

# Near-term, Term and Post-term babies born in NWH 2010-2020 (July)

Data from Healthware and Neonatal Database

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November 2020

# Audit of inborn term admissions to NICU

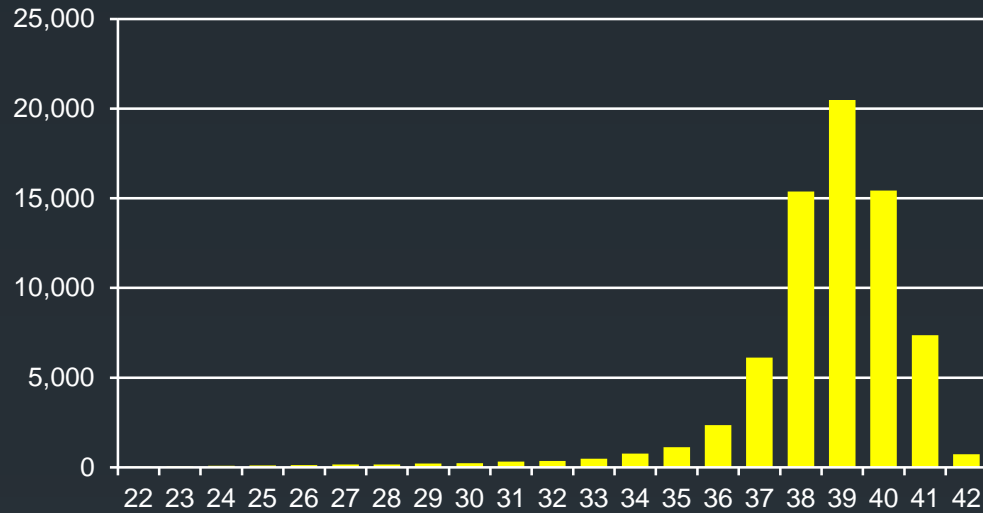
- Has there been an increase in admissions of term/post-term babies to NICU?
- Why has the number of such babies having assisted ventilation has increased?
- Audit assisted ventilation by method of delivery.
- Duration of assisted ventilation varies
  - How many babies have assistance for a short time?
  - Which babies are these?

# Inborn-births

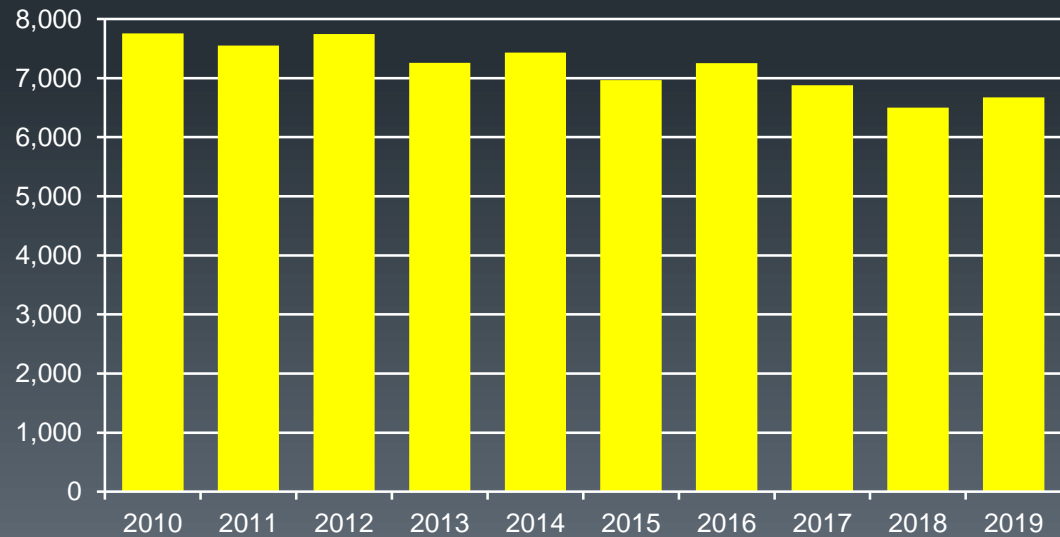
n = 72,022



## 2010-2020 Births



## Birth per year



# How many inborn babies are admitted over 10 years

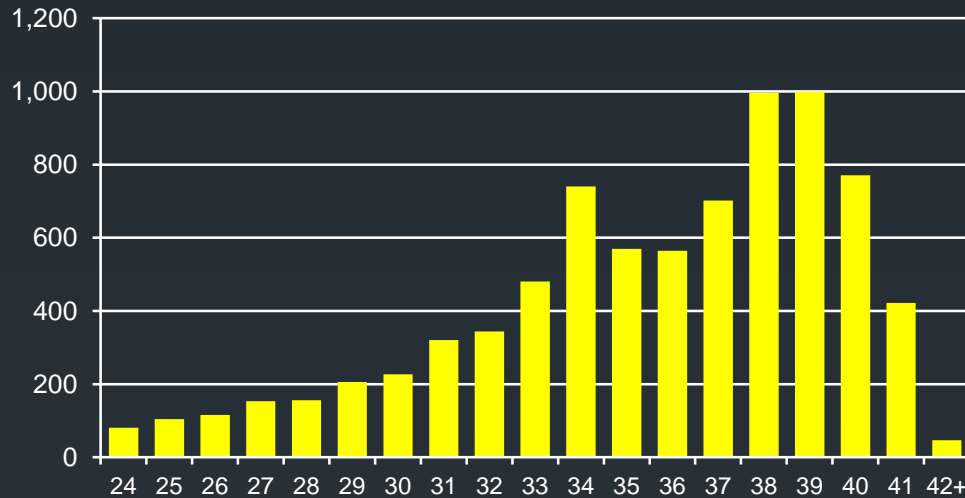


|             |                 |            |
|-------------|-----------------|------------|
| ■ 34 weeks  | 96.9% of births | 740 babies |
| ■ 35 weeks  | 50.9%           | 570        |
| ■ 36 weeks  | 24.1%           | 564        |
| ■ 37 weeks  | 11.5%           | 702        |
| ■ 38 weeks  | 6.5%            | 996        |
| ■ 39 weeks  | 4.9%            | 999        |
| ■ 40 weeks  | 5.0%            | 771        |
| ■ 41 weeks  | 5.7%            | 422        |
| ■ 42+ weeks | 6.5%            | 47         |

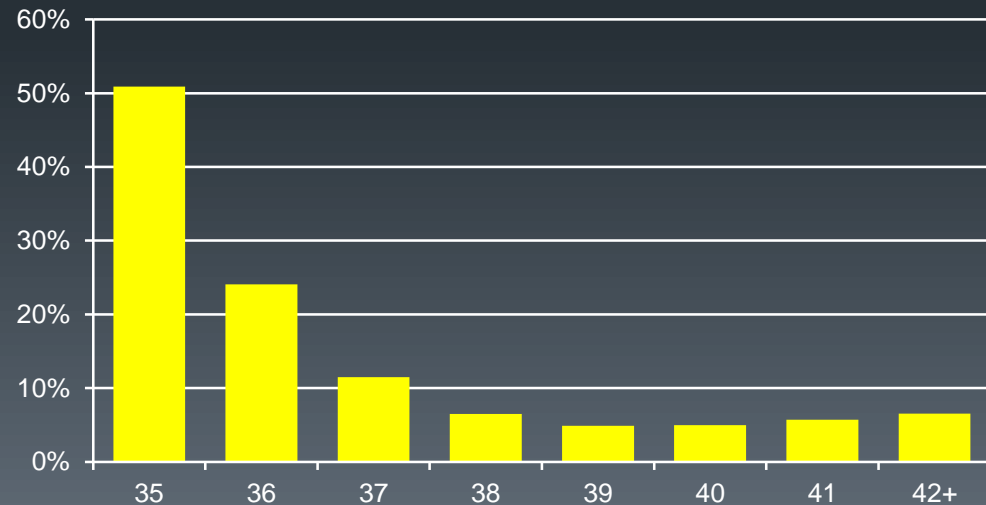
# Neonatal Unit Admissions of Inborn Babies 2010 - 2020



