



“Doing the obs”

**An exploration of vital sign monitoring in
a large metropolitan teaching hospital**

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What does the literature say?

- Practice is based on tradition and ritualisation
- Arguably the core function of the nurse is to “observe” patients
- Frequency of observations guided by clinical judgement
- Nurses tend to underestimate the importance of vital sign monitoring
- Vital sign monitoring often regarded as workload intensive
- Seen as a low priority task
- Completeness of observation recording poor



Other trends

- Reliance on automated electronic equipment
- Ageing RN workforce
- Decreasing skill mix
- Higher acuity, decreased LOS, ageing population, increasing co-morbidities in hospitalised patients



The deteriorating patient

- Substantial evidence available on the antecedents to serious adverse events
- Key signs are derived from simple observations
- Respiratory Rate in particular is seen now as a sensitive and specific marker



About RPA

- 700 bed tertiary referral centre
- 54 ICU Beds
- Trauma centre
- Liver and renal transplantation
- Highly specialised
- 63000 ED presentations per annum
- Gradual implementation of a RRS (“CERS”) Sept 2008



Pre CERS

- Poorly designed general observation chart
 - ? Date of design - > 15yrs
- Vital signs plotted over two pages
- Respiratory rate charted at the bottom of the page
- Respiratory rate completion at 10%
 - O₂ Saturation completion at 98%
- Increasing SAC 1 incidents relating to the deteriorating patient (7 Jan – August 2008)
- Patient observation policy - “vital sign assessment daily”



Observed practice

- Senior staff report:
 - Over reliance on automated electronic equipment
 - Ad-hoc vital sign frequency patterns
 - Poor completion rates
 - Poor follow up following abnormal vital sign recording
 - “BP Unrecordable” commonly documented
 - Generally delegated to most junior members of staff



Hospital response

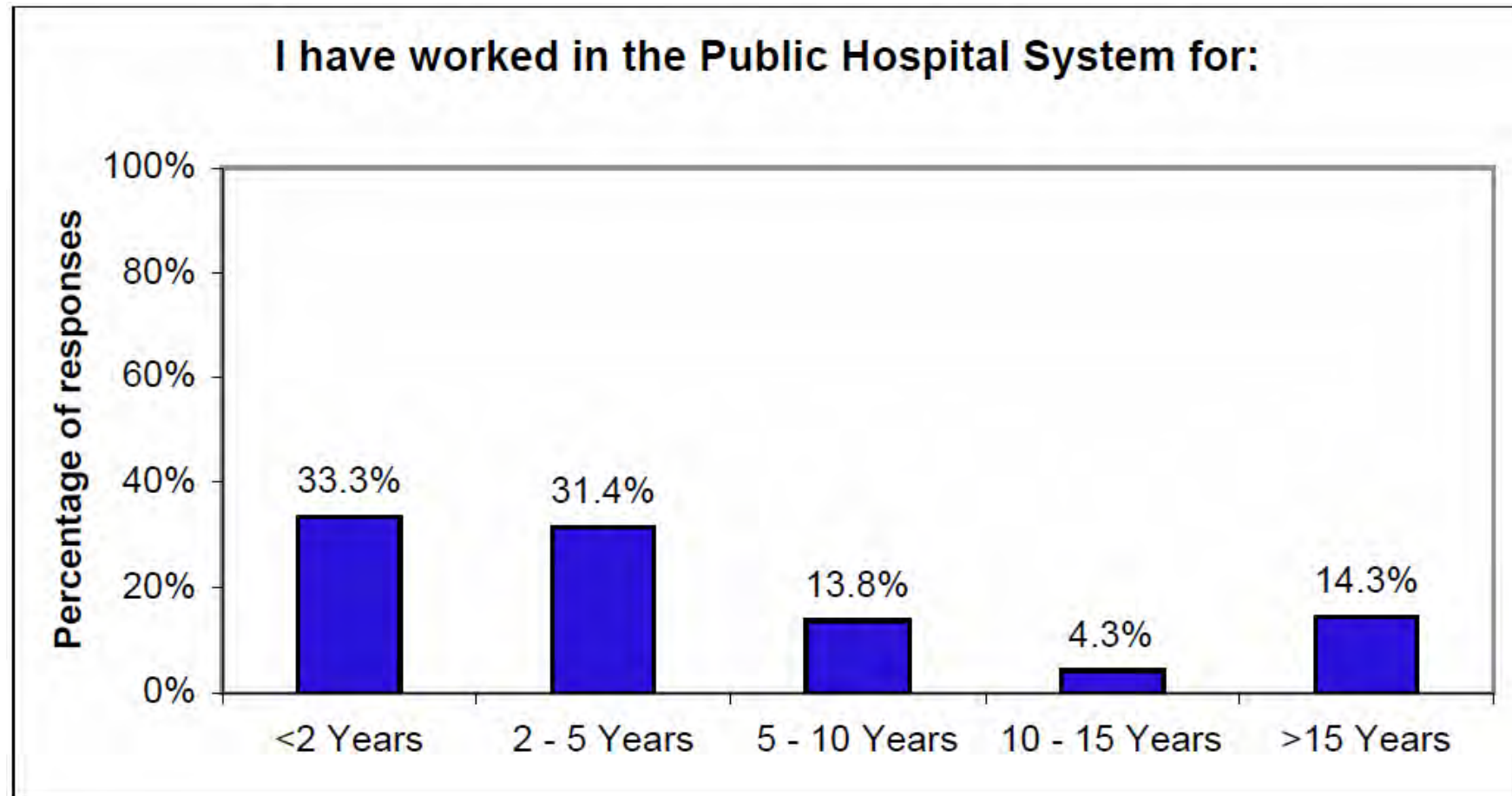
- RPA Nursing Advisory Council (NAC), Hospital Executive and CERS Steering Committee identified it as a high priority area
- General observation chart redesign
- Extensive education programs developed
- Clinical Skills working party convened:
 - Review existing policies
 - Hospital-wide vital sign survey
 - Organisational observation equipment stocktake



