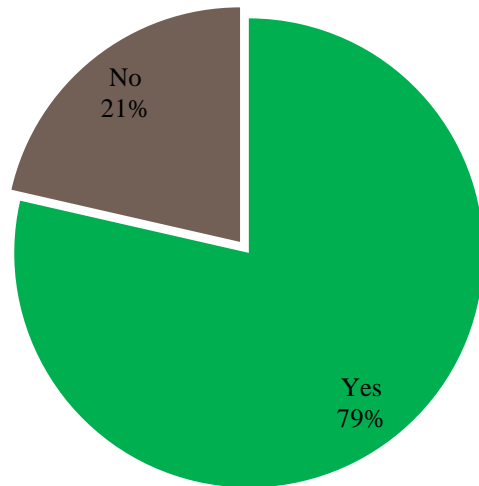




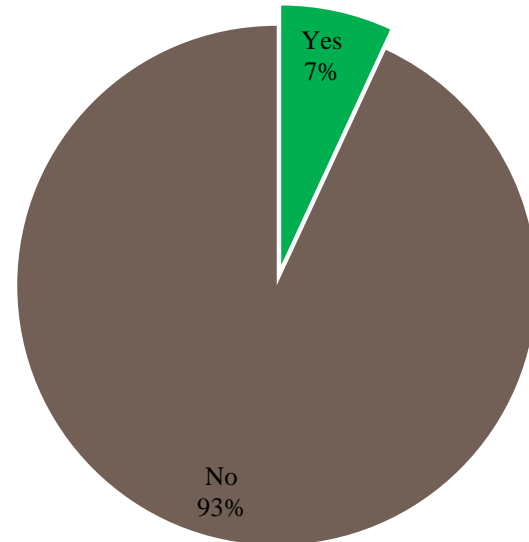
Hyperbilirubinemia Web Conference September 23, 2016

Baseline Data

Does your hospital have a policy, protocol or order-set which addresses neonatal hyperbilirubinemia assessment?

