Examining the power of Child-At-Risk electronic medical record (eMR) alerts to share interpersonal violence, abuse and neglect concerns:

Do child protection alerts help?

Key findings and future directions

ANROWS

AUSTRALIA'S NATIONAL RESEARCH ORGANISATION FOR WOMEN'S SAFETY
to Reduce Violence against Women & their Children

RESEARCH TO POLICY & PRACTICE
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ANROWS Research to policy and practice papers are concise papers that summarise key findings of research on violence against women and their children, including research produced under ANROWS's research program, and provide advice on the implications for policy and practice.

This is an edited summary of key findings from ANROWS research *Examining the power of Child-At-Risk electronic medical record (eMR) alerts to share interpersonal violence, abuse and neglect concerns: Do child protection alerts help?* Please consult the ANROWS website for more information on this project and the full project report: Flaherty, R., Meiksans, J., McDougall, S., Arney, F. (2018). *Examining the power of Child-At-Risk electronic medical record (eMR) alerts to share interpersonal violence, abuse and neglect concerns: Do child protection alerts help?* (Research report, 02/2018). Sydney, NSW: ANROWS.

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ANROWS research contributes to the six National Outcomes of the *National Plan to Reduce Violence against Women and their Children 2010-2022*. This research addresses National Plan Outcome 4 – Services meet the needs of women and their children experiencing violence.

Acknowledgement of lived experiences of violence
It is also important to acknowledge the lives and experiences of the women and children affected by domestic, family, sexual violence and neglect, who are represented in this report. It is important to recognise the individual stories of courage, hope and resilience that form the basis of ANROWS research.

Caution: Some people may find parts of this content confronting or distressing.
Recommended support services include: 1800 RESPECT – 1800 737 732, Lifeline – 13 11 14

Acknowledgement of Country
ANROWS acknowledges the traditional owners of the land across Australia on which we work and live. We pay our respects to Aboriginal and Torres Strait Islander elders past, present and future, and we value Aboriginal and Torres Strait Islander history, culture and knowledge.

Overview

Background

Health workers are often the "first responders" to victims/survivors of violence. Access to relevant information about a client's safety and wellbeing can enhance the quality and appropriateness of that response.

New South Wales Health requires a standardised alert or "file flagging" system to be in place in every Local Health District to flag at-risk children and pregnant women. However, Northern New South Wales Local Health District (NNSW LHD) is currently the only Local Health District in NSW with a comprehensive Child-At-Risk electronic Medical Record (eMR) alert system.

In 2015, the NNSW LHD developed a new system to identify and support at-risk children and pregnant women who present to health workers. An alert function was built into the health district's existing electronic medical record system. The alert function operates as an immediate notification of child safety and wellbeing concerns upon access of a patient's medical record by a health worker. The purpose of the alert is to encourage health workers to talk to the patient concerned, or in the case of children, to their family, about referrals to support services and to share information with other relevant agencies as appropriate. This would promote health worker responses that extend beyond simply reporting their concerns to the statutory child protection agency. The system is known as the Child-At-Risk electronic medical record (eMR) alert.

> "The purpose of the alert is to encourage health workers to talk to the patient... about referrals to support services and to share information with other relevant agencies as appropriate."

The Child-At-Risk alert is applied to the patient's eMR when a health worker reports concerns to the NSW Health Child Wellbeing Unit or the NSW Child Protection Helpline. The alert is active for 12 months and is formally reviewed at 12 monthly intervals by the NNSW LHD Child Protection Service. Health worker guidance on using the alert system is provided during child protection training (available monthly, with staff required to attend once) and via the NNSW LHD Child Protection User Guide. New health workers need to complete the training as soon as possible after commencement in their patient-facing role.

Project aim and definition

The aim of this research was to assess the impact of the Child-At-Risk eMR alert system on health worker responses to victims of interpersonal violence, abuse and neglect within the NNSW LHD. This included understanding:

- how staff responded to seeing Child-At-Risk alerts on a client's eMR;
- the practices that were carried out in response; and
- the perceived outcomes for clients.

