

ILCOR - International Liaison Committee on Resuscitation



- Formed in 1992 to provide a forum for liaison between principal resuscitation organisations worldwide
- Six task forces:

ILCOR Task Forces

Adult
Life Support



Basic
Life Support



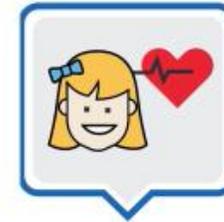
Education
Implementation
and Teams



First Aid



Pediatric
Life Support



Neonatal
Life Support



ILCOR - International Liaison Committee on Resuscitation



Neonatal Life Support



- First guidance on neonatal resuscitation in 1999
- First established NLS Task Force ~2005, First CoSTR 2010
- Subsequent CoSTR statements 2015, 2020
- Since 2020, continuous review of the evidence: 2021, 2022, 2023 in preparation

GRADE

- The “Grades of Recommendation, Assessment, Development, and Evaluation” (GRADE) process describes direct evidence as “research that directly compares the interventions in which we are interested, delivered to the populations in which we are interested, and measures the outcomes important to patients”

GRADE

When moving from evidence to recommendations the four considerations that determine the direction and strength of the recommendation are:

1. The overall quality of the evidence for one or more critical outcomes
2. Balance between benefits and harms
3. Resource implications and
4. Patient values and preferences

Levels of Evidence

Previous system (NHMRC based)

Level	Systematic review of all relevant RCTs
Level II	At least one properly designed RCT
Level III-1	Pseudo-randomised trials
Level III-2	Other comparative studies (cohort, case control, etc.)
Level IV	Comparative studies with historical control, single arm studies etc.
Level V	Case series

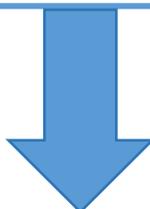
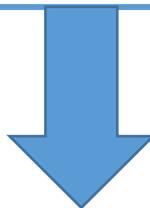
Levels of Evidence

Previous system (NHMRC based)	
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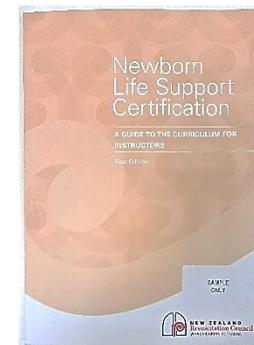
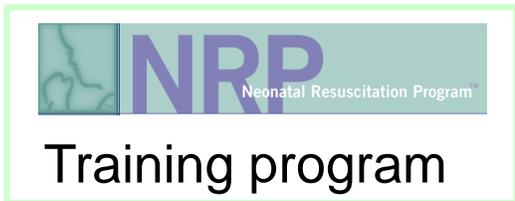
GRADE Quality level	Definition ¹⁰
High (eg. outcome supported by RCTs)	We are very confident that the true effect lies close to that of the estimate of the effect
Moderate (eg. outcome supported by RCTs downgraded one level)	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low (eg. outcome supported by observational studies)	Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect
Very low (eg. outcome supported by uncontrolled case series)	We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect