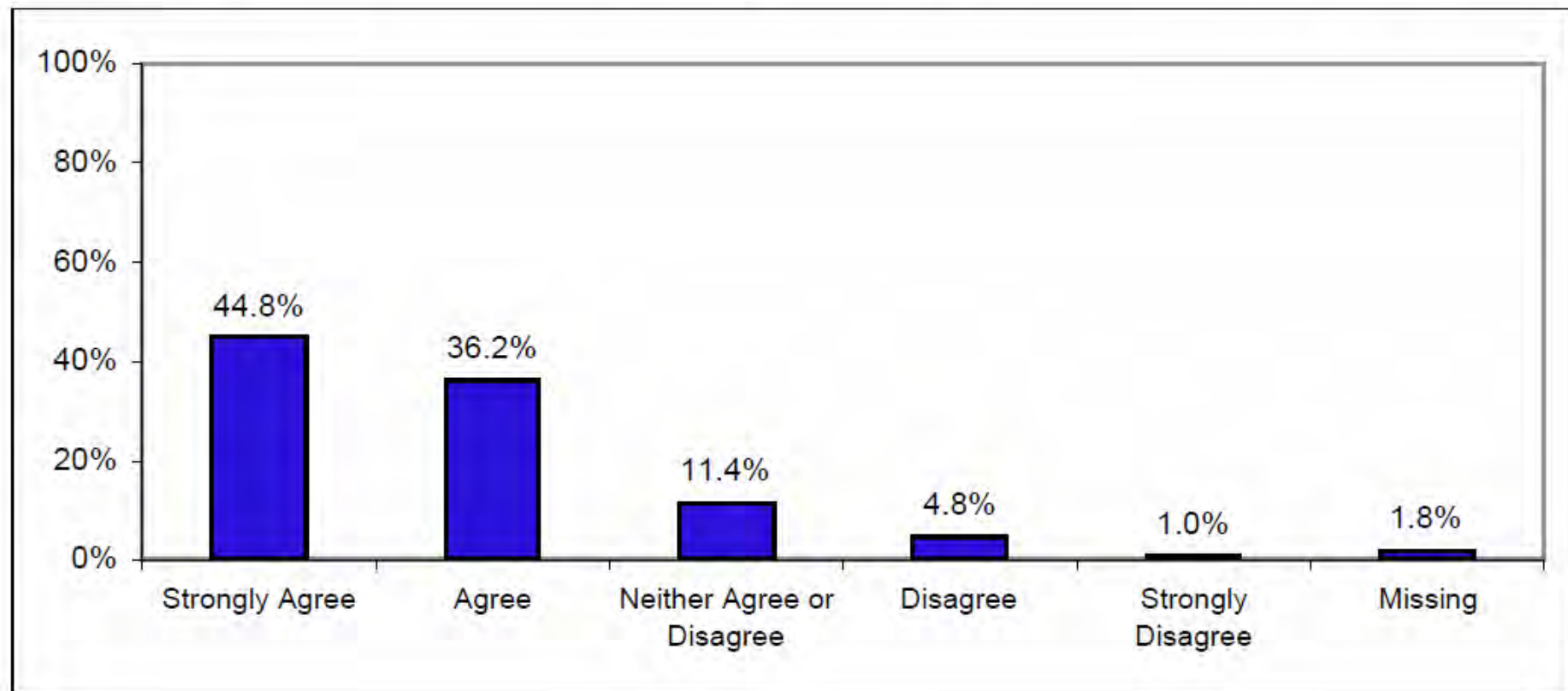
Vital sign survey

- Aim: To scope current vital sign practices used by nurses in the general ward setting
- Method: 13 question survey (likert scale and open ended)
- 400 surveys distributed
- 210 returned (52.5% response rate)

