

# Opioid prescribing audits 2014

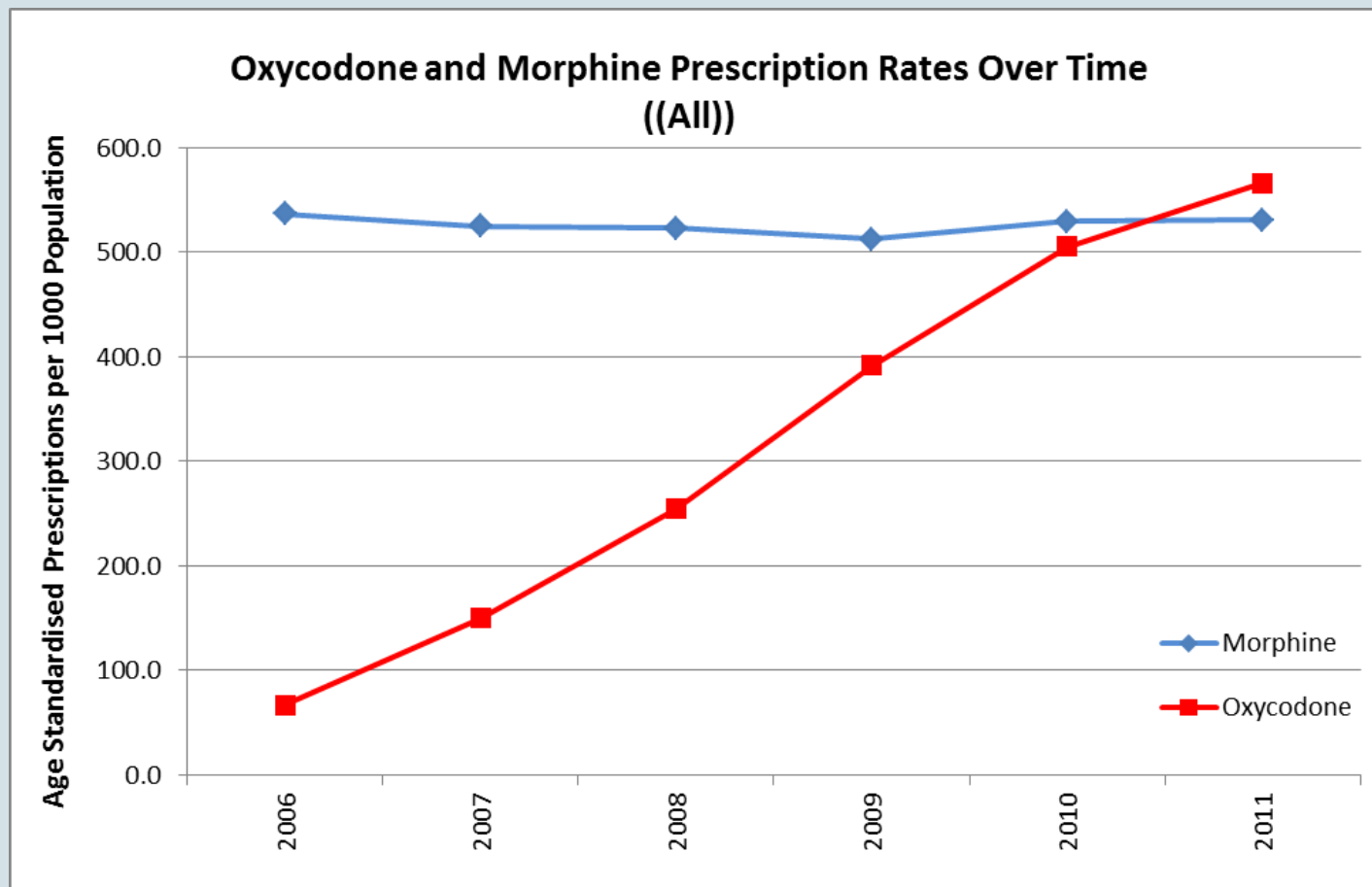
## Opioid collaborative Learning Session Zero