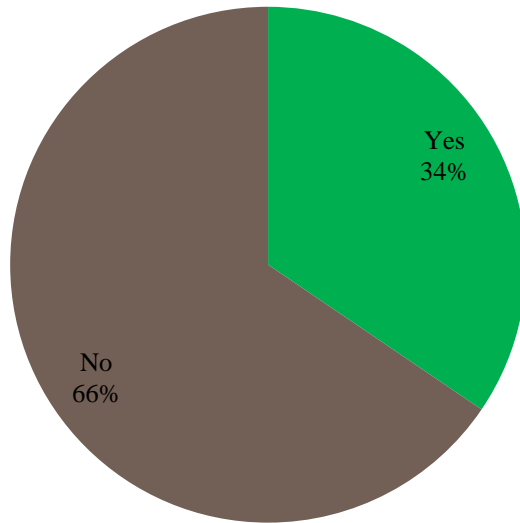


Bilirubin level measured at 12 hours of age

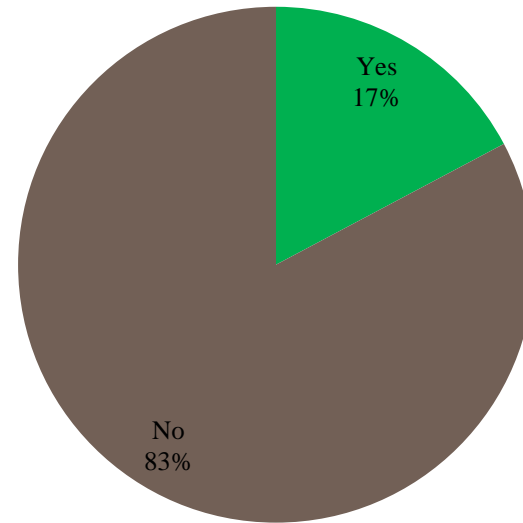


Baseline Data

**Bilirubin level measured at
24 hours of age**

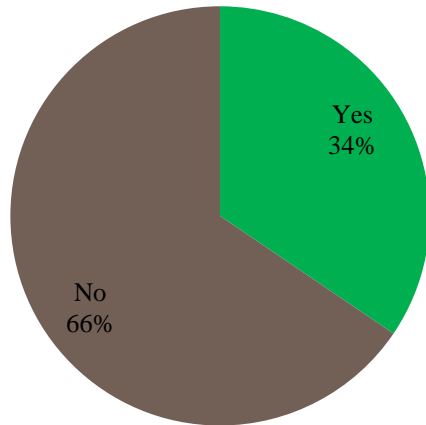


**Bilirubin level measured at
48 hours of age**

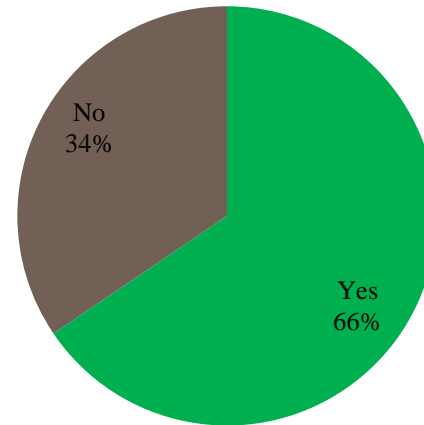


Baseline Data

**Bilirubin level measured
prior to discharge if
discharge prior to 48 hours
of age**

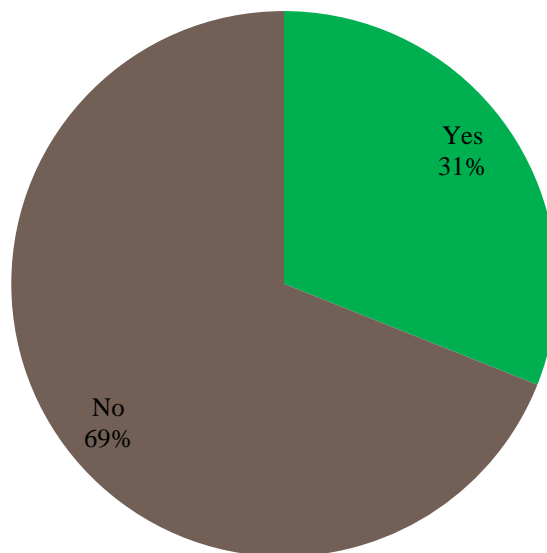


**Nomogram used to
determine if bilirubin level is
in the high risk zone based
on age**



Baseline Data

Babies discharged before 48 hours of age are seen by a provider within 48 hours of discharge

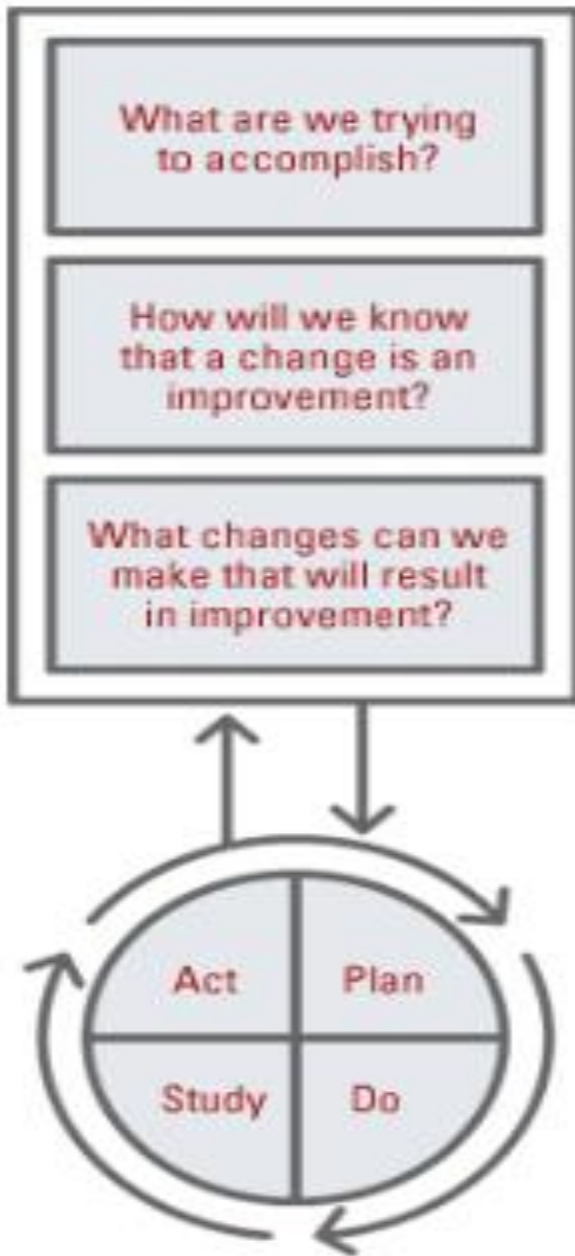


Policy, protocol or order-set

- Bilirubin level measured at 12 hours of age
- Bilirubin level measured at 24 hours of age
- Bilirubin level measured at 48 hours of age
- Bilirubin level measured prior to discharge if discharge prior to 48 hours of age
- Nomogram used to determine if bilirubin level is in the high risk zone based on age
- All mothers receive instructions about jaundice before discharge
- Nurses have the ability initiate a bilirubin test
- Babies discharged before 48 hours of age are seen by a provider within 48 hours of discharge

Model for Improvement

<http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>



*Source:

Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition).

San Francisco: Jossey-Bass Publishers; 2009.