ILCOR CoSTR Statements



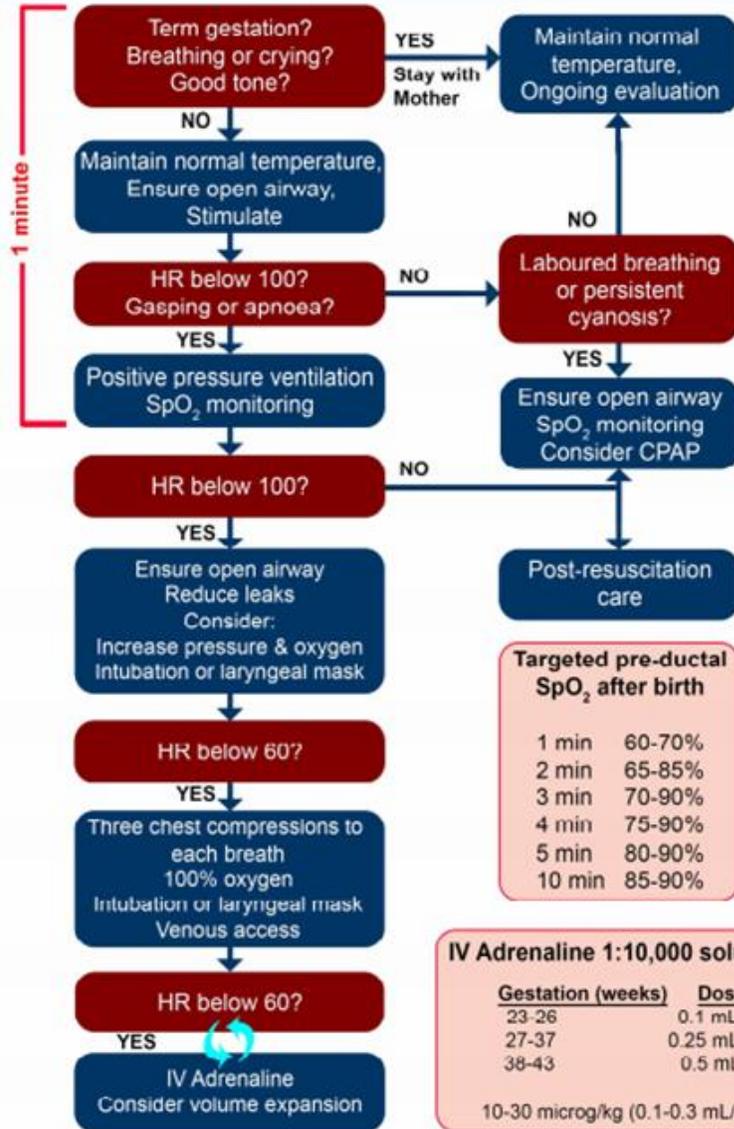
Training programs



Newborn Life Support

ILCOR NLS PICOST questions

At all stages ask: do you need help?



- ~60 questions in total unique to NLS
- Prioritisation of reviews by
- Scanning of literature, updated monthly
- Recommendations from member councils
- Polling of task force and larger content expert group

