



# Patient Satisfaction with their Pain Management: The Effect of Provision of Pain Management Advice

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# Background

- Pain is the most common presenting complaint in the ED
- Inadequate use of analgesics is widely recognized
- Initiatives:
  - staff training
  - time-to-analgesia KPIs
  - nurse-initiated analgesia
  - mandatory recording of triage pain scores
- Goal is a high level of patient satisfaction with pain management



# Background

- The provision of ‘pain advice’ is associated with high levels of patient satisfaction with their pain management<sup>1-3</sup>
- Definition: ‘The treatment of pain is very important and be sure to tell the staff when you have pain’
- ‘Pain advice’ as an intervention?
- Aim: To provide ‘pain advice’ as an intervention and evaluate its impact upon patient satisfaction

1. Jao K et al. *Emerg Med Australas* 2011;23:195-201
2. Shill J et al. *Acad Emerg Med* 2012;19:1212-1215
3. Taylor DMcD et al. *Emerg Med Australas* In press

# Methods

- Pilot, randomized, controlled, clinical intervention trial
- Austin Hospital ED, tertiary referral, 80,000 patients/year
- February-May, 2015
- Approved by the Austin Health HREC
- Registered Australian New Zealand Clinical Trials Registry

# Methods

## Inclusion criteria:

- age 18 years or more
- moderate-severe pain (pain score  $\geq 4$ , VNRS 0-10)

## Exclusion criteria:

- triage category 1
- suspected cardiac chest pain
- too ill to approach
- unable to communicate adequately
- no means for follow up (e.g. no telephone)
- declined participation in the follow up interview

# Methods

- Convenience sampling (08:00-18:00, weekdays)
- Consecutive patients meeting entrance criteria enrolled
- Computer generated randomization to:
  - Control arm: standard care
  - Intervention arm: standard care + ‘pain advice’ (from investigator)
- Blinding:
  - Patients and ED staff: undertaking of the study and patient enrolment
  - ED staff: ‘pain advice’ provision
  - Investigator collecting outcome measures at follow up

# Methods

- Control group patients were not approached
- Intervention patients given ‘pain advice’ *once* by an investigator
  - ‘The ED staff consider pain treatment is very important so be sure to tell the ED nurse when you have pain’
  - No other intervention
- Prospective data collection while the patient in the ED

# Methods

- Follow up data 48 hours post-discharge
- An investigator blinded to the patients' randomization status

“During your stay [in the ED], was it made clear to you that the staff consider treatment of pain very important and that you should be sure to tell them when you have pain?”

(yes, no)

“During your stay, how frequently were you asked to score your pain?”

(not at all, infrequently, frequently, very frequently)

“How satisfied or dissatisfied are you with the results of your pain treatment [in the ED], overall?”

(6 point ordinal scale: very dissatisfied-very satisfied)



# Methods

## Primary Outcome:

- level of patient satisfaction with their pain management  
(% proportion of patients who were ‘very satisfied’)

## Secondary Outcomes:

- % patients who reported having been given pain advice
- the perceived frequency of pain score measurement  
(actual frequency not known)

