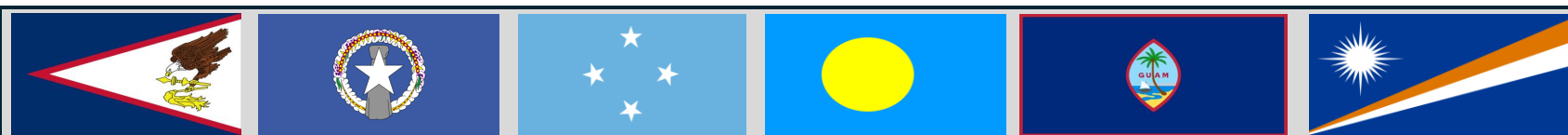
- A. Is the standard of care for persons with TB
- B. Reduces the number of times that the patients had to receive medications
- C. Is the preferred management strategy for persons with TB
- D. All of the above



# Directly Observed Therapy (DOT)

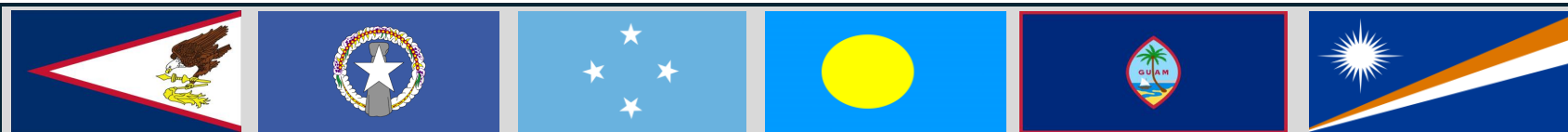
**DOT is the Standard of Care for persons diagnosed with TB disease and TB infection.**

- Directly observed therapy, commonly referred to as DOT is where a health-care worker observes the patient swallow each dose of TB medication.
- DOT is preferred management strategy for all patients with TB.
- DOT can reduce acquired drug resistance, treatment failure, and relapse.
- Any regimen can be given DOT, regardless of frequency.
- DOT reduces total number of doses and encounters for the patient.
- DOT is an intervention that allows the assessment of the patient on a daily basis to help prevent harm from side effects or adverse events of the TB medications.

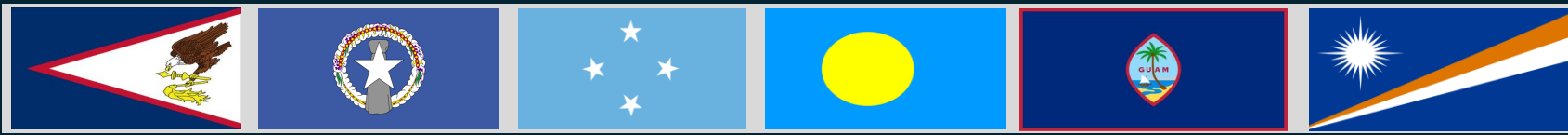


# DOT Continued....

- There are other variances of DOT (daily, 3xwk, 2xwk, once weekly)
- Video Directly Observed Therapy (VDOT)
- Prepackaged doses in containers that provide a notification of date & time when opened
- Dedicated pill takers?

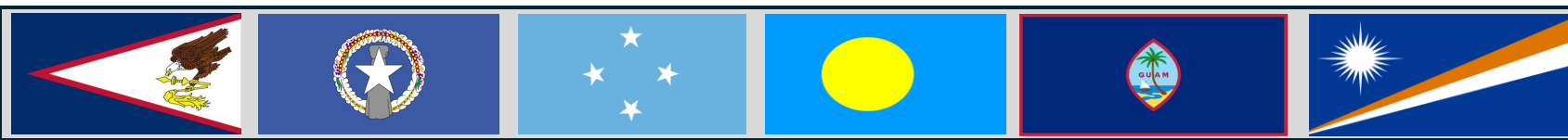


# Intervention



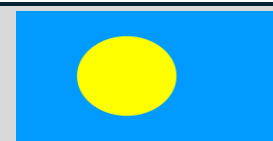
# Intervention

- Monitor the patient's response to treatment, interventions and adherence – monthly if not more often
- Review laboratory testing to assure progress & remain WNL
- Referrals to and coordination with other community service providers
- Obtain other necessary medical services
- Negotiate DOT plan with the patient
- Identify & implement strategies to assure adherence with the use of incentives and enablers
- Educate patient/family about the TB infection and/or disease
- Implement the contact investigation



# Which activity is **NOT** used to monitor the patient's progress?

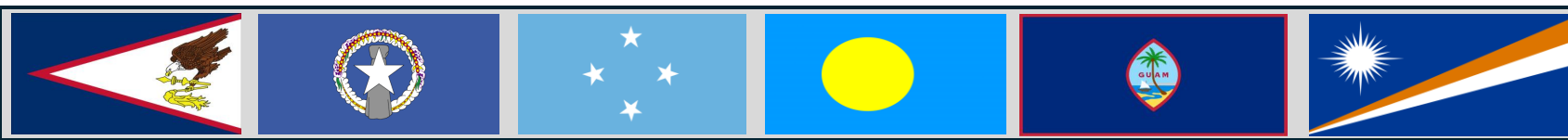
- A. Completion and reading of a Chest X-Ray
- B. Sputum testing for bacteriology (smear, NAAT, culture, DSTs)
- C. Visual acuity and hearing testing
- D. Providing the patient with reading materials