29 October 2014

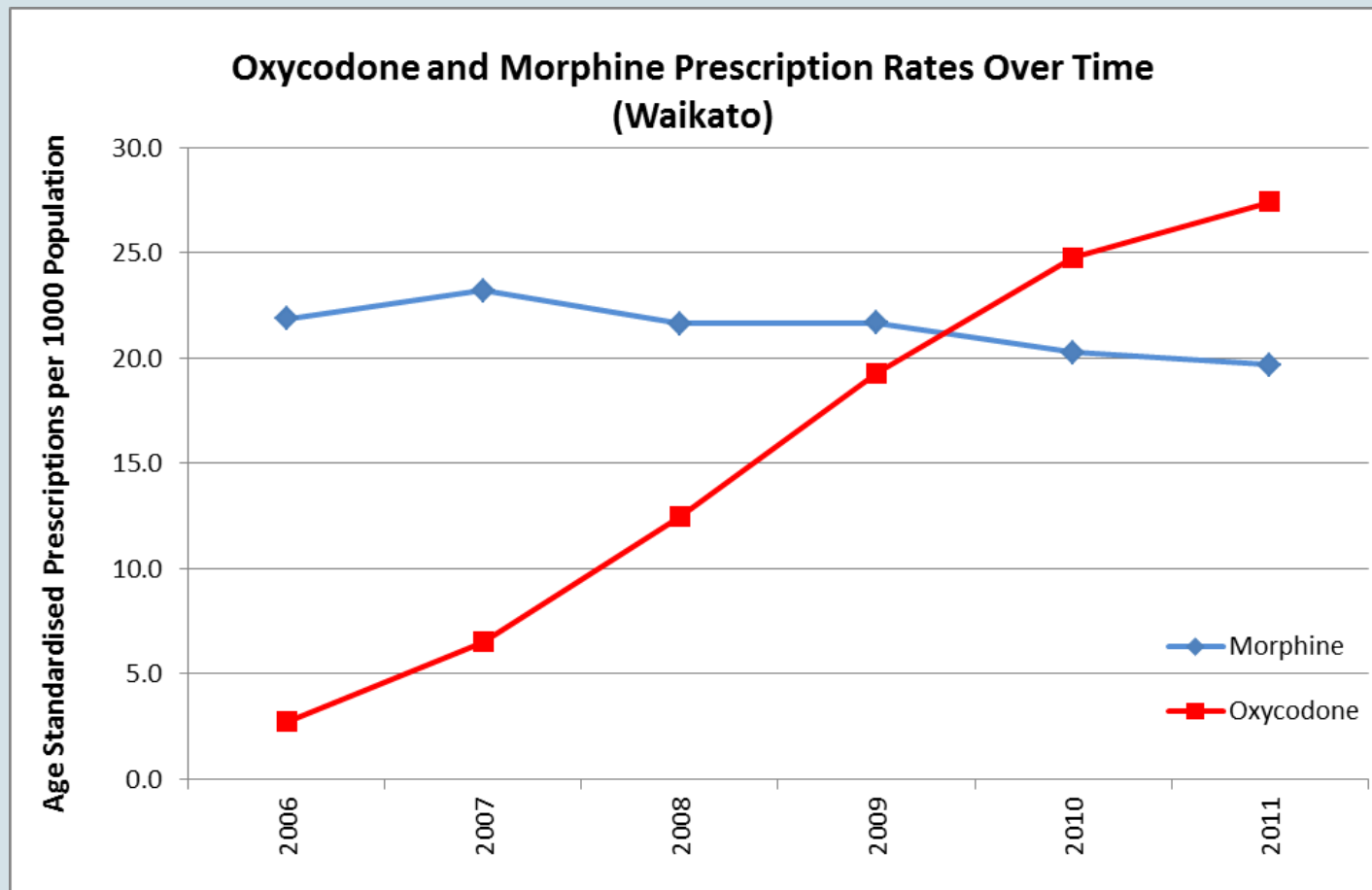


**Waikato** District Health Board

# Background



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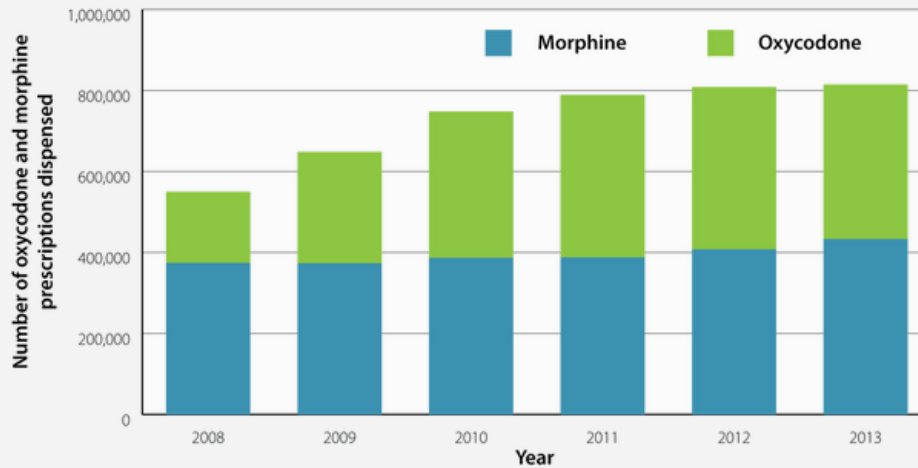


Figure 1: Number of oxycodone and morphine prescriptions dispensed (excluding injected preparations).<sup>5</sup>



Figure 2: Source of oxycodone prescriptions for patients initiated in 2013/14 (Apr 2013 – Mar 2014)

# Two audits

- First audit
  - Emily McCulloch
  - Focus on oxycodone
- Second audit
  - Kate Kilpatrick
  - Strong oral opioids
- Advice and support
  - Dr John Barnard, Jan Goddard, Sue King, Shelley Proctor, Rajan Ragupathy, Julie Vickers

# Oxycodone audit outline

- Baseline of oxycodone prescribing on two orthopaedic wards
- Audit tool developed and trialled prior to data collection
- Patients discharged over two week period
- Retrospective review of charts, notes and discharge summaries



# Oxycodone audit details

- Patient demographics
- Oxycodone prescribed
  - Dose
  - Dosage form
  - Frequency
  - Review date
- Opioid prescribed before/concurrent to oxycodone
- Admission medications present
- Discharge medications present

# Audit results

- 107 patients discharged; 85 met the criteria
- 47 patients were prescribed oxycodone
- 53 percent female, 47 percent male
- Ages ranged from 17 to 88 years; median 66 years
- eGFR ranged from  $>90\text{ml/min}/1.73\text{m}^2$  to  $33\text{mL/min}/1.73\text{m}^2$