## 2010-2020 admission numbers



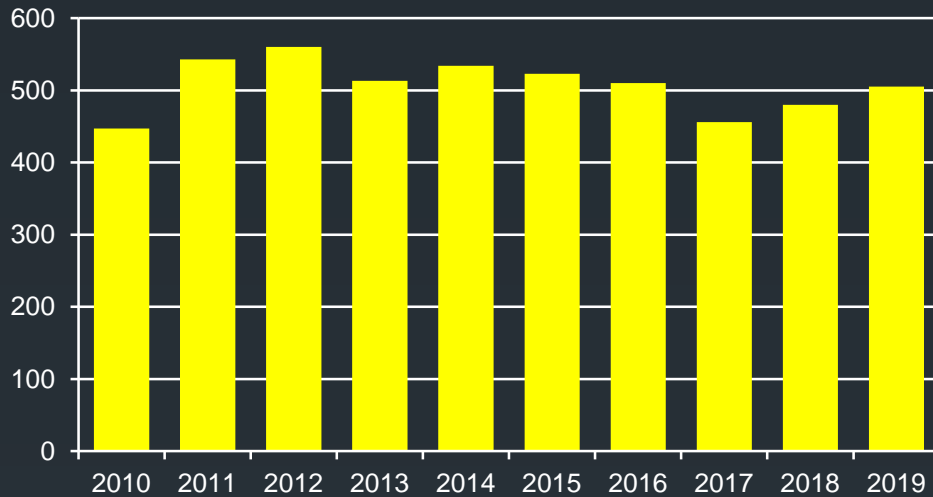
## Admissions by Gestational Age



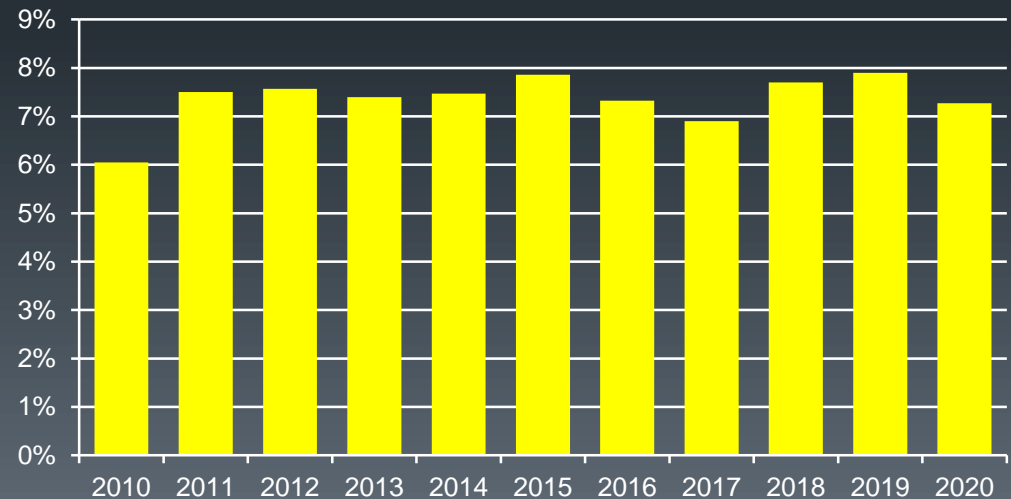
# Neonatal Unit Admissions of Inborn Babies $\geq 35$ weeks 2010 - 2020



## Number



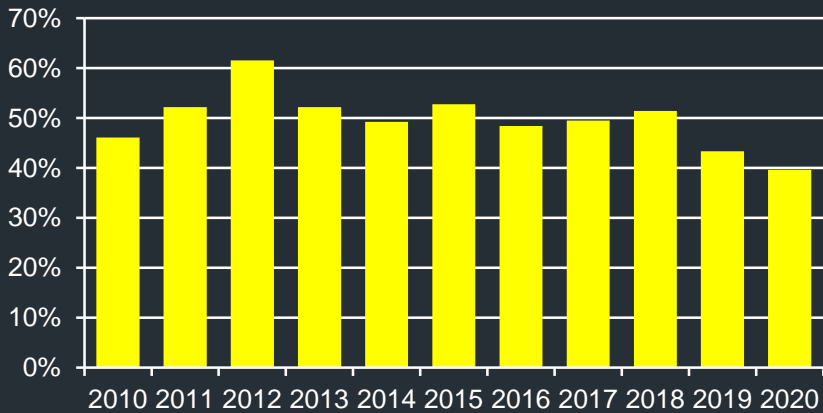
## Percentage



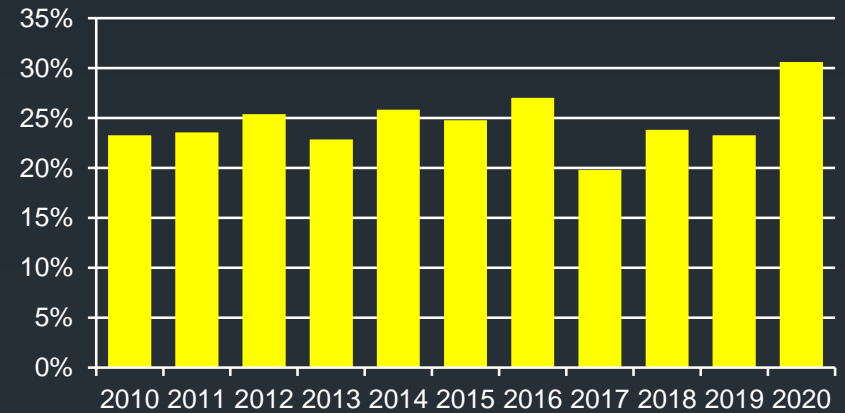
# Admissions of 35 – 38 week Inborn Babies



