REWS Remote Early Warning Score Improving Remote Patient Safety: Adding a REWS

Rod Omond
SRMP, Primary Health Care, TEHS
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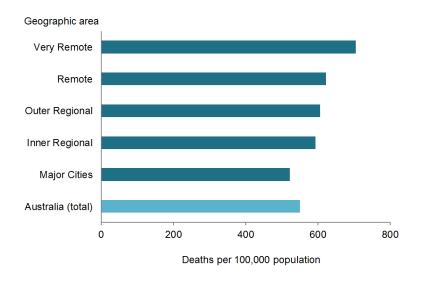
REWS Application

»ACUTELY ILL

» **NOT** PREVENTION or CHRONIC DISEASE



Remoteness equals Risk



Source: AIHW unpublished analysis of National Mortality Database (2015).



Structures Reducing Risk

On site clinician

- » Adequately qualified
- » Adequate training
- » Adequate experience PROBLEM: Staff turnover
- » Access to advice

On site facilities

- » Patient information
- » Maintenance of life
- » Diagnosis
- » Point of Care Testing (POCT) options

Decision Support/Evacuation Infrastructure



The Advice

When

» IT Decision Support Absent

How

- » Patient Record IT
- » Communication

Doctor on site

Duty RMP Telehealth



The Advice

WHEN = REWS



REWS

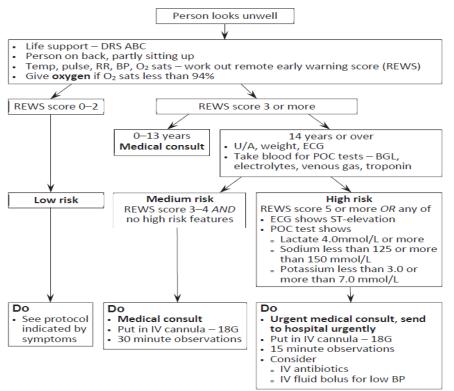
- »Into CARPA (standard care) 2017
- »Patient observations
- »Number or colour (traffic light)
- »Advice Action



Early recognition of sick or deteriorating patients

- If concerned a person is not improving or is deteriorating despite treatment —
- Calculate remote early warning score (REWS) using appropriate table
 - Adult Table 1.1 OR if woman more than 20 weeks pregnant Table 1.2
 - Child (by age) Tables 1.3 1.6 (p8)
- · Score each line individually, then add scores for REWS
- THEN follow Flowchart 1.1

Flowchart 1.1: Management based on risk level





REWS

ADULT

HR	≤ 40		41-50	51-100	101-110	111-130	≥ 131
Systolic BP	≤ 89	90-99		100-169	170-179	180-199	≥ 200
RR	≤ 8			9-20	21-30	31-35	≥36
SaO2% (RA)	≤ 84	85-89	90-92	≥ 93			
Temperature	≤ 34	34.1-35	35.1 - 36	36.1 - 37.9	38 - 38.5	38.6 – 39.5	≥ 39.5
Consciousness AVPU				Awake, Verbal	Verbal <10s awake		Pain Unresponsive
REWS score	3	2	1	0	1	2	3

<u>REWS score</u> = **R**emote **E**arly **W**arning **S**core – add all of the numbers from the bottom row



REWS

Number OR Traffic Light

Taught as COLOUR CODING
CARPA emphasises the NUMBER



REWS ACTIONS

YOU CAN DISCUSS ANY CASE WITH THE DUTY RMP (DOCTOR ON CALL), EVEN IF THE "COLOUR" DOES NOT REQUIRE DOCTOR CONSULT - IF YOU ARE WORRIED OR UNSURE, CHECK WITH A DOCTOR

ANY OBSERVATIONS IN A RED ZONE OF REWS 2.4:

NOTIFY THE DUTY RMP and DOCTOR IN CLINIC (if present) WITHIN 10 MINUTES

WHEN NOTIFYING STATE CASE IS "URGENT"

IF NO DOCTOR RESPONSE WITHIN 10 MIN RE-NOTIFY STATING "EMERGENCY!"

ANY OBSERVATIONS IN ORANGE ZONE: or REWS= 3

(OR - New or unexplained behavioural changes; Poor peripheral or sulation; Units output 43mi/kg/hr for 4 hours or NL units output for 12 hours)

MUST CONTACT A DOCTOR WITHIN 15 MINUTES
Duty RMP or ON SITE DOCTOR

MUST REPEAT OBSERVATIONS IN (MAXIMUM OF) 1 HR - if still in ORANGE, MUST contact Duty RMP

ANY OBSERVATIONS IN YELLOW ZONE:

May manage within CARP Aguidelines
Ensure underlying poin, anxiety, hypaxia, fever addressed

REPEAT OBSERVATIONS IN 1 HOUR - if still in yellow zone consult with Doctor



REWS TRIAL

Staff members trained

Pirlangimpi 3

Maningrida 12

Timber Creek 5 (plus 1 Bulla)



REWS TRIAL 2017

February

Training Session

Active Months

March

April

Survey One (mid March)

Survey Two (May)



27 surveys completed

9 clinicians completed both (18 responses)9 completed one



24 easy to use (also timely)

1 disagreed, 2 neutral



Consult a doctor:

12 responses - did make consult easier

10 - DID NOT

5 - neutral



Usage:

Survey 1: 100%

Survey 2: 47%



ATTITUDES

Patients "not needing" REWS

Clinician "too experienced" for REWS



NECTA

NORMAL ASSESSMENT (IT INTEGRATION)

EDUCATIONAL OBJECTIVES PURPOSE DRIVEN

CHAMPION IN CLINIC

TRAFFIC LIGHT METHODOLOGY

ATTITUDES ADDRESSED



REWS REVIEWS

RATE - MEASURE USAGE
REVIEW PATIENT OUTCOME CHANGES
REMODEL PROCESS



NECTA R

E

W

S