The definition of interpersonal violence, abuse and neglect in this study was limited to the circumstances that place a child or young person at risk of significant harm according to s.23 of the *NSW Children and Young Persons (Care and Protection) Act 1998* or when the child was the subject of a prenatal report under s.25 of the Act.

Method

A one-off web-based survey was conducted between November 2017 and January 2018 to examine the views of health workers across the NNSW LHD. The survey included demographic items, fixed response options and open-ended items examining eMR alert knowledge, response practices and further training and support needs. Qualitative data was collected through free-text space for further comment in response to items. Two groups of participants were included in the study. Group 1 included health workers in the NNSW LHD who had applied a Child-At-Risk alert to a client's eMR (n = 101). Group 2 included health workers who had not applied an alert, but had recently provided healthcare to a client who already had an alert on their eMR (n = 79). The survey had a total completion rate of 74 percent across both groups. Descriptive statistics were used to examine the composition of the participant sample, identify the proportion of participant responses to survey questions, and to make comparisons across the two groups. Open-ended responses to survey questions were grouped within major themes and counted.

The study also approached health departments in other Australian states and territories to identify where similar systems were operating and their corresponding features. All seven health departments outside of NSW responded.

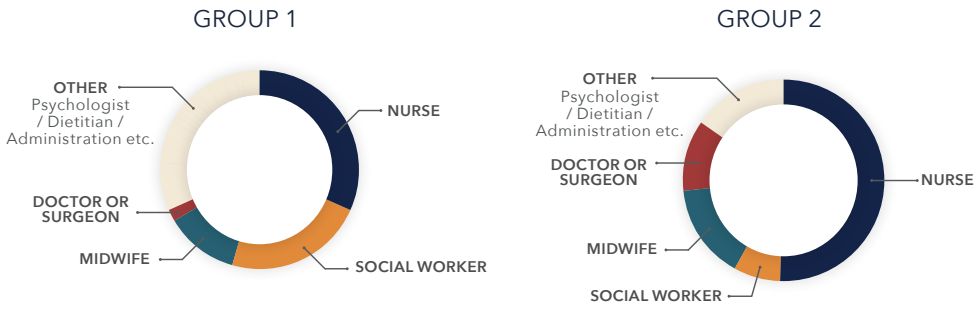
Key findings

Demographics of respondents

Group 1 (those who had applied an alert) was mostly comprised of child and family, community health and mental health workers. Group 2 (those who had responded to an alert) were mainly based in emergency departments, maternity units and paediatrics. This demonstrates that the system was being accessed across different healthcare settings, from community health to acute care services.

The majority of Group 1 were nurses (31.7%) and social workers (22.8%), whereas Group 2 were predominately nurses (50.6%) and midwives (15.2%). Only two percent of participants in Group 1 (compared to 11.4% in Group 2) identified themselves as doctors, which was significantly less than expected.

PARTICIPANT'S MAIN WORK

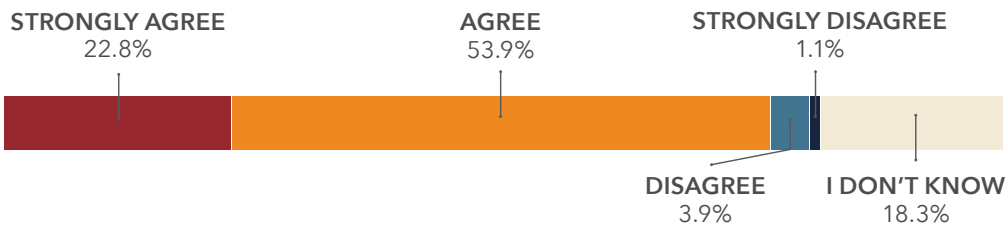


Understanding and opinions

Around three-quarters (76.7%) of participants across both groups agreed (53.9%) or strongly agreed (22.8%) that the eMR alert system assisted in improving health worker responses to at-risk clients, demonstrating a high level of agreement.