Survey Results

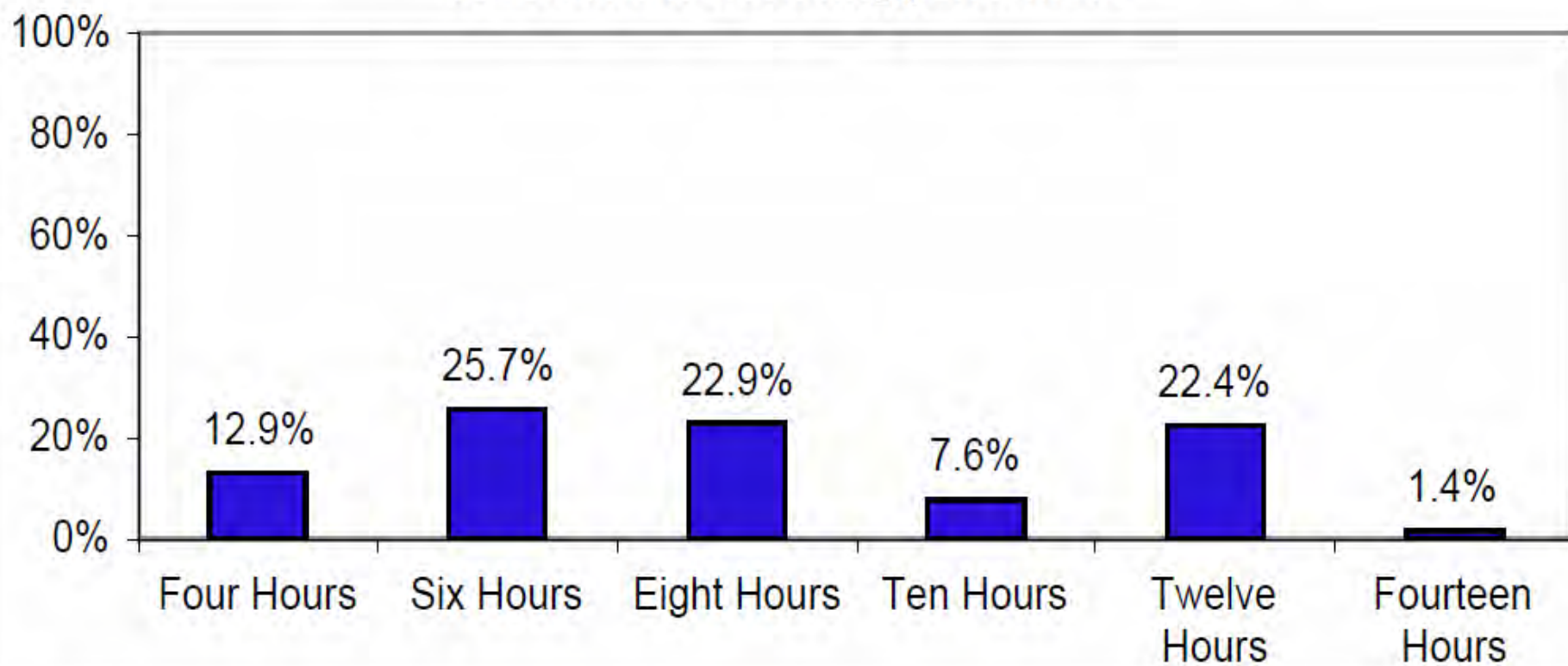


Doing patient observations (vital signs) is an important part of my job.