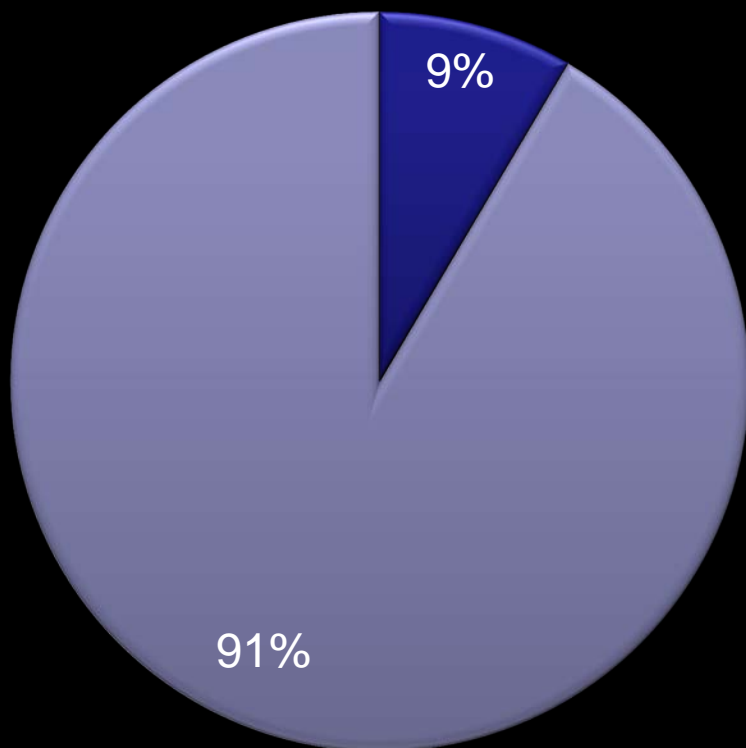


# Results

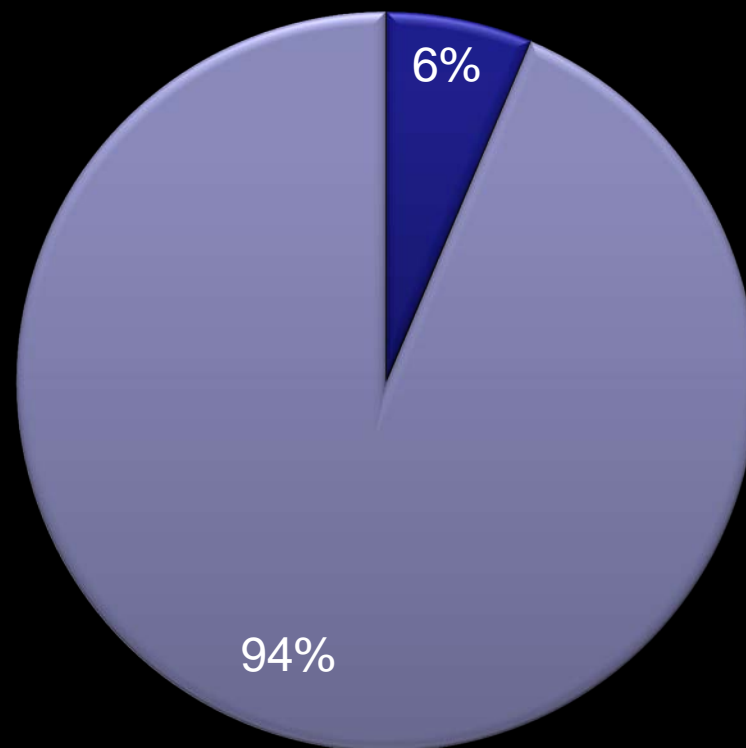
- 46 patients (98 percent) were prescribed immediate release oxycodone for PRN use
  - Potential doses ranged from 10mg to 240mg/24 hours
- 10 patients (21 percent) were also prescribed regular sustained release oxycodone
  - Daily doses ranged from 10mg to 40mg
- 16 patients (34 percent) were prescribed oxycodone first-line
- 32 patients (68 percent) were prescribed an opioid concurrent with oxycodone

# Results

- Review Date Present
- Review Date Absent



- Maximum Dose Charted
- Maximum Dose Not Charted



## Results – discharge

- 38 of the 47 patients (81 percent) had discharge medicines listed in the discharge summary
- Of the 38 patients, four (10.5 percent) were noted to be on oxycodone
- More may have been discharged on oxycodone?

