Wean or intervene: a trainee led initiative to assess interdisciplinary perspectives on changes to bronchiolitis management

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Background

• Continuous pulse oximetry in routine bronchiolitis patients is associated with multiple negative outcomes:
  • Increased length of stay
  • Increased cost
  • Iatrogenic harm
  • Alarm fatigue
  • Sleep deprivation
  • Family anxiety
  • Clinical pathway was adjusted to reduce the use of pulse oximetry to wean oxygen for low risk patients
  • Objective: Understand barriers to intervention success via stakeholder survey

Methods

Anonymous 20 question online survey created
Survey revised based on user testing feedback
Survey distributed to nurses, physicians and respiratory therapists
Non-parametric statistics used to assess the relationship between responses and respondent characteristics
Characteristics: clinical role, length of employment, experience weaning oxygen and previous institutional practices

Results

Survey Respondents (n=80)

Physician Method Primarily Used to Wean O2

Nursing Method Primarily Used to Wean O2

Benefits reported:
• Potential for faster weaning
• Potential for shorter lengths of stay
• Family-centered approach to measuring work of breathing
• Assessments at home done the same way as inpatient

Negatives reported:
• Continuous pulse oximetry alarms allow staff to take a shared approach to patient care
• Pulse oximetry offers objective data vs. subjective observations
• Observing clinical trends is often more time intensive

Conclusions

• work of breathing is already the primary method utilized to wean oxygen in bronchiolitis at our institution
• clinical care team members have concerns that may be important considerations for the design of pathway change interventions to maximize effectiveness across stakeholder groups
• EBM sometimes comes second to culture and comfort
• Roles shape comfort with new changes to common pediatric illness management

Implications and Future Steps

• Role diversity should and can be considered when choosing team members to refine and update clinical pathways
• Town halls can help problem solve and address common concerns
• Other institutions can serve as models for effective transition

Disclosures

Authors do not have any disclosures to report