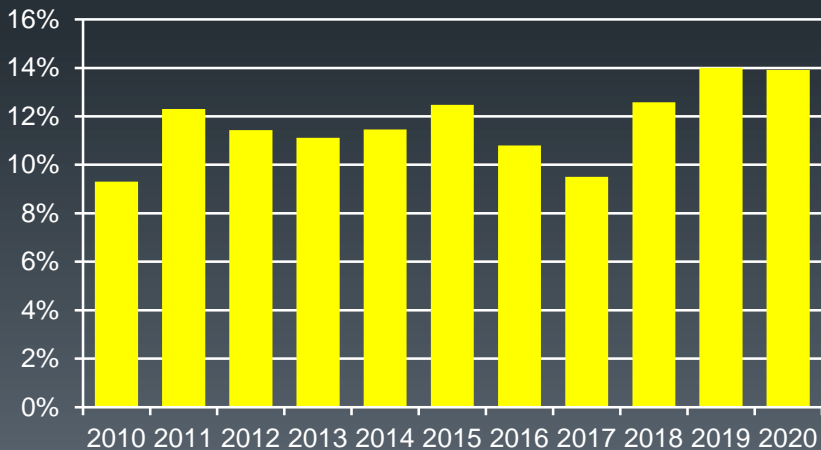
## 35 weeks admissions



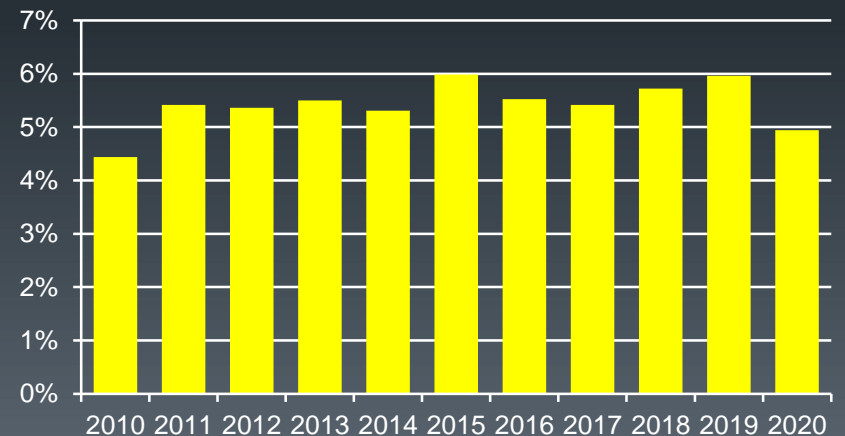
## 36 weeks admissions



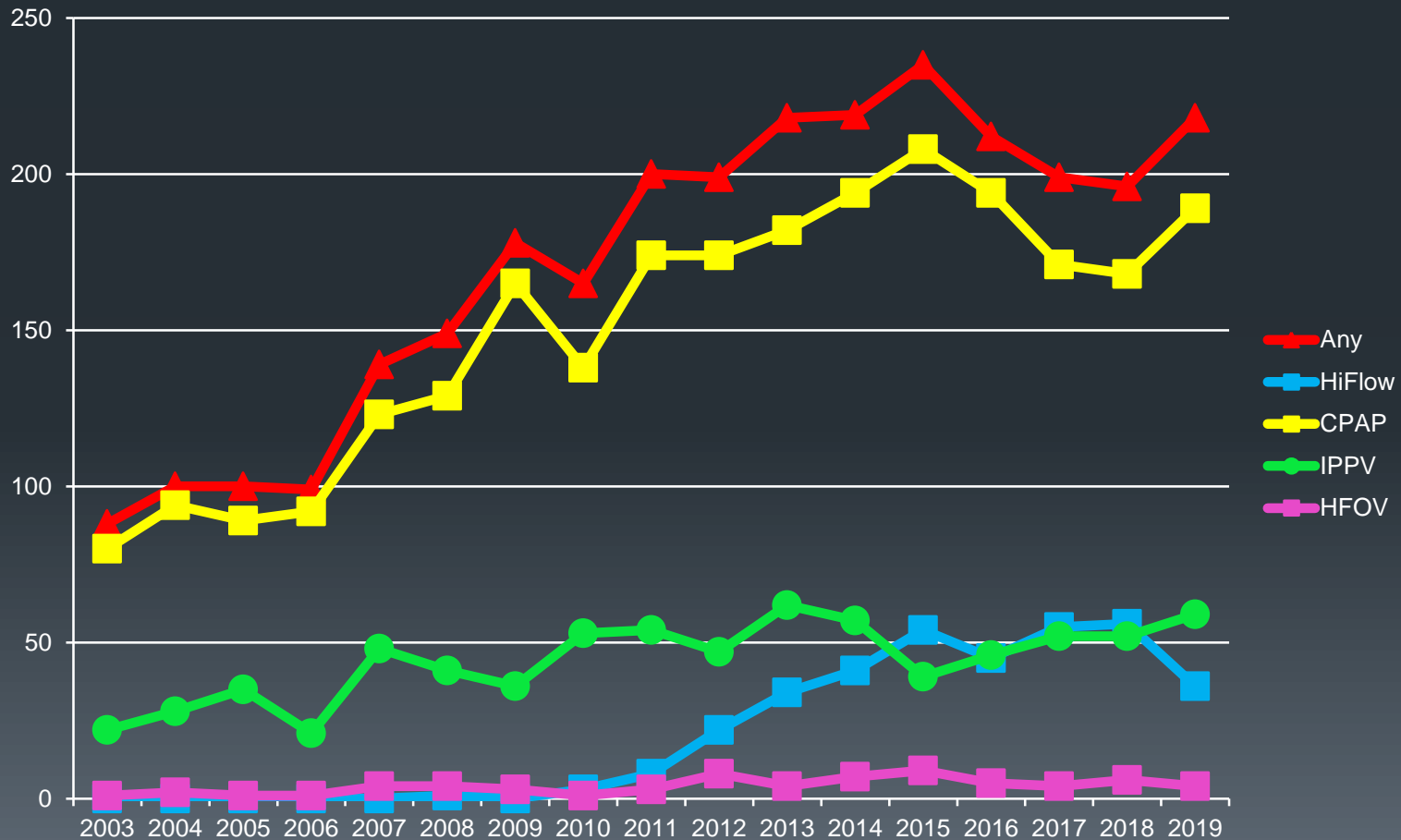
## 37 weeks admissions



## ≥38 week admissions



# Assisted Ventilation of Term or Post-Term Inborn Babies 2003 – 2019 by year

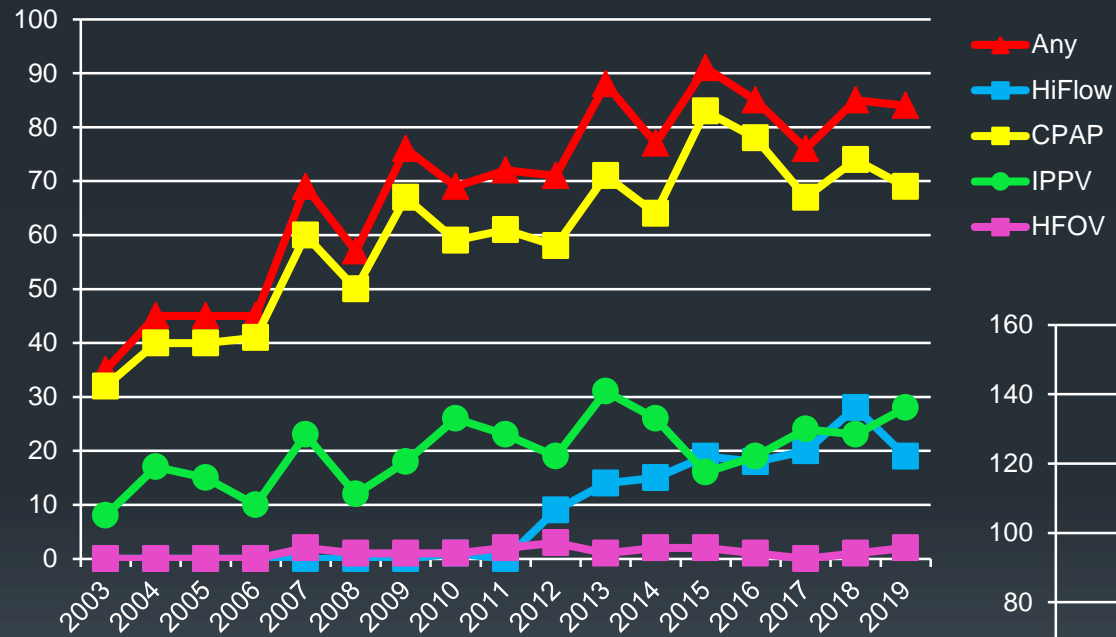




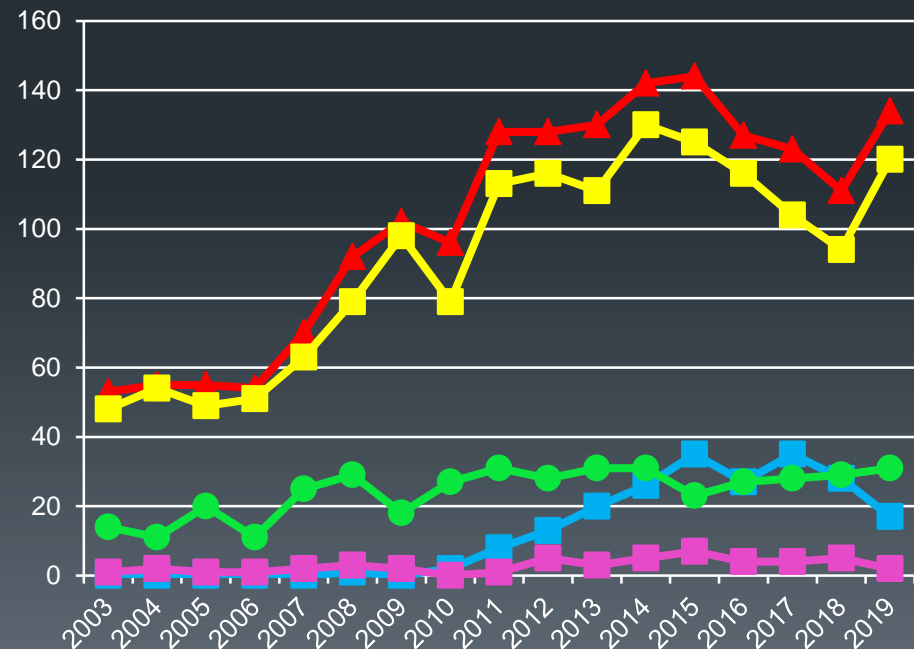
# Assisted Ventilation of Term and Post-term Inborn Babies

## 2003 - 2019

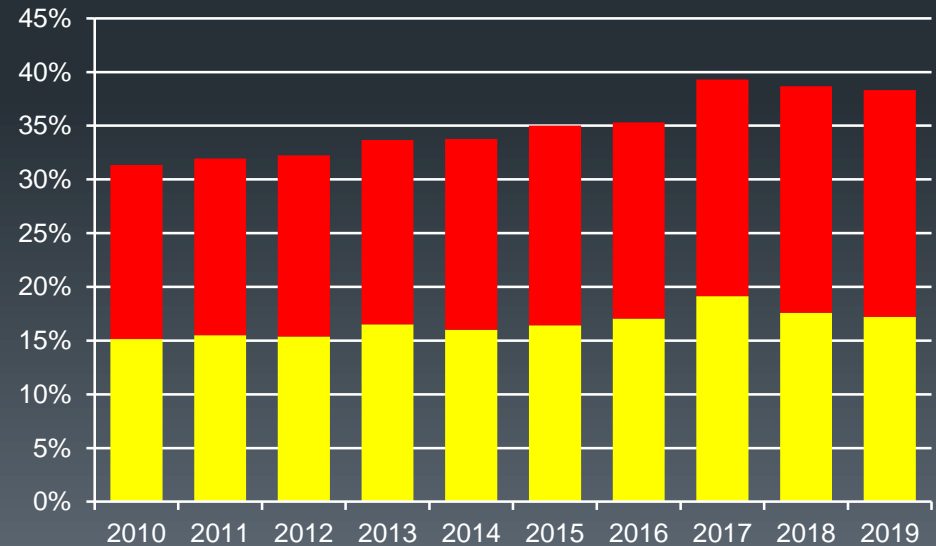
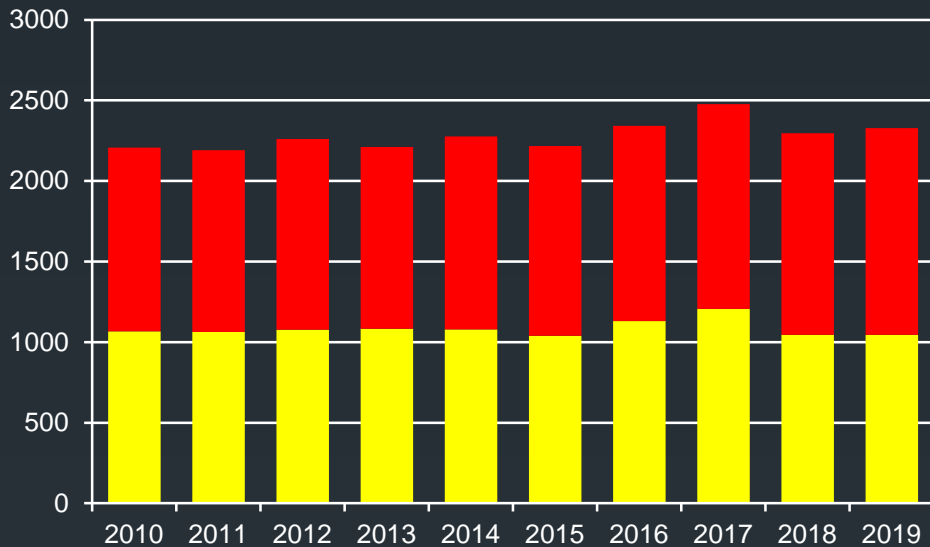
### 37 and 38 week babies