**What are we trying to
accomplish?**

Prevent Kernicterus

How will we know that a change is an improvement?

Structure: all birthing hospitals have policy, protocol or order-sets with key EBP

Process: 95% of newborns have.....

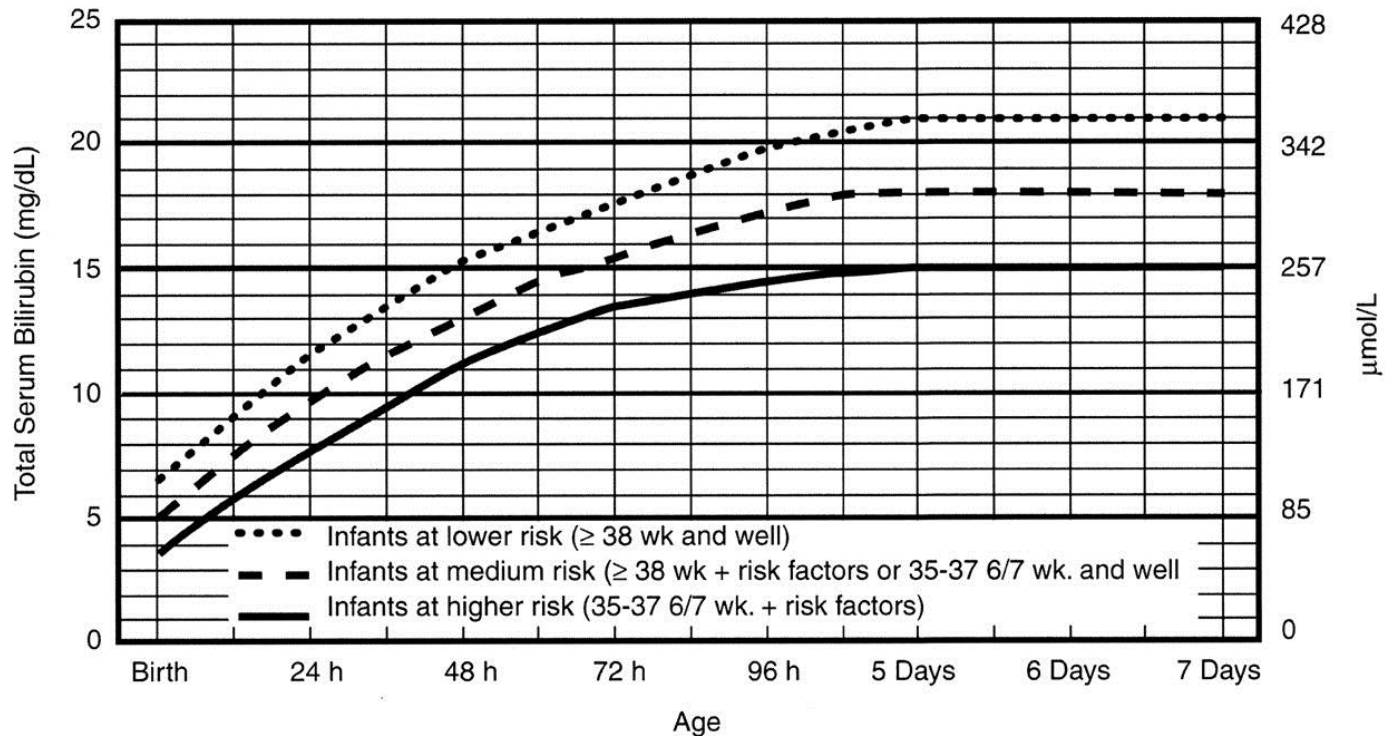
Outcome: 0 cases of kernicterus

What changes can we make that will result in improvement?

Policy, Protocol, or Order Set:

- Bilirubin level measured at 12 hours of age
 - Bilirubin level measured at 24 hours of age
 - Bilirubin level measured at 48 hours of age
 - Bilirubin level measured prior to discharge if discharge prior to 48 hours of age
 - Nomogram used to determine if bilirubin level is in the high risk zone based on age
 - All mothers receive instructions about jaundice before discharge
 - Nurses have the ability initiate a bilirubin test
 - Babies discharged before 48 hours of age are seen by a provider within 48 hours of discharge
-