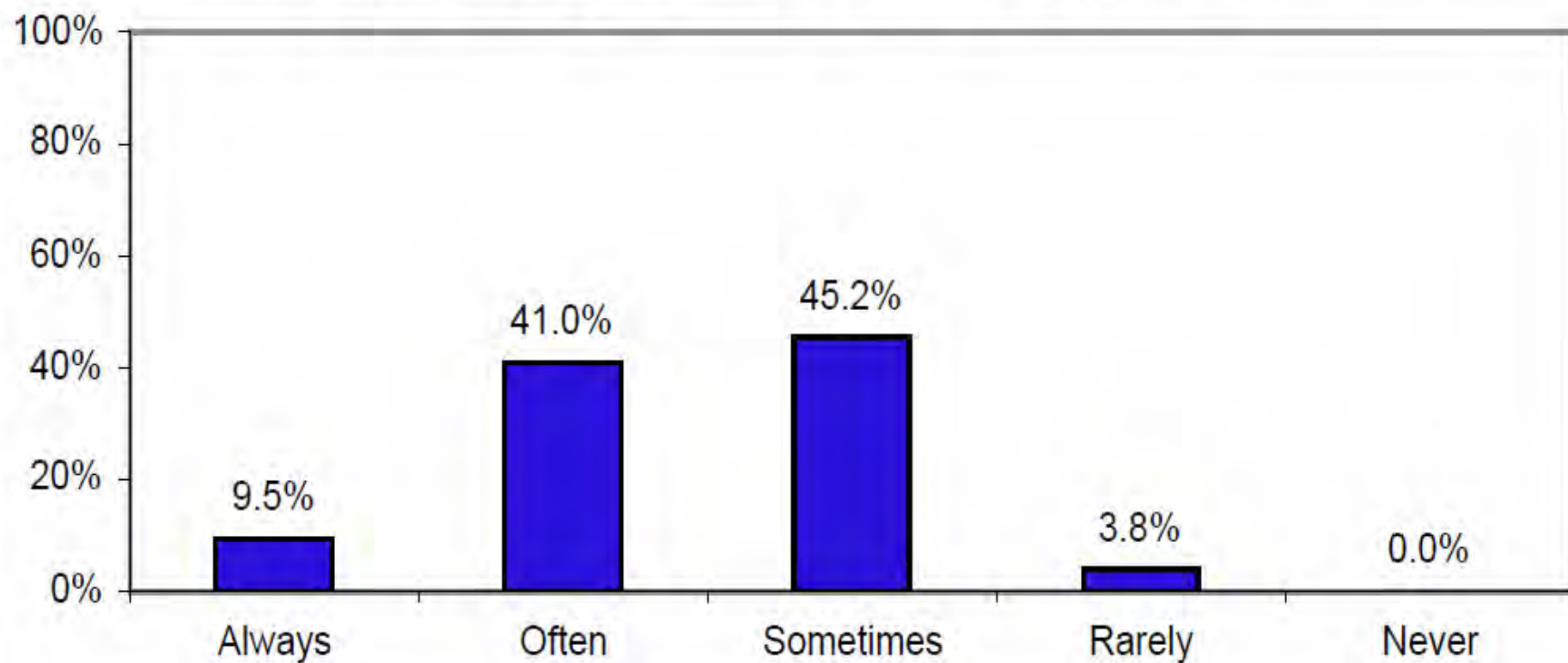


What should be the longest acceptable timeframe for observations not being performed?