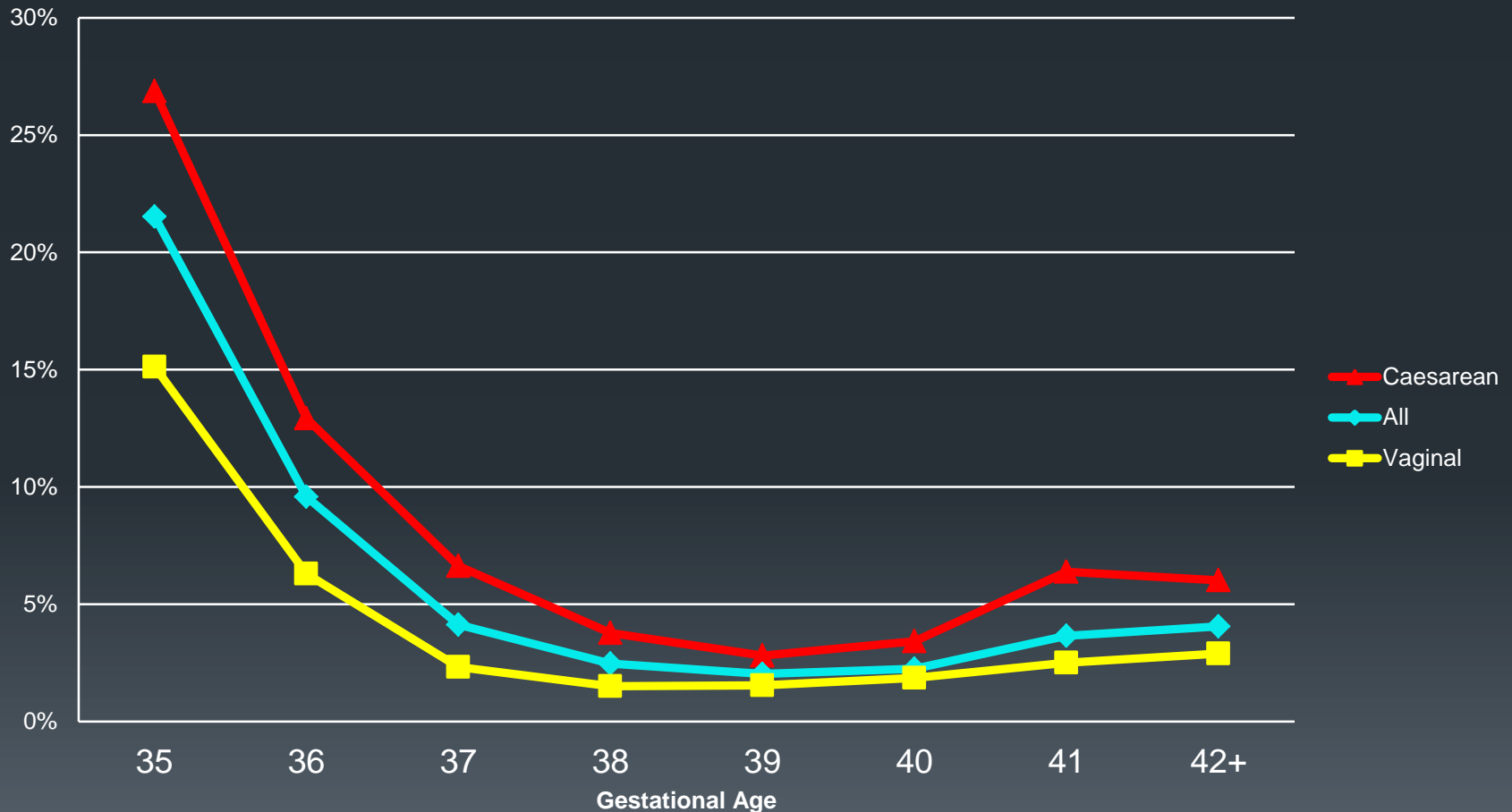
### >38 week babies



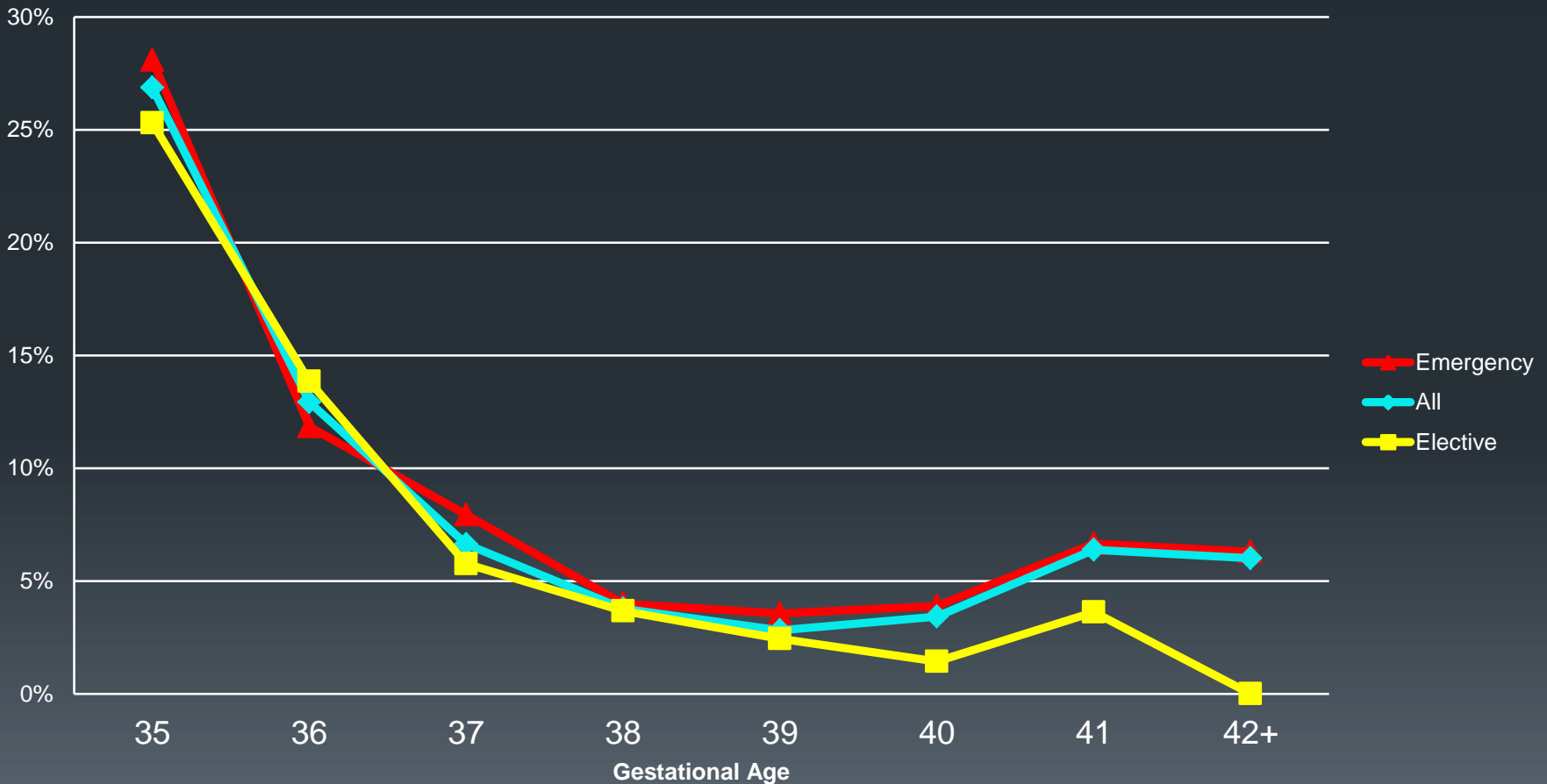
# Caesarean section rate in term babies born at NWH