The survey showed the alert assisted in improving health worker responses.

THE eMR ALERT SYSTEM IMPROVES HEALTH WORKER RESPONSES TO AT-RISK-CLIENTS : ALL



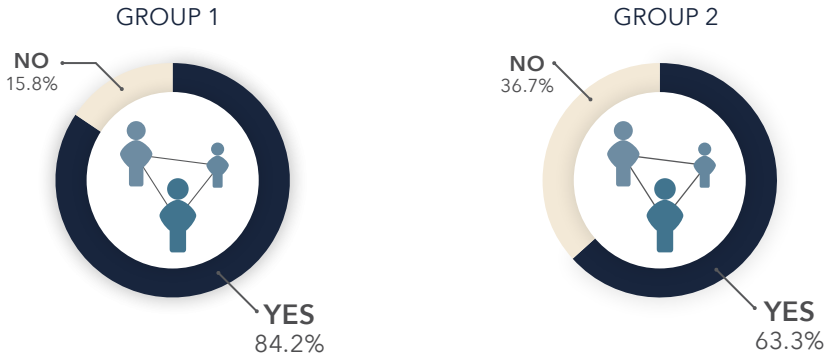
The majority of Group 1 indicated that they had either a good (47.5%) or somewhat good (44.6%) understanding of the alert system. About two-thirds of participants in Group 2 also reported having a good (13.9%) or somewhat good (51.9%) understanding. In addition, a larger proportion of Group 2 reported having a limited understanding (34.2%) compared to Group 1 (7.9%). This suggests that those who had used the alert system (applied an alert to a client eMR) had a greater understanding of it.

Half of the participants across both groups agreed that the alert allowed clinicians to immediately see the child protection status of a child or pregnant woman. However, while over one-third (37.6%) indicated they had received enough support to help them use the alert system, almost one third (30.9%) indicated that they had not. One third of the sample found the system easy to use, compared with 14.0 percent who found it hard to use.

Impact on practice

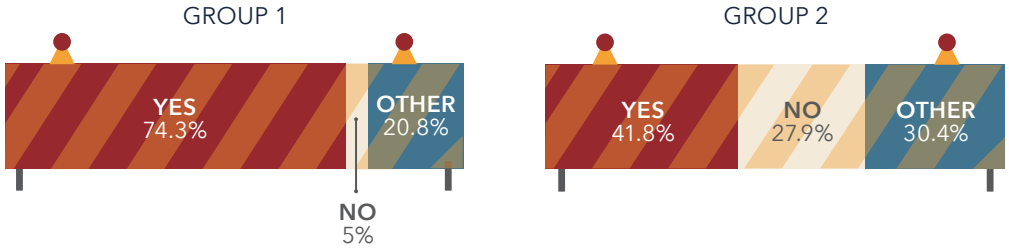
Around one-third of participants across both groups (36.7%) reported that the presence of the alert changed their approach to the assessment of a patient. The vast majority of respondents in Group 1 reported that when they saw an alert on the eMR of a client, they actively assessed whether referrals to additional services were necessary (92.1%) and shared information with other prescribed bodies (84.2%). Around three-quarters of Group 1 (74.3%) also reported that they tried to resolve any barriers to client attendance at appointments. For Group 2, 81.0 percent advised that when they saw an alert they assessed whether to make referrals but only 63.3 percent shared information about clients and 41.8 percent followed up missed appointments. This highlights that more training and support for health workers who are seeing the alert is needed.

SHARED INFORMATION WITH OTHER PRESCRIBED BODIES



Workers who had applied an alert actively assessed whether referrals were necessary, and shared information to other prescribed bodies after seeing an alert.