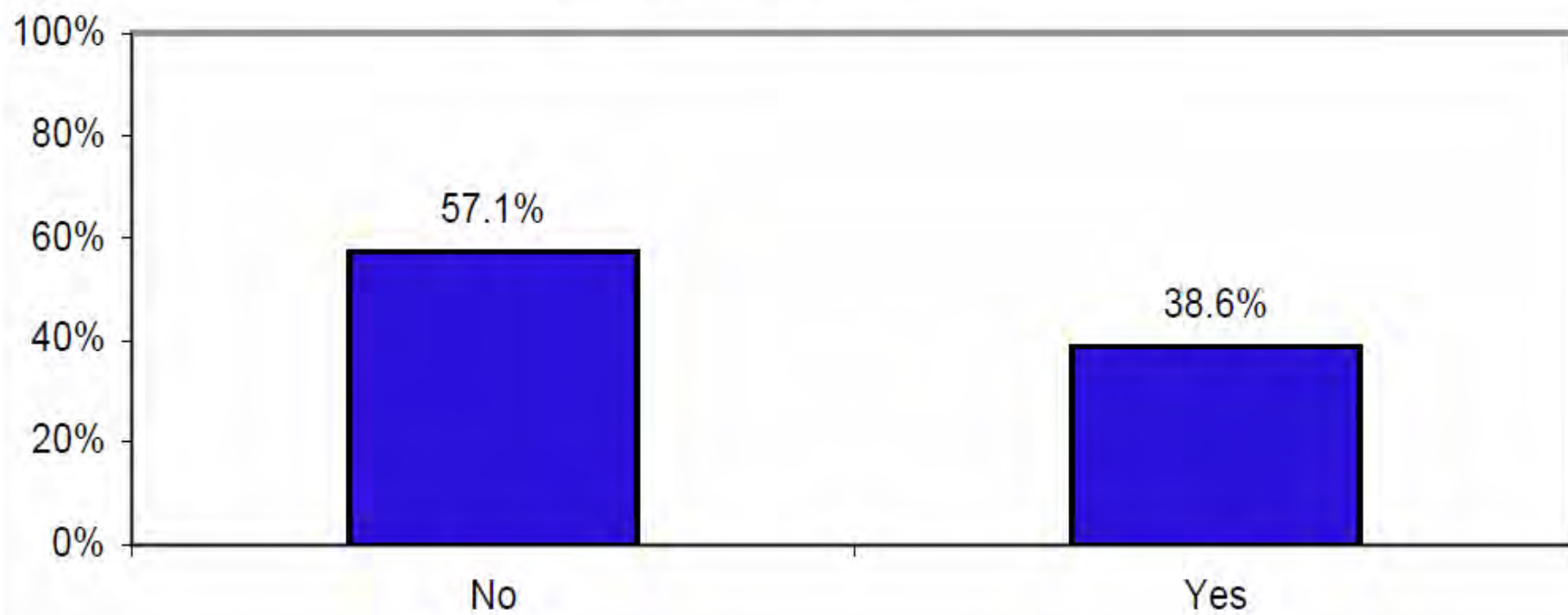


How often do you perform manual observations?