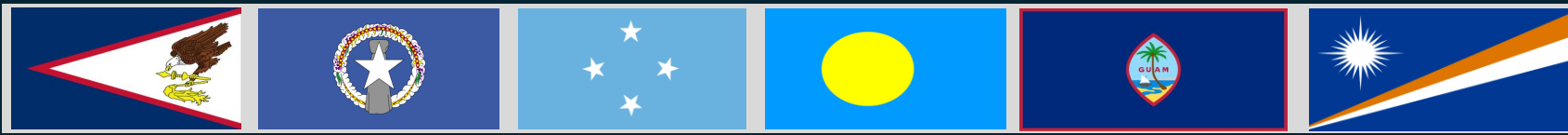
# Monitoring Activities

**May include any/all on a regular basis:**

- Chest x-ray, other radiology
- Sputum for bacteriology (smear, NAAT, culture, DSTs)
- Laboratory testing: LFTs, CBC, HIV, CD4, hepatitis serology, TB and other drug levels
- Visual acuity, color discrimination, hearing
- Assessment for signs/symptoms of drug side effects and/or adverse reactions



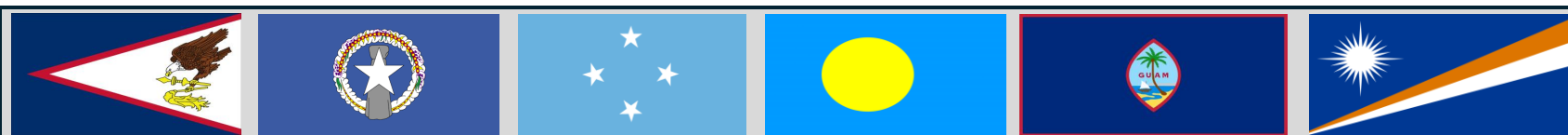
# Evaluation



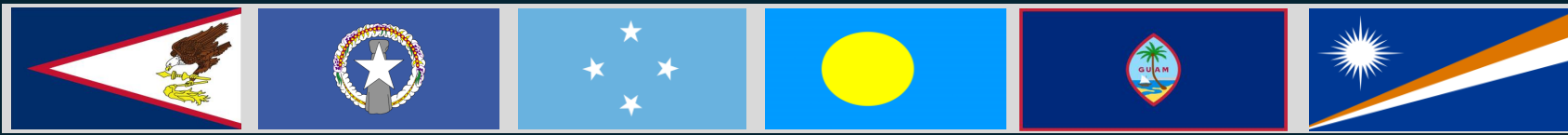


# Evaluation

- Review and update/revise the plan at least monthly
- Identify strengths and weaknesses in the plan
- Conduct physician reviews on a regular basis
- Review contact investigation to revise parameters as needed and to assure completeness
- Assure regulatory reports are submitted
- Conduct regular chart reviews, program audits and QA reviews
- When nearing completion, begin to focus on discharge planning

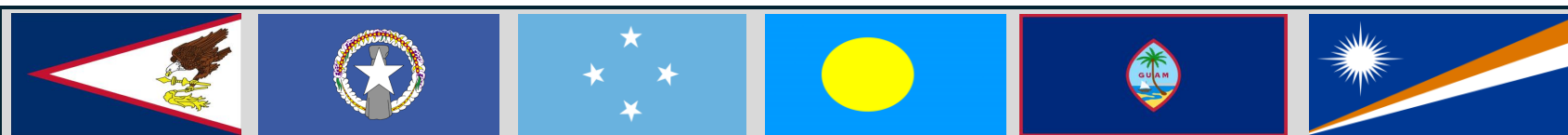


# Documentation



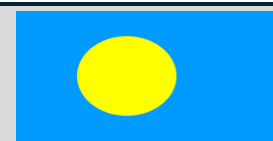
# Confidentiality

- HIPAA – protects individually identified health information and requires an authorization for disclosure.
- Section **164.512** notes the **exemption** of communicable diseases reported to the public health authority as authorized by law.
- Know your laws/guidelines regarding TB, confidentiality, and medical need to know



# Documentation

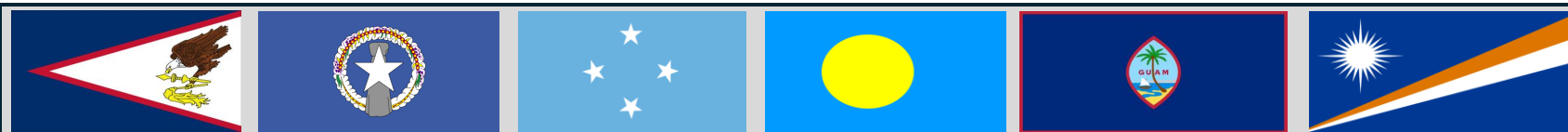
- Utilize forms developed specific to TB: Clinical and risk assessment, medication and/or DOT forms, education, laboratory tests, sputum log.
- Conduct regular reviews of the patient's medical record to assure completeness.
- Document case management activities (referrals made, outcomes, appointments made, arranging transportation, etc).
- Assure patient confidentiality throughout the treatment period.
- Medical record should be kept so it provides a ongoing clinical picture of the patient and the patient's process to cure.
- Ensure all documentation is true and accurate to the best of one's ability.
- **If it is not documented, it was not done!**