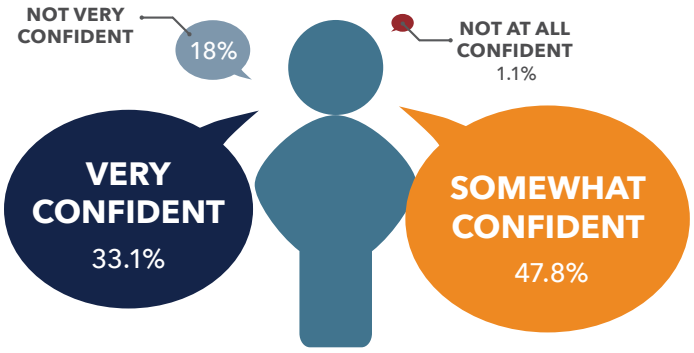
TRIED TO RESOLVE BARRIERS TO CLIENT ATTENDANCE AT APPOINTMENTS AS A RESULT OF SEEING ALERT



Confidence in client engagement

Across both groups, 33.1 percent of participants felt very confident and 47.8 percent were somewhat confident in discussing concerns about child wellbeing, child welfare or child maltreatment with clients. In addition, 36.5 percent of participants felt very confident and 43.8 percent felt somewhat confident in discussing relationship issues with clients. A larger proportion of participants felt very confident (46.6%), while 39.9 percent were somewhat confident about offering referrals to clients. These results suggest that more can be done to equip clinicians with information and skills that allow them to engage with at-risk clients.

CONFIDENCE IN DISCUSSING CHILD WELLBEING, CHILD WELFARE OR CHILD MALTREATMENT WITH CLIENTS : ALL



> More can be done to equip clinicians with information and skills that allow them to engage with at-risk clients.

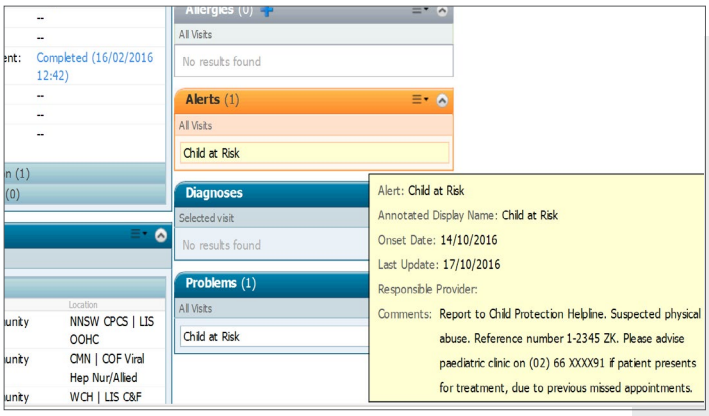
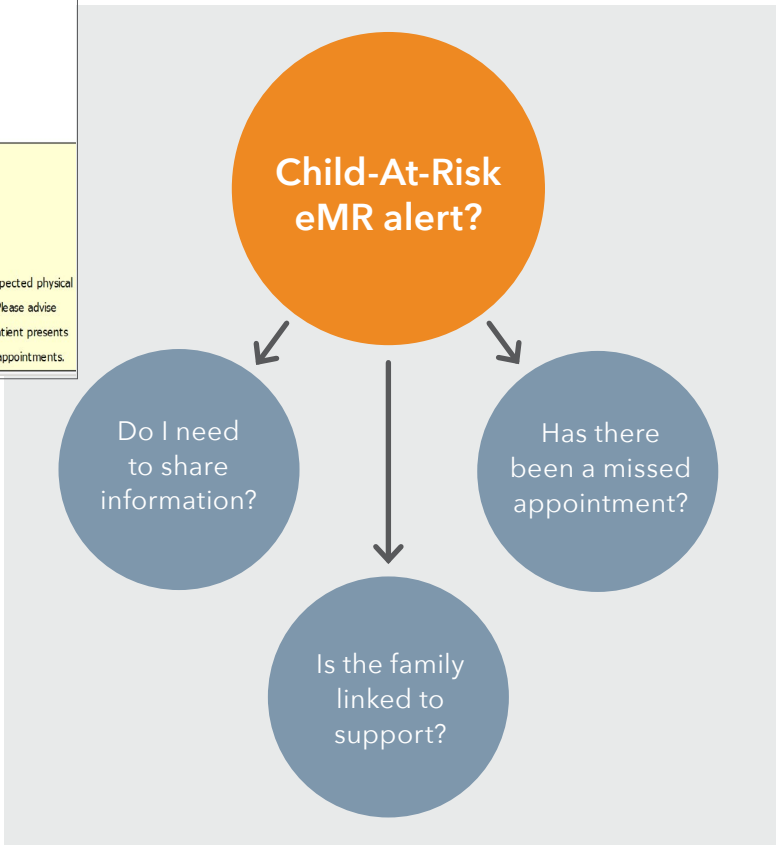