<https://costr.ilcor.org/>

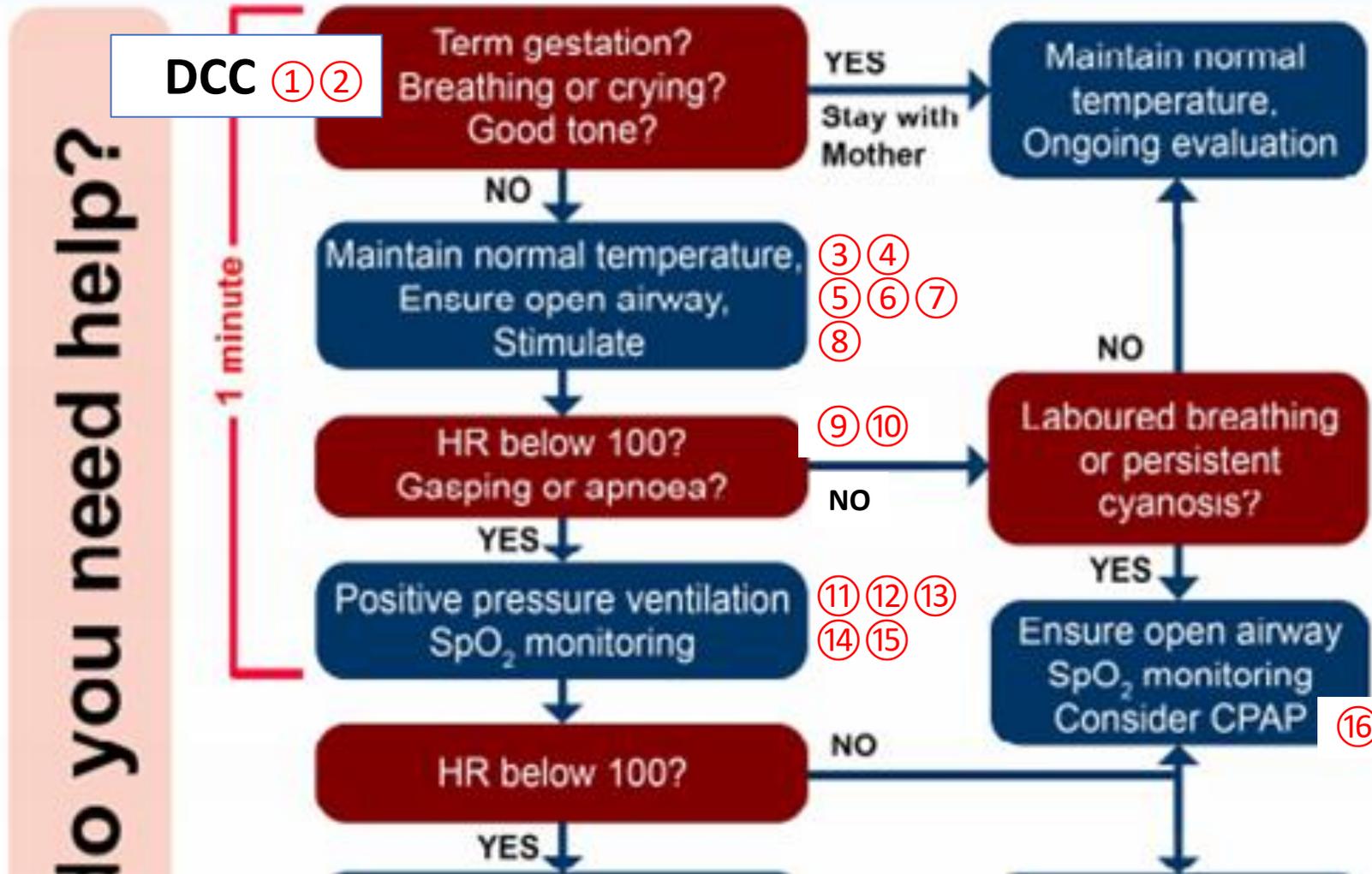


April 2021



NEW ZEALAND
Resuscitation Council
WHAKANAUARA AOTEAROA

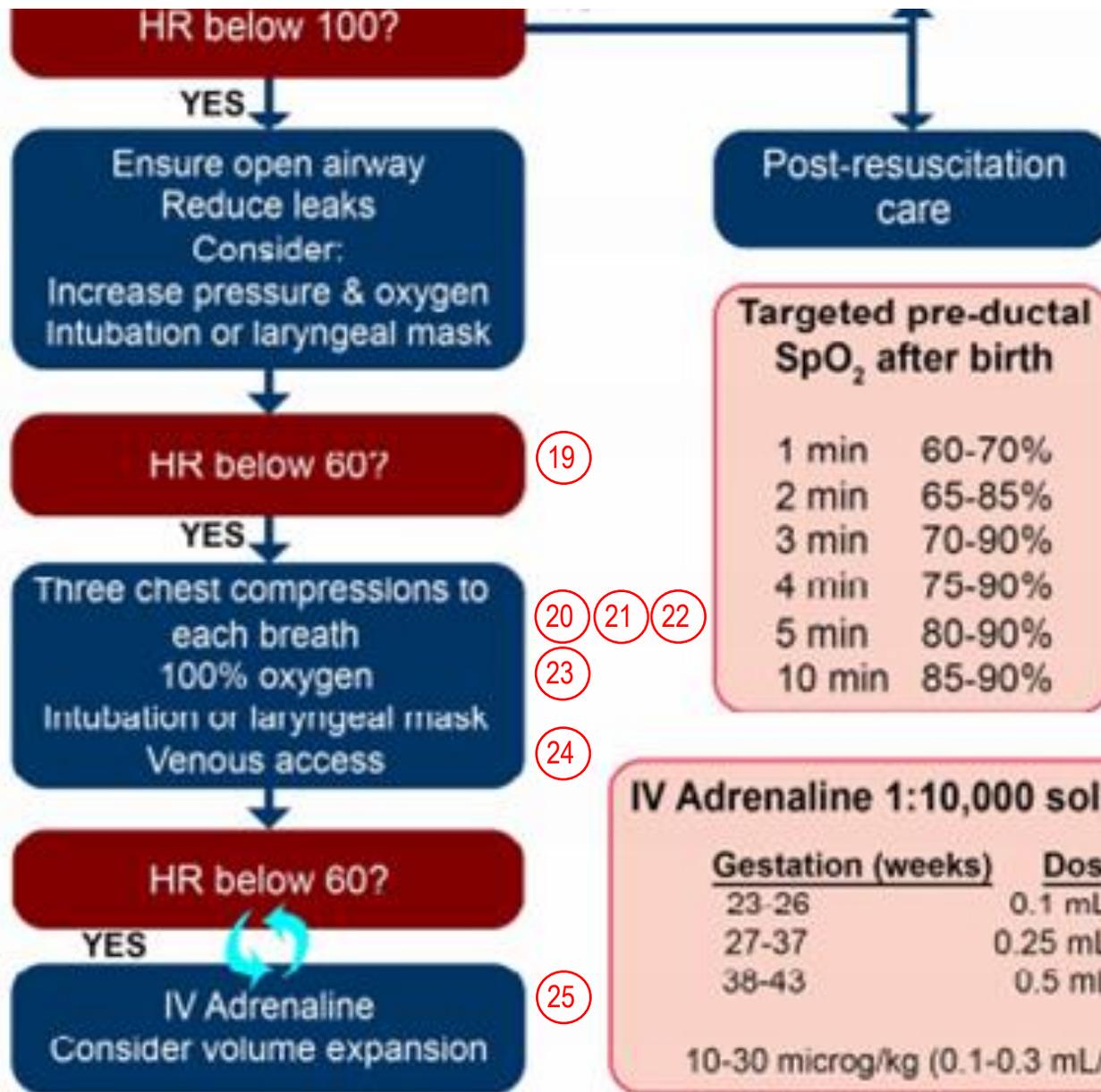
Newborn Life Support



- ① DCC preterm/② term infants 2021
- ③ Maintaining normal temp in late preterm & term infants 2022 / ④ preterm infants 2023
- ⑤ Suctioning clear fluid @birth 2022/
⑥ clear fluid during resus 2021 / ⑦ mec stained liquor below cords 2021
- ⑧ Tactile stimulation 2022
- ⑨ HR assessment methods 2023/⑩ HR monitoring to improve outcomes 2022
- ⑪ PPV devices 2021/ ⑫ SI vs PPV 2021/ ⑬ Laryngeal mask(SGA) 2022
- ⑭ Initial O₂ concentration for term 2021/ ⑮ preterm infants 2021
- ⑯ CPAP vs not in term infants with RD 2022

MONITORING: ⑰ Et CO₂ to guide NIV 2023, ⑱ RFM to improve outcomes 2022

At all stages ask: do y



- (19) HR for starting CC 2023
- (20) Compression ventilation ratio 2023/ (21) CC technique 2023 / (22) Feedback devices during CC
- (23) Supplemental O₂ during CC 2023
- (24) IV vs IO 2021
- (25) Adrenaline dose, route & interval 2021

ILCOR NLS PICOST question: Suctioning of meconium below the cords in non-vigorous infants (NLS#865)

- **Population:** Non-vigorous infants born ≥ 34 w delivered through meconium-stained amniotic fluid of any consistency (non-vigorous defined as heart rate <100 bpm, decreased muscle tone and/or depressed breathing at delivery).
- **Intervention:** Performing immediate laryngoscopy with/without intubation and suctioning at the start of resuscitation.
- **Comparison:** Performing immediate resuscitation without direct laryngoscopy at the start of resuscitation.
- **Outcomes:** Survival to hospital discharge (Primary), Neurodevelopmental impairment (Secondary), Meconium aspiration syndrome (Secondary), Other respiratory outcomes – CPAP or mechanical ventilation, treatment of PPHN with iNO, oral medications or ECMO (Secondary), DR interventions - CPR/medications, intubation for PPV (Secondary), Length of hospitalization (Secondary)
- **Study Designs:** RCTs & non-randomized studies (non-randomized controlled trials, interrupted time series, controlled before-and-after studies, and cohort studies)
- **Timeframe:** All years and all languages (with English abstract). Excluded: Unpublished studies (e.g., conference abstracts, trial protocols) and animal studies Literature search updated to May 2019.

ILCOR NLS PICOST question #865 : Suctioning of mec below the cords in non-vigorous infants