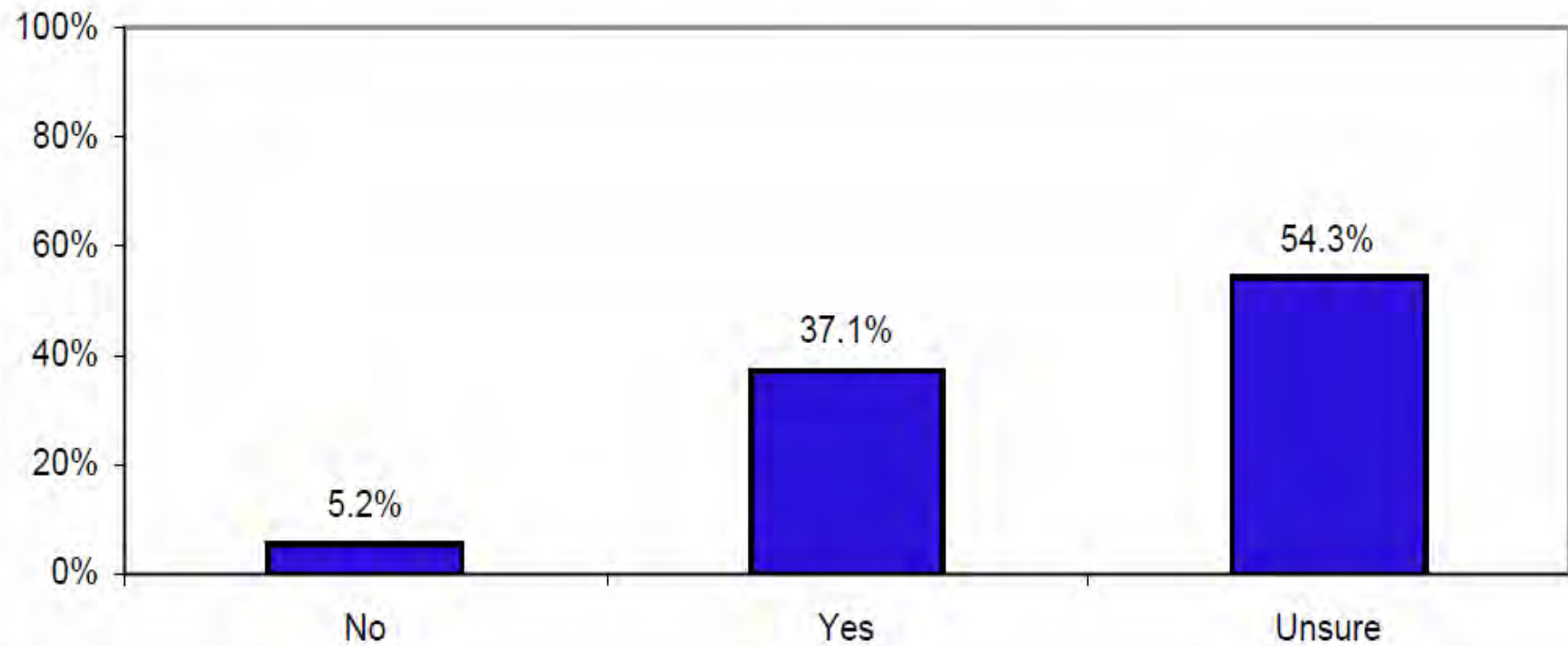


I would prefer to do manual observations rather than use electronic equipment?