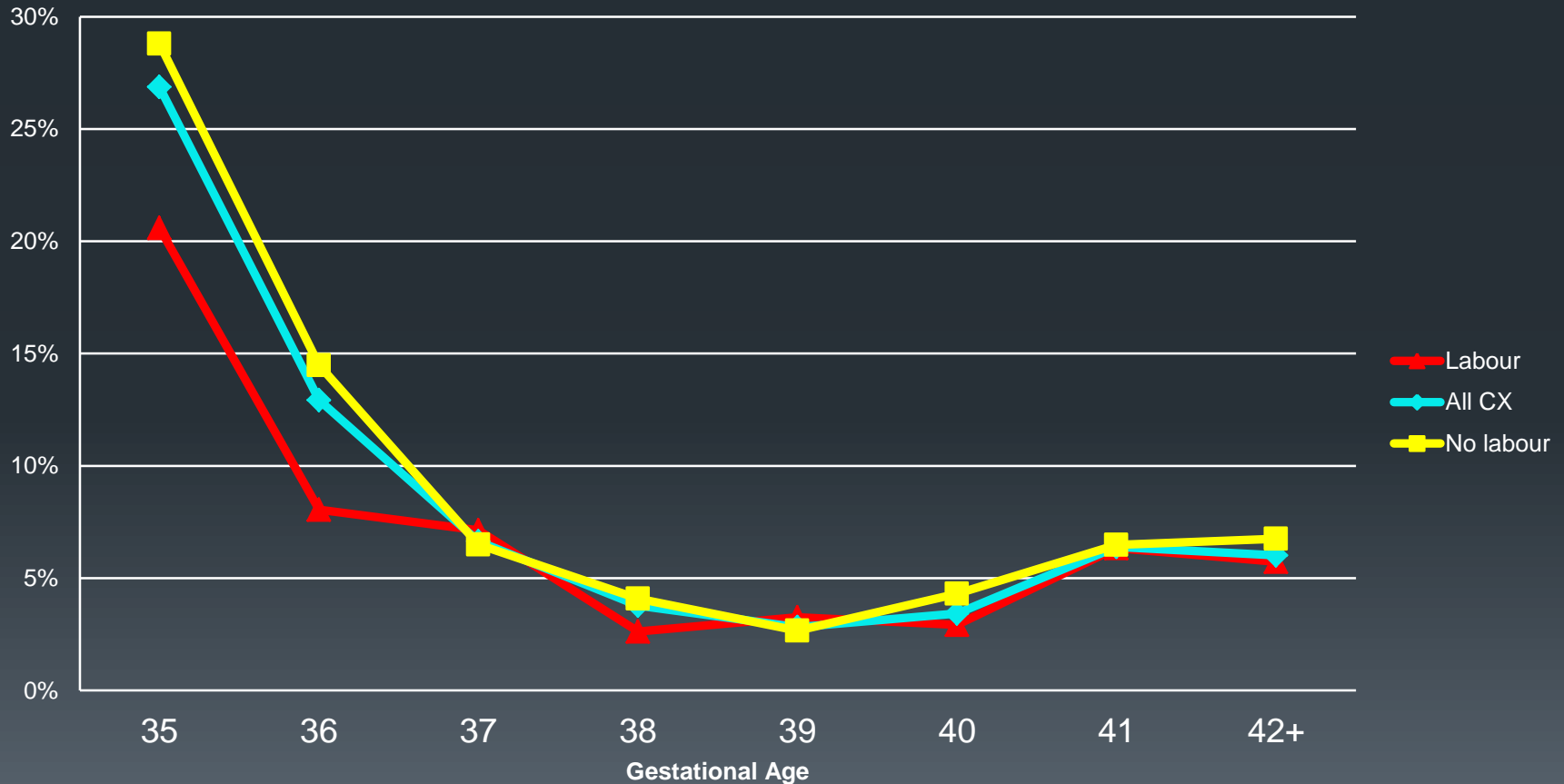
# Assisted Ventilation in Inborn Babies without Congenital Anomalies. 2010 - 2019



# Assisted Ventilation in Inborn Babies without Congenital Anomalies born by Caesarean Section. 2010 - 2019



# Assisted Ventilation in Inborn Babies without Congenital Anomalies born by Caesarean Section following Labour or no Labour. 2010 - 2019



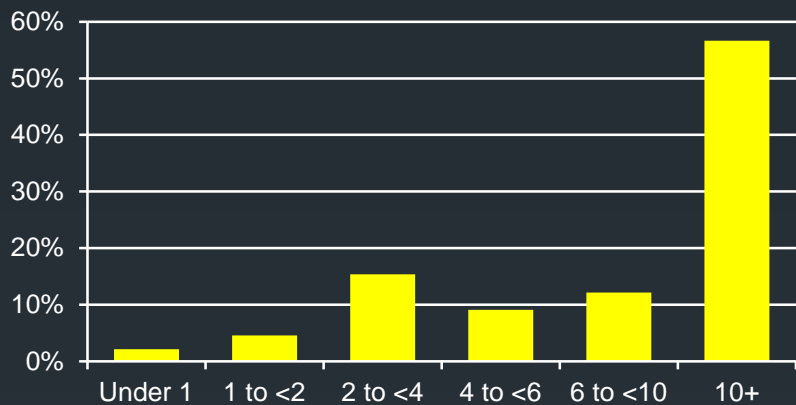
# Conclusion

- Births at NWH have decreased from 7700 to 6600 over 10 years
- Caesarean sections at term have increased from 31% to 38% over this time
- Admissions to NICU have not shown any consistent change over 10 years
- Admissions to NICU at 35 weeks are 50%,  
36 weeks are 24%  
37 weeks are 11.5%  
38+ weeks are 6%
- Number of babies treated with CPAP increased dramatically 2003-2010 and more slowly since then
- Babies born at 37-37 weeks by Caesarean have a higher chance of needing assisted ventilation, but not at 38+ weeks
- No difference in assisted ventilation between babies born by elective or emergency Caesarean
- Babies at 35 and 36 weeks gestation born by Caesarean in labour less likely to need assisted ventilation than those with no labour, but not at 37+ weeks gestation

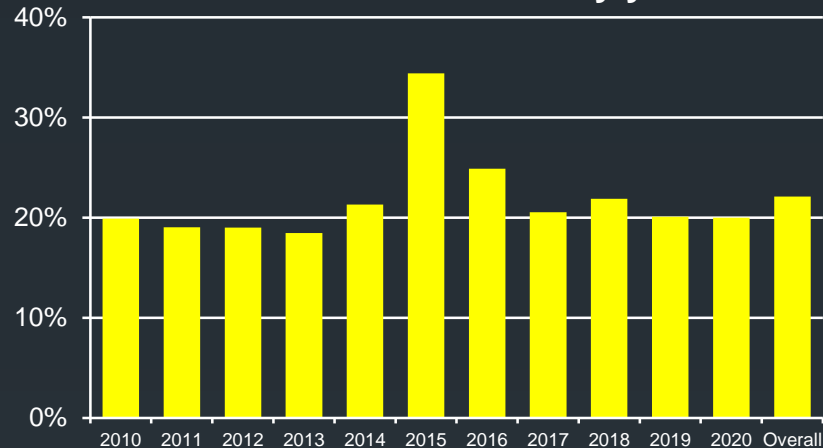


# Duration of Assisted Ventilation in Near-Term, Term and Post-Term Babies without Anomalies. 2010 - 2019

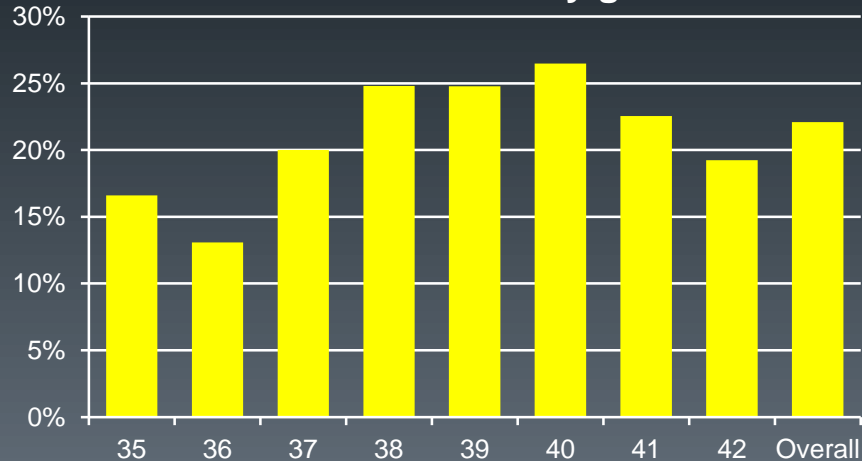
Duration of ventilation (hours)