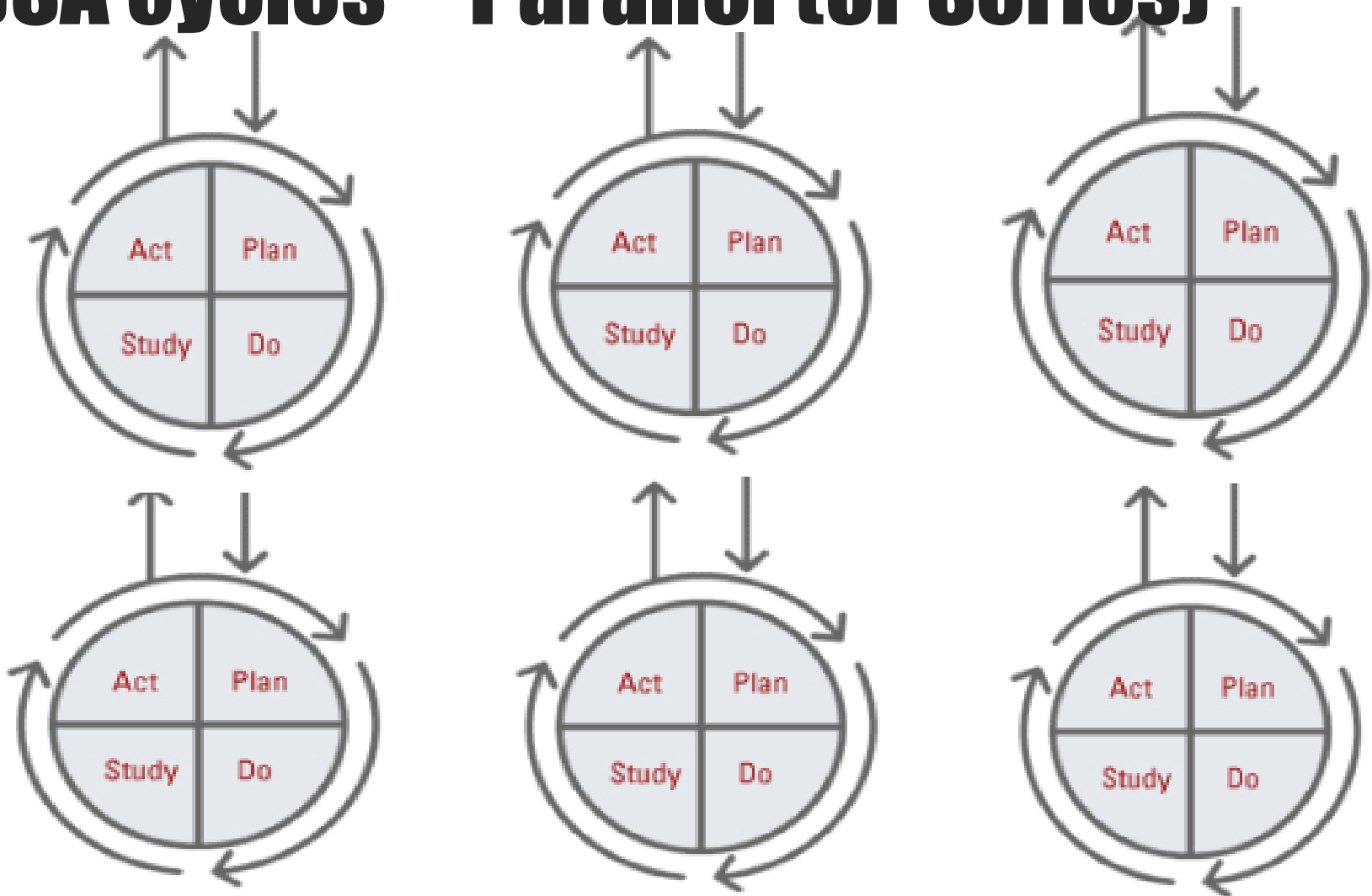
Guidelines for phototherapy in hospitalized infants of 35 or more weeks' gestation



- Use total bilirubin. Do not subtract direct reacting or conjugated bilirubin.
- Risk factors = isoimmune hemolytic disease, G6PD deficiency, asphyxia, significant lethargy, temperature instability, sepsis, acidosis, or albumin < 3.0 g/dL (if measured)
- For well infants 35-37 6/7 wk can adjust TSB levels for intervention around the medium risk line. It is an option to intervene at lower TSB levels for infants closer to 35 wks and at higher TSB levels for those closer to 37 6/7 wk.
- It is an option to provide conventional phototherapy in hospital or at home at TSB levels 2-3 mg/dL (35-50mmol/L) below those shown but home phototherapy should not be used in any infant with risk factors.

Subcommittee on Hyperbilirubinemia, Pediatrics 2004;114:297-316

PDSA cycles – Parallel (or Series)



Is your policy/protocol/order-set ready?

Next:

- **Plan** implementation of policy/protocol/order-set
 - **Do** implement it
 - **Study** audit to see if it is actually happening
 - **Act** adjustments as needed, continue to audit
-

SHARING

- Status of policy, protocol, order-set
 - PDSA
-

Study

- Bili check at 12, 24, 48 hours and at DC if DC before 48h
 - Risk identified per nomogram
 - Mother received education on jaundice before DC
 - If DC before 48h, baby seen by provider within 48h
-