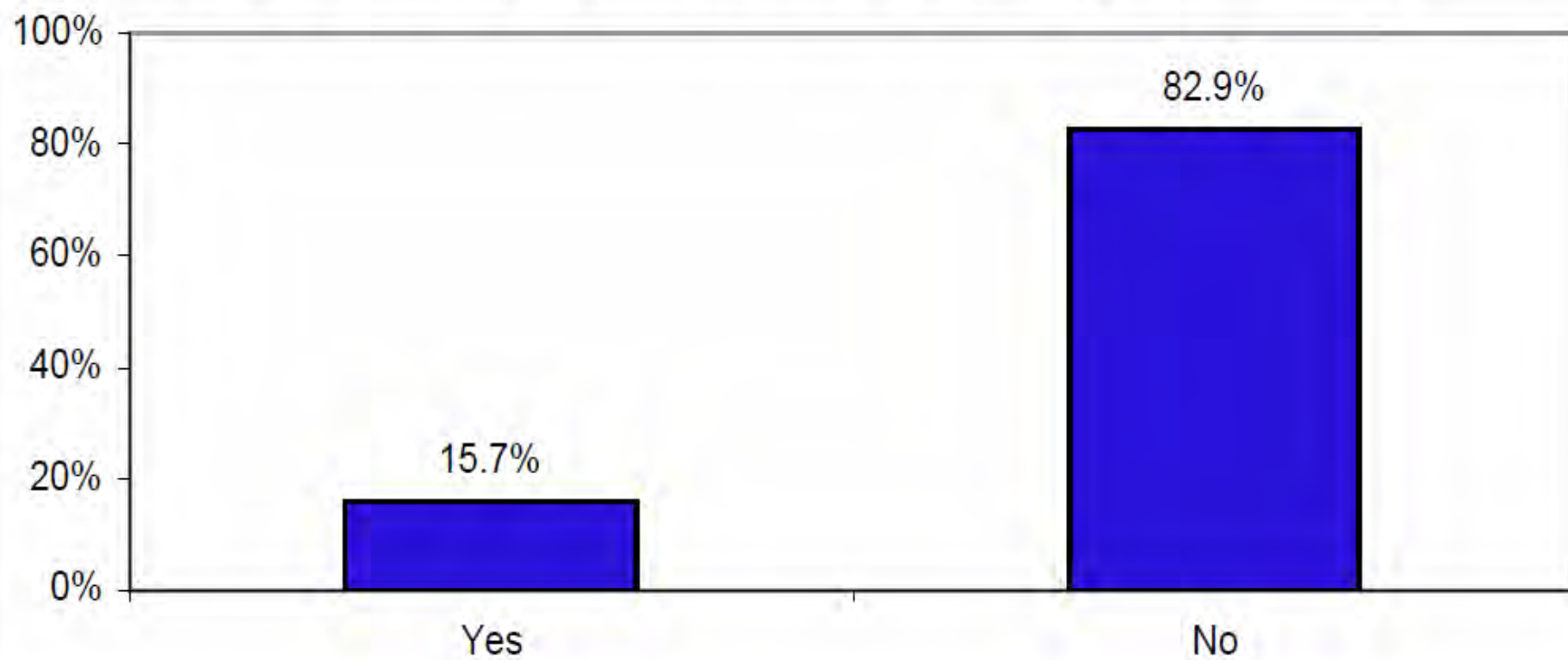


Does your ward have a policy on patient observations?





Do you feel that you need education on vital sign monitoring?





Delegation of tasks

- Most likely

1. ADL's
2. Vital signs
3. Patient admission

- Least likely

1. IV medications
2. Documentation
3. Oral medication



Routine observation times

- QID most common
- QID times varied from ward to ward and within each ward
- 22 QID time variations described
- Standard gap = 10hrs

QID variations

	1.	0600, 1000, 1600, 2000	
	2.	0600, 1100, 1600, 2100	
	3.	0600, 1100, 1600, 2200	
	4.	0600, 1200, 1800, 2200	
	5.	0600, 1000, 1600, 2200	
	6.	0800, 1200, 1600, 2000	
	7.	0800, 1200, 1800, 2000	
	8.	0600, 1000, 1400, 1800	
	9.	0200, 0900, 1600, 2000	
	10.	0900, 1400, 1600, 2000	
	11.	0600, 1000, 1600, 2100	
	12.	0600, 1400, 1800, 2000	
	13.	0600, 1200, 1800, 2400	
14 Hour Gap →	14.	1000, 1400, 1800, 2000	← 6 hourly
	15.	0600, 1000, 1400, 2000	
	16.	0600, 1100, 1600, 2000	
	17.	0600, 1000, 1500, 2000	
	18.	0600, 1000, 1500, 2100	
	19.	0600, 1100, 1600, 2200	
	20.	0600, 1130, 1600, 2100	
	21.	0600, 1000, 1600, 2400	
13 Hour Gap →	22.	1000, 1400, 1800, 2100	