Ventilation for <4 hours by year



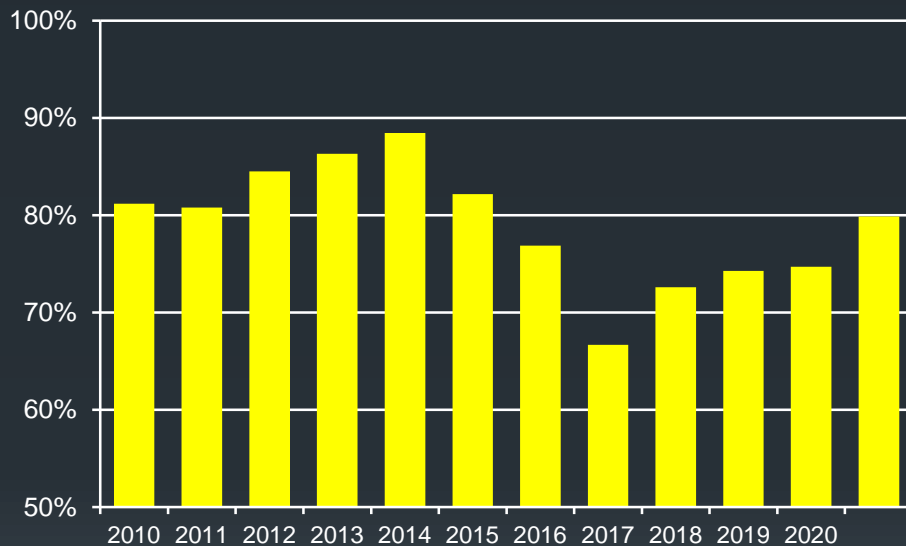
Ventilation for <4 hours by gestation



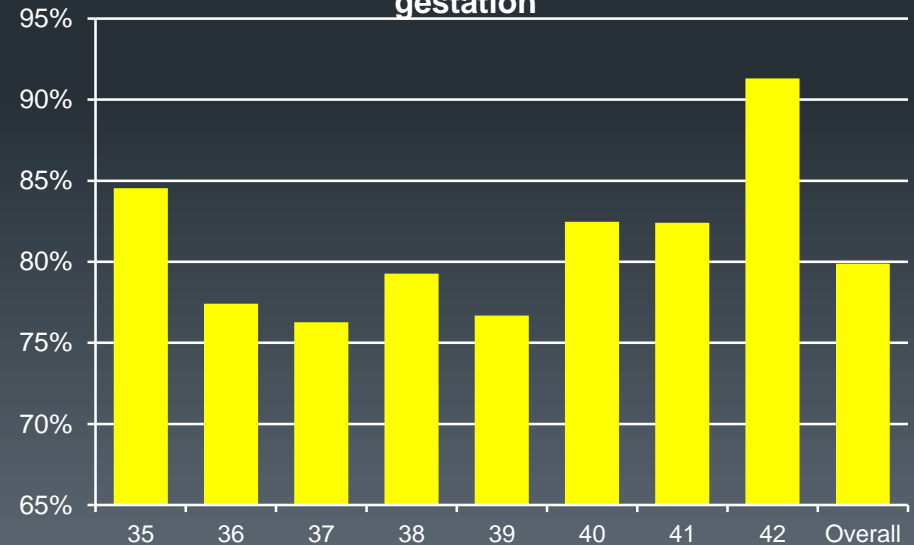


# Onset of Assisted Ventilation in Near-Term, Term and Post-Term Babies without Anomalies. 2010 - 2019

Onset of ventilation under 2 hours of age



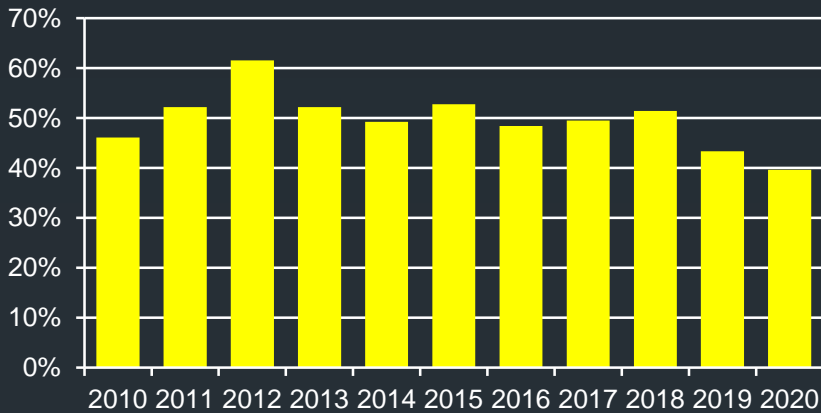
Onset of ventilation under 2 hours of age by gestation



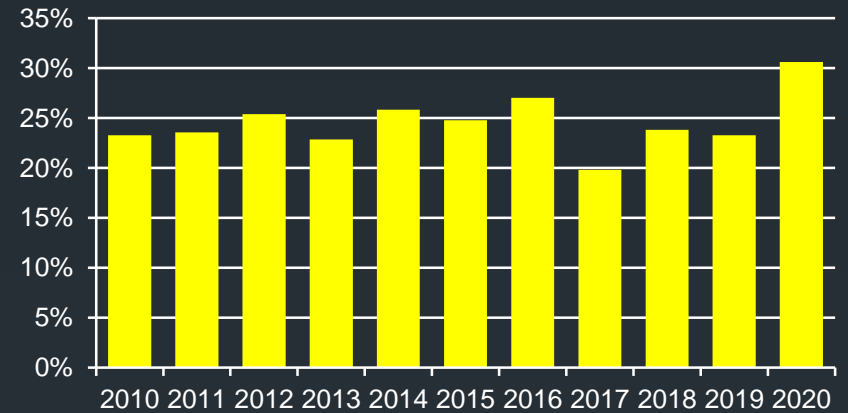
# Admissions of 35 – 38 week Inborn Babies