# Strong oral opioids

- Conduct a baseline audit to assess prescribing of orally administered strong opioids
- Design and deliver an intervention to improve opioid prescribing
- Evaluate the effectiveness of the intervention at influencing prescribing change



# Audit details

- Data collected retrospectively from charts over 10 consecutive weekdays on orthopaedic wards
- Exclusion criteria: any patient discharged to other wards or other hospitals
- Strong oral opioids only: methadone, morphine, oxycodone
- Information collected: patient demographics, names of opioids used, doses, frequency and formulation. Review dates, max doses charted, admission and discharge opioids

# Intervention

- Feedback and education with nurses and doctors
  - Results of baseline audit
  - Place in therapy of strong oral opioids and use of IR formulations
  - Differences between oxycodone and morphine
  - For PRN opioids chart a maximum daily dose
  - Regular review and have a tapering plan
  - Opioids at discharge: communicate with GP and patient, choose an appropriate quantity, include plan and duration of treatment in discharge summary



<b>Allergies</b>	No <input type="checkbox"/>	<b>Adverse Reactions</b>	No <input type="checkbox"/>
Yes <input type="checkbox"/>	List medicine(s):	Yes <input type="checkbox"/>	List medicine(s):
Refer to front page for details		Initials	

Weight (kg) _____	Date _____	Weight (kg) _____	Date _____
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### As Required (PRN) Medicines

Date <i>11/6</i>	Medicine <i>ORAL MORPHINE (OXYNORM)</i>						
	Dose <i>5</i>	Units <i>mg</i>	Route <i>PO</i>	Frequency <i>4 hourly</i>	Dose calculation <small>(e.g. mg/kg per dose)</small>	Max dose/24hrs	
	Dose range if needed		Indication <i>pain</i>	Pharmacy & special instructions		Pharm	