General themes

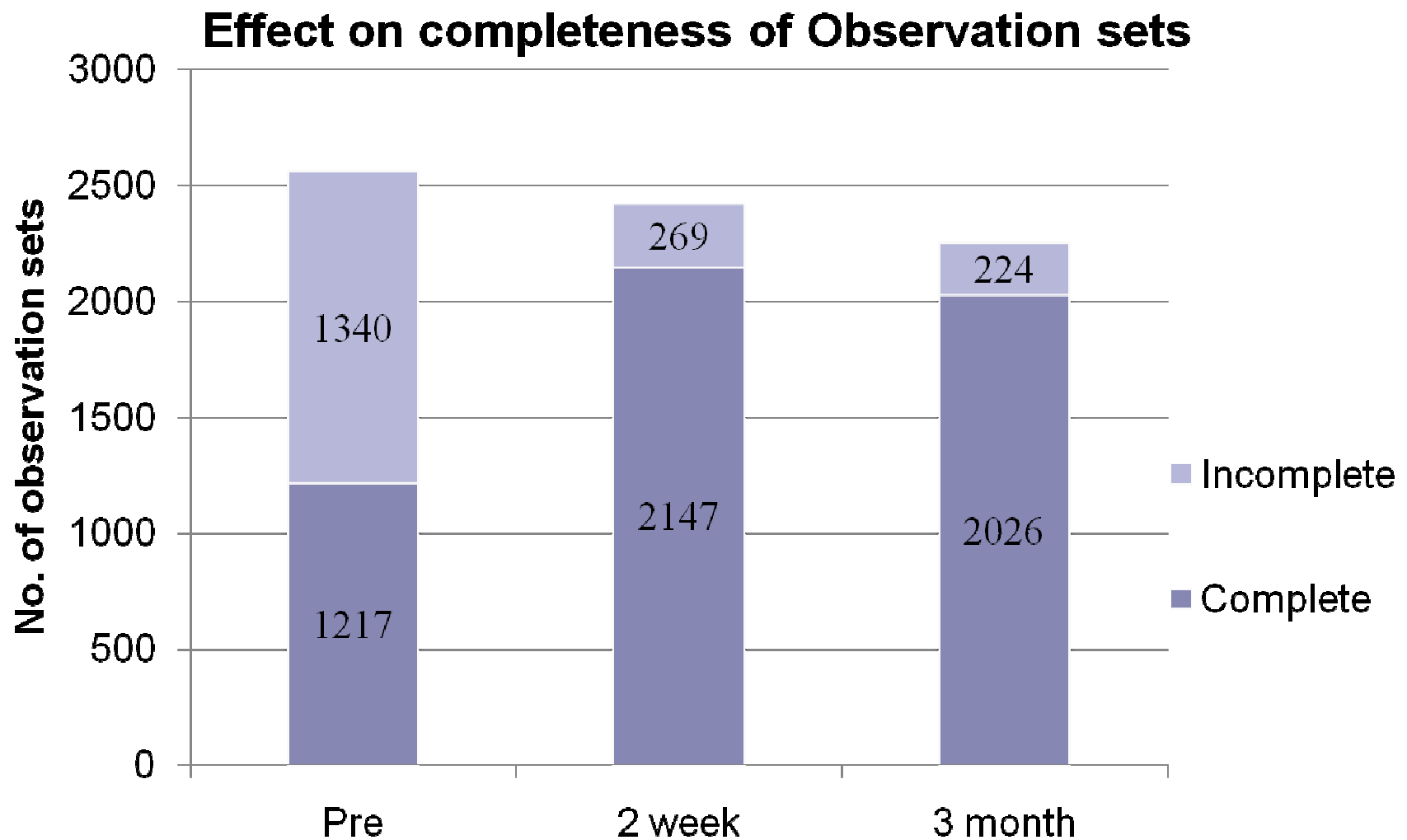
- Vital signs completed at the end of night shift
- 25% respondents do not count pulse or respiratory rate for the correct time
- 60% prefer electronic equipment
- 50% unaware of a hospital policy
- Unclear on what the acceptable timeframe should be for observations
- 15% report that they do not wear a watch



Where to now?

- Development of workshops aimed at:
 - Recognition of deteriorating patient
 - Systematic assessment (A-E)
 - Manual observations
- >300 nursing staff have completed workshops end 2009
- More workshops planned 2010
- Move away from automated equipment
 - 2 wards now use only manual equipment
- Vital sign equipment stocktake completed

Early results





In summary

- Vital sign monitoring practices have improved throughout the organisation
 - Move towards manual observations
 - Significant improvement in completeness of observation sets
- It should be a key focus for nursing
 - Pt observation is a core function of nurses
- More research needs to be done in this area
 - Frequency, Gaps, Skill mix