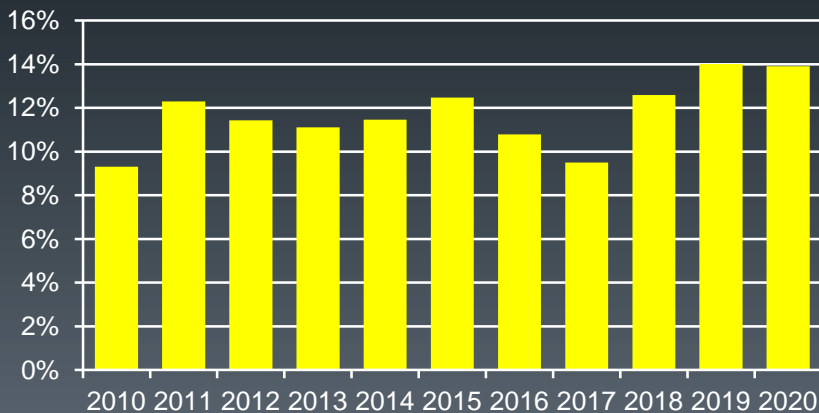
## 35 weeks admissions



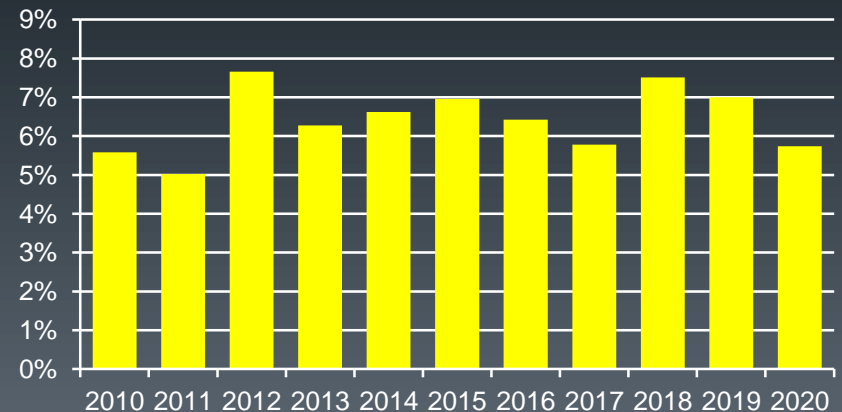
## 36 weeks admissions



## 37 weeks admissions



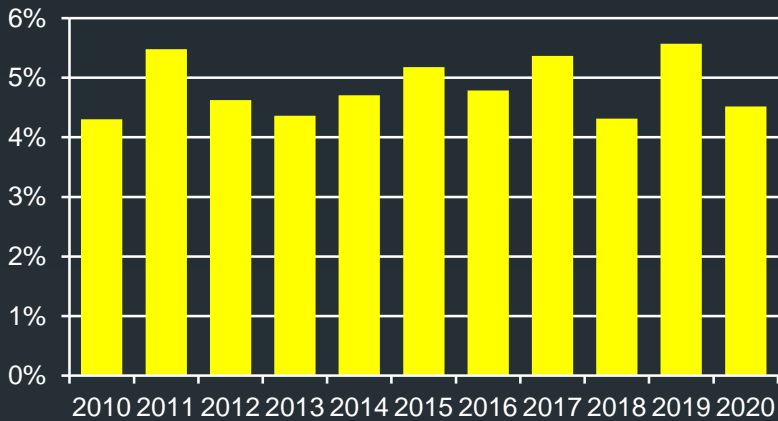
## 38 weeks admissions



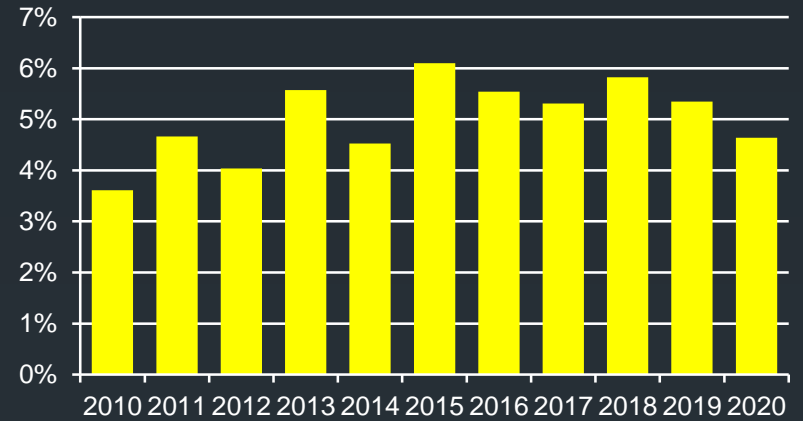
# Admissions of 39 – 42+ week Inborn Babies



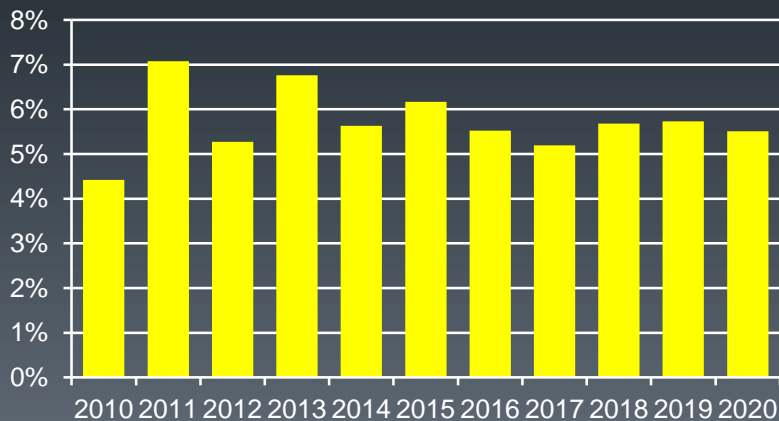
## 39 weeks admissions



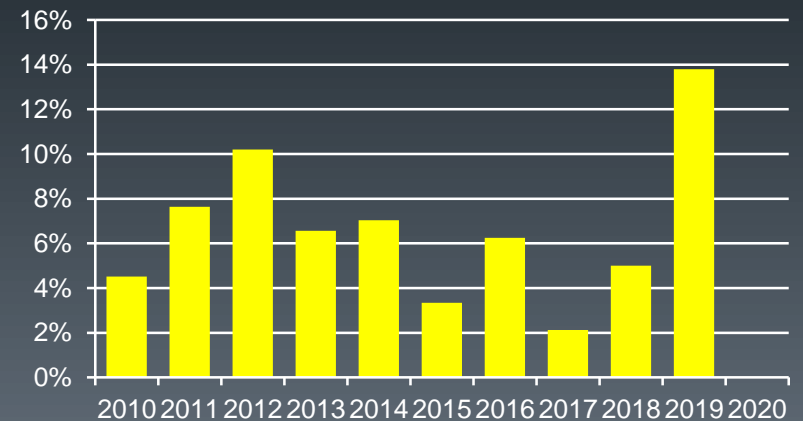
## 40 weeks admissions



## 41 weeks admissions



## 42+ weeks admissions



# Indications for Caesarean Section

- Fetal distress n = 3657
  - Includes Cord prolapse, Chorioamnionitis
- Fetal indication n = 2060
  - Includes LGA, Multiple, SGA
- Failure to progress n = 7764
  - Disproportion, Failed induction, Hyperstimulation, Obstructed
- Maternal medical n = 1472
  - Includes Diabetes, BP,
- Non-medical n = 9960
  - Includes Maternal age, Request, Repeat,
- Placenta Previa/APH n = 739
  - Includes low lying placenta, vasa previa
- Unknown n = 31