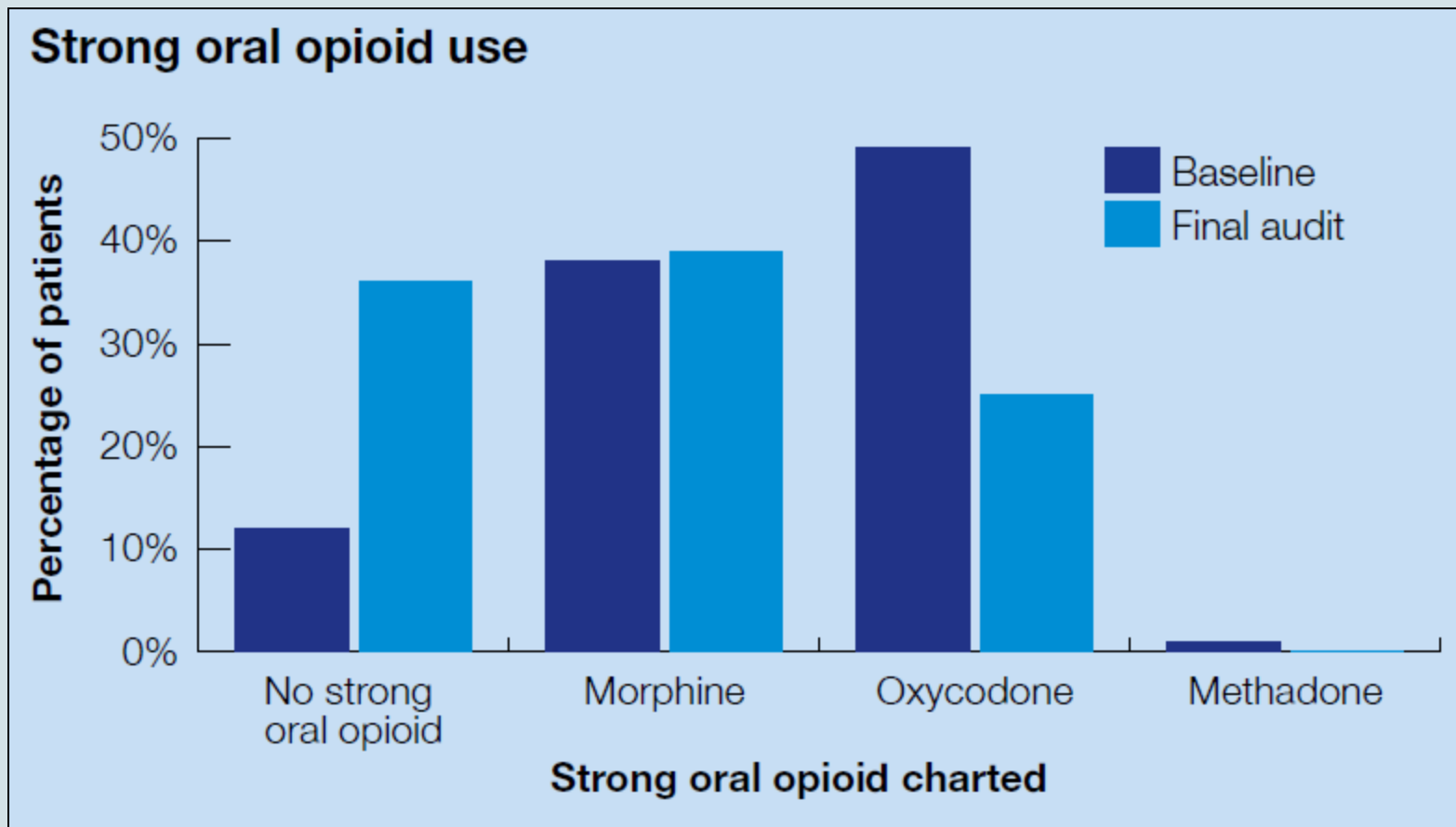


# Results

	<b>Baseline audit</b>	<b>Final audit</b>
Female (number of patients)	30	34
Male (number of patients)	37	45
Total (number of patients)	67	79
Age range; median (years)	15 to 97; 61	16 to 90; 58
eGFR range; median (ml/min/1.73m <sup>2</sup> )	15 to >90; 78	28 to >90; 76



# Results



# Results

	Baseline audit	Final audit
<b>Morphine</b>		
Percentage patients prescribed IR form	96	100
Percentage patients prescribed SR form	31	13
Potential maximum prn dose; median (mg)	20 - 480; 120	30 – 480; 120
Regular total daily dose; median (mg)	20 – 40; 20	20 – 40; 20
<b>Oxycodone</b>		
Percentage patients prescribed IR form	97	95
Percentage patients prescribed SR form	26	10
Potential maximum prn dose; median (mg)	20 – 240; 100	20 – 240; 60
Regular total daily dose; median (mg)	10 – 40; 20	10 – 40; 25

# Results

	<b>Baseline audit</b>	<b>Final audit</b>
Percentage of patients charted strong oral opioid with a maximum dose specified	14	16
Percentage of patients charted strong oral opioid with a review date present	8	6

# Results – opioids at discharge

	<b>Baseline audit</b>	<b>Final audit</b>
Tramadol	42%	30%
No oral opioid listed	30%	32%
Oxycodone or morphine	13%	9%
Codeine	7%	13%
Codeine and tramadol	4%	11%
Unknown	4%	5%



# Results – opioids at discharge

	<b>Baseline audit</b>	<b>Final audit</b>
Patients prescribed morphine at discharge as indicated by discharge summary	4 (6%)	4 (5%)
Patients prescribed oxycodone at discharge as indicated by discharge summary	5 (7%)	3 (4%)
Patients supplied a controlled drug prescription	10 (15%)	6 (8%)

# Limitations

- Small sample size and audit period
- Orthopaedic wards only
- Long term effect of intervention unknown
- Did not record opioids administered or assess pain management



# Where to from here?

- Further audits
  - Same wards
  - Other wards
- Education (in-patient and discharge)
  - Orientation
  - Rotations
- Opioid collaborative
  - Global trigger tools, measurement, patient engagement, education, prescriber responsibility.....