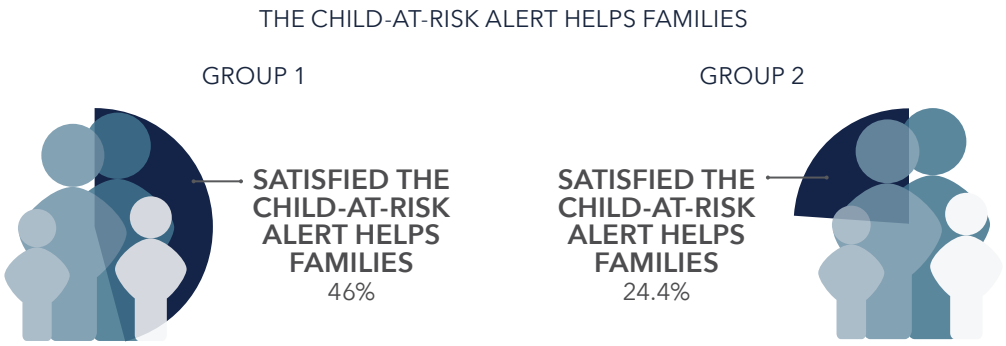
Figure 1 Dummy test client example of the visual representation of the NNSW LHD Child-At-Risk alert in the Cerner Millennium® eMR



Perceived outcomes

Just over one-third (36.5%) of survey respondents across participant groups felt that the Child-At-Risk eMR alert helps families, with one-third (37.6%) also agreeing that children and at-risk pregnant women were safer with the system in place. However, 33.7 percent indicated that they did not know if the alert system helped children and their families. Several factors could explain this result. First, participants did not know what the outcomes for families were, so they may have been unable to say whether the system helped. Second, health workers may view the system as having a greater benefit to their own practice (prompting them to make referrals, share information and resolve barriers to non-attendance at appointments) rather than helping families per se.

Further exploration of how health workers receive feedback on the outcome of referrals is needed. This would enable health workers to understand how the alert system can assist children and their families.



> Further exploration of how health workers receive feedback on the outcome of referrals is needed to understand if the alert helps families.

Factors in improved responses

Respondents across participant groups indicated that training (73.3%), workplace policies and guidelines (77.2%), support from colleagues and peers (72.8%), and to a lesser extent, supervision (31.7%), had assisted them in responding effectively to at-risk pregnant women or at-risk children.

The factors or circumstances that prevented participants from responding to at-risk clients included lack of training (37.2%), lack of collegiate support (19.4%), lack of workplace policies and guidelines (17.2%), and lack of supervision (15.6%).

Overall, participants reported ongoing professional development in the area of violence, abuse and neglect (62.9%) as their greatest need to better respond to at-risk clients. Lack of knowledge of available victim support services (60.1%), and limited time with clients (50.6%) were also identified as barriers to responding.

Ongoing professional development in violence, abuse and neglect is the greatest area of need to better respond to at-risk clients.