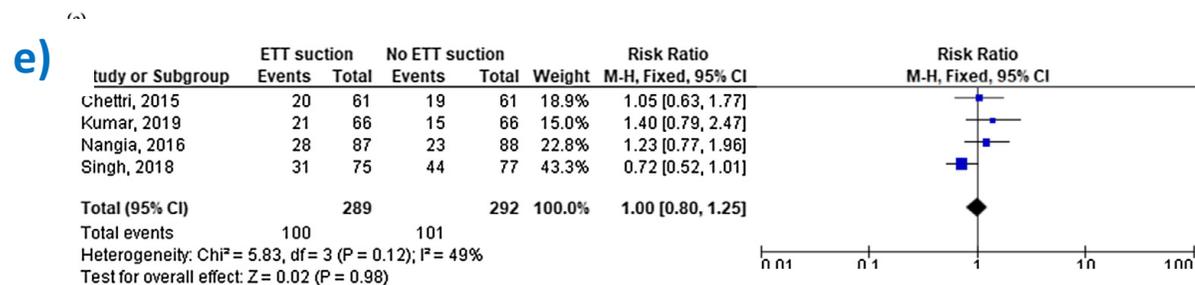
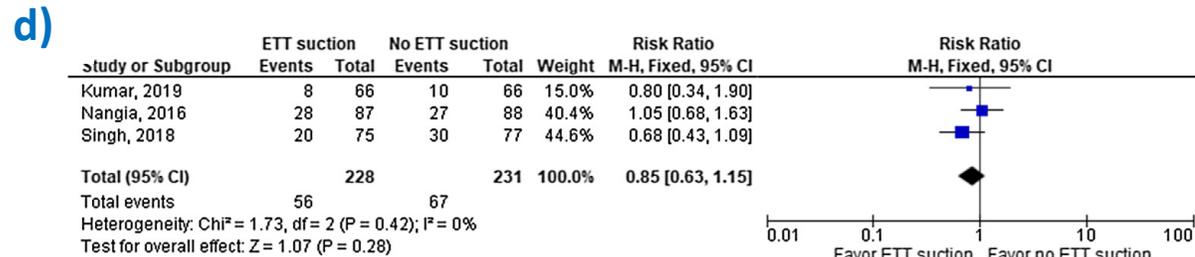
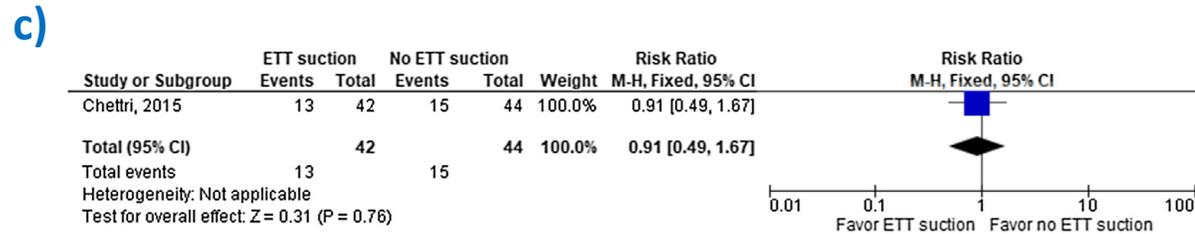
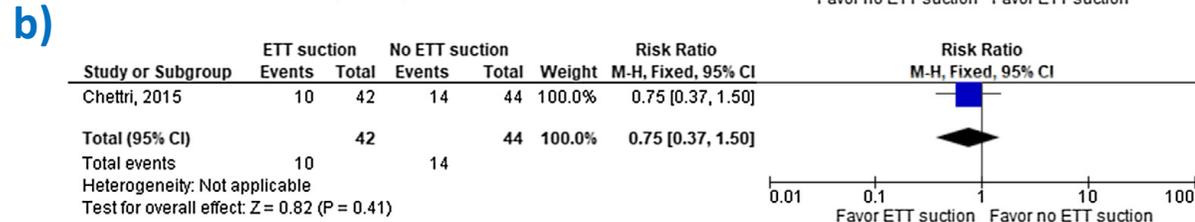
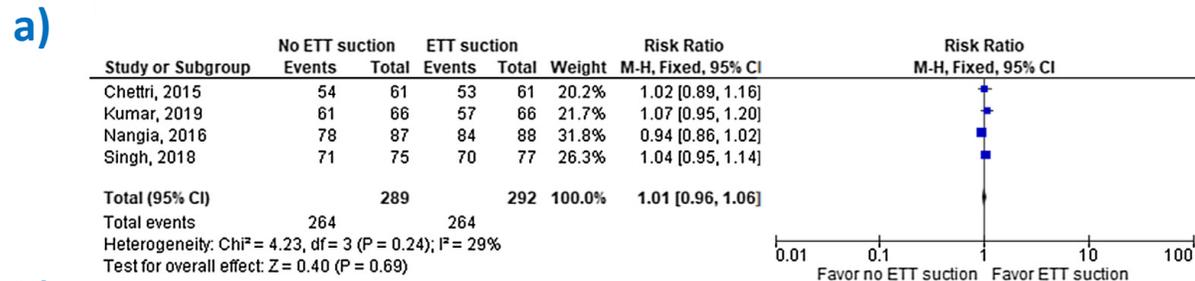


Fig. 2 – Summary of results: immediate laryngoscopy with or without tracheal suctioning compared with immediate resuscitation without laryngoscopy.

- (a) Survival at discharge
- (b) mental NDI at 9 months
- (c) motor NDI at 9 months
- (d) hypoxic-ischemic encephalopathy
- (e) meconium aspiration syndrome

Source: Strand ML et al, Systematic Review, from: <http://ilcor.org>

Favors ETT suction ← → Favors no ETT suction

Updates

- ILCOR CosTR page, free access: <https://costr.ilcor.org/>
- ANZCOR guidelines: <https://anzcor.org> (NEW page)
- Pubmed: Yearly ILCOR publication, ~Xmas time (in Circulation, Resuscitation & Pediatrics)

ILCOR NLS PICOST questions - Publications

- ILCOR NLS PICOST questions reviewed/updated 2020
- ILCOR NLS PICOST questions reviewed/updated 2022
- ILCOR NLS PICOST questions reviewed/updated 2023