# Documentation

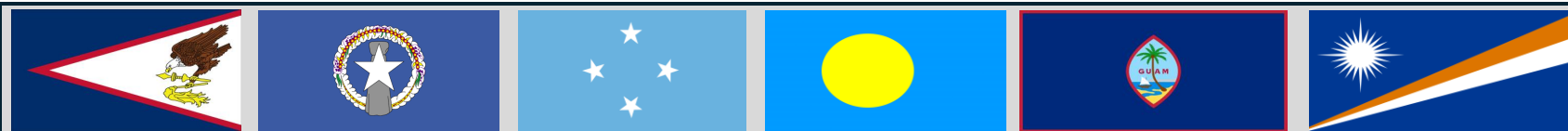
“These domains require that the healthcare workers provide consistent and concise documentation throughout the case management process. Expected documentation provides an ongoing clinical picture of the patient and the patient’s progress to cure, while ensuring continuity of care. Case management, with appropriate documentation, provides the framework that enables the public health nurse to ensure that the TB patient completes treatment and is able to be discharged from the TB Program.”

NTCA/NTNC. Tuberculosis Nursing: A Comprehensive Guide to Patient Care. 2<sup>nd</sup> Edition. 2011, pg. 5-6.



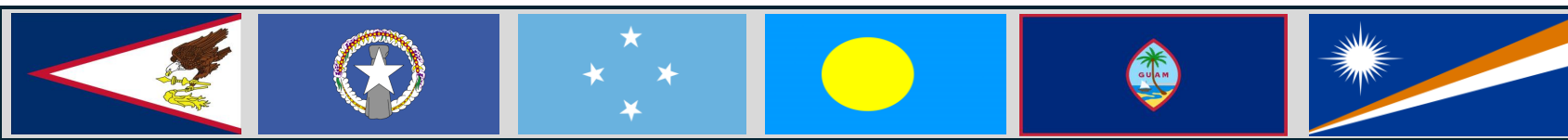
# TB Nurse Case Management is...

TB Nurse Case Management is the coordination of medical, nursing and social services to ensure that every patient with suspected, or confirmed, tuberculosis disease or TB infection has access to the appropriate evaluation and can complete the most effective treatment regimen.



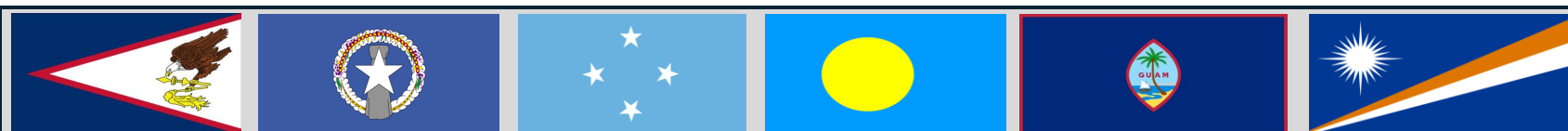
# TB NCM Activities

Case management activities are based on state regulations, national standards, and the policies and procedures established within the state. It is dynamic and ever changing and provides a continuous challenge. But that is what makes nursing case management in the TB Program interesting, challenging and fun.



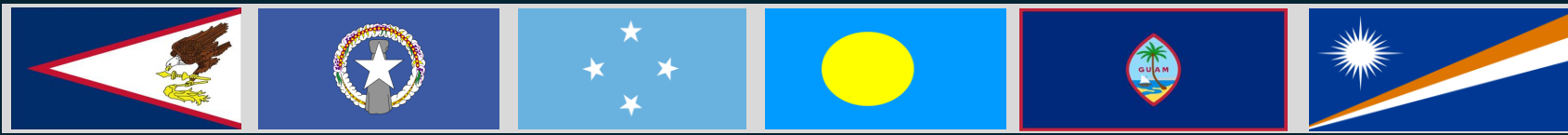
# References

- Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care settings, 2005. *MMWR* 2005; 54 (No. RR-17).  
[http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm?s\\_cid=rr5417a1\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm?s_cid=rr5417a1_e)
- Centers for Disease Control and Prevention. Division of Tuberculosis Elimination. Core Curriculum on Tuberculosis: What the Clinician Should Know, Sixth Edition 2013.  
<http://www.cdcnpin.org/scripts/tb/cdc/asp>
- National TB Controllers Association and the National TB Nurse Coalition. *Tuberculosis Nursing: A Comprehensive Guide to Patient Care*. 2<sup>nd</sup> Edition, 2011.

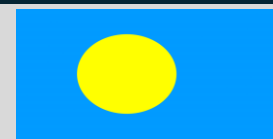




# Questions and Answers



# Thank You



USAPI Regional TB Training 2024