WAYS TO IMPROVE HEALTH WORKER RESPONSES : ALL

Other states and territories

At the time the research was conducted, only two other state health departments had implemented similar alert processes: South Australia and Tasmania. In South Australia, four Local Health Networks were using a Child-At-Risk eMR alert system. In Tasmania, the system was configured to include several alerts that helped staff to identify families who may need additional support and intervention.

The Victorian health department indicated that their eMR systems had the capacity to host an alert system, but there was currently no consistency in implementation or standard for its use. The Western Australia Department of Health was not using a Child-At-Risk eMR alert system, but a working group was being established to progress work on this issue. Health departments in Queensland, the ACT and Northern Territory advised that they did not currently have sufficient knowledge of the alert system to implement one.

Future directions for policy-makers, practitioners and service providers

Implication 1: Research using case-file data is needed to determine direct outcomes

Further research is needed to better understand the direct outcomes for families as a result of referrals, information sharing and the follow-up of missed appointments. Case file reviews that trace the outcomes for the family identified in the alert would strengthen evidence about the usefulness of the alert system. Examples of proxy measures for system efficacy include the uptake of referrals, and health-specific family outcomes. This research should precede any expansion of the system to ensure the effectiveness of further roll-out and implementation.

Implication 2: Alert systems should be implemented using established procedures and regular staff training

The introduction of any new child protection information sharing system within an eMR should include ongoing training, support and other kinds of professional development for healthcare workers. In particular, medical officer training should be undertaken to ensure that doctors are aware of the system and are using it in their everyday interactions with vulnerable families. This is because of the lower-than-expected numbers of medical officers using the Child-At-Risk alert system, as highlighted in this study. The processes (for implementation and regular staff training) should be consistent with those described within the implementation science literature as promoting successful and sustained implementation of evidence informed practices into the everyday work of health and social service practitioners.

“Medical officer training should be undertaken to ensure that doctors are aware of the system and are using it in their everyday interactions with vulnerable families.”

Implication 3: System features should meet end-user needs

To optimise the use of the alert, healthcare workers should be consulted about its features. For example, when an alert exists on a client eMR, a “pop-up” alert or a cursor that changes shape could increase the likelihood of clinicians checking the details of the Child-At-Risk alert (thereby offsetting the need to click on the Alerts, Problems, Diagnosis tab to see the alert on the patient’s eMR). Further, the alert system should be standardised across the various departments, so that it operates in the same manner regardless of which operating system is being utilised in the eMR.

Implication 4: Tracking staff-users should result in greater understanding of the system's use

Key performance measures of the alert system within health workers' workflow should include tracking the number and profession of staff applying alerts. The latter would allow the monitoring of staff engagement, with the aim of improving the uptake by staff in professions not currently using the system. This would also help ensure follow-up each time an alert is not applied when it should have been, and to assist with the design of ongoing staff training and professional development around effective identification and response to child protection presentations.

Implication 5: Health workers need ongoing training and information on responding to interpersonal violence, abuse and neglect

In addition to system-related training, the survey responses showed that participants would like more training on how to respond appropriately to individuals and families experiencing interpersonal violence, abuse and neglect. Health workers would also benefit from a better understanding of the services available for clients, and access to consultancy on child protection and domestic violence matters.

Implication 6: Standardised alert systems could be implemented across states and territories

Work at a national level would help to progress discussions about the implementation of similar systems in other jurisdictions. These discussions could be led by the federal and state government agencies responsible for the *National Framework for Protecting Australia's Children 2009-2020*, the *National Plan to Reduce Violence against Women and Children 2010-2022*, or by key offices such as the office of the National Children's Commissioner. Further discussion of the use and evaluation of Child-At-Risk eMR alert systems should be carried out at national forums in order to increase knowledge dissemination and develop opportunities for implementation across health systems nationally. This work should be undertaken in parallel with further research and evaluation of Child-At-Risk eMR alert systems to further assist government bodies make decisions about how to optimise the system's potential.

Further reading and additional resources

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