# Methods

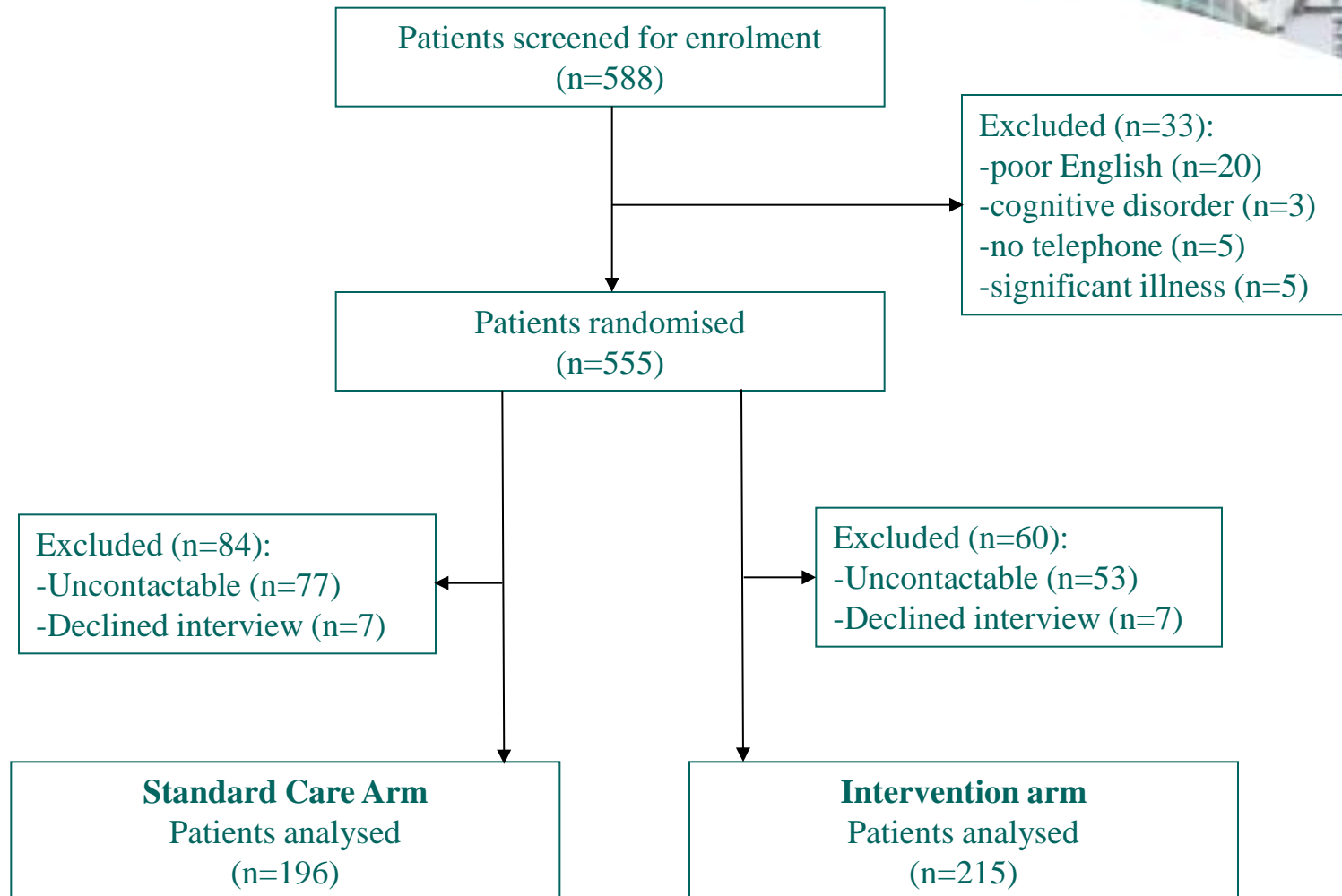
## Sample size:

- Recall having received 'pain advice'
  - control arm 80%
  - intervention arm 90%
- 400 patients, power 0.76 (2-sided, alpha 0.05)

## Analysis:

- Chi square test for comparison of proportions
- SPSS (Version 22.0, SPSS Inc., Chicago, Illinois, USA)

# Results



# Results

The baseline characteristics of the two study arms did not differ ( $p>0.05$ ):

- Age
- Gender
- Ethnicity
- Triage category
- Triage pain score
- Indication for analgesia
- Nurse-initiated analgesia administration
- Administered any analgesia
- Administered simple analgesia
- Administered oral opioid
- Administered parenteral opioid

# Results

variable	standard care arm	intervention arm	p
	n=196	n=215	
	n (%)	n (%)	
Pain advice received	152 (77.6)	191 (88.8)	<0.01
Very satisfied with pain management	87 (44.4)	109 (50.7)	0.20
Pain score frequency			
not at all	33 (16.8)	18 (8.4)	0.05
infrequently	68 (34.7)	86 (40.0)	
frequently	80 (40.8)	87 (40.5)	
very frequently	15 (7.7)	24 (11.2)	

# Results

Variables associated with patient satisfaction with pain management (patients in both arms pooled)

variable	not very satisfied n=215 n (%)	very satisfied n=196 n (%)	p
Pain advice received	164 (76.3)	179 (91.3)	<0.001
Pain score frequency			
not at all	37 (17.2)	14 (7.1)	<0.01
infrequently	85 (39.5)	69 (35.2)	
frequently	76 (35.3)	91 (46.4)	
very frequently	17 (7.9)	22 (11.2)	

# Conclusion

- An intervention to provide ‘pain advice’ results in a clinically significant increase in patient satisfaction
  - effect size will inform the design of a larger study
  - better effect if the ED staff provide ‘pain advice’?
- Significant positive association between the perceived frequency of pain score measurement and patient satisfaction
  - consider another RCT:

standard care

*versus*

standard care + regular pain scoring