WA Country Health Service

In partnership with

Royal Perth Hospital

Public Report on Pilot Study

April 2009

Improving Clinical Handover in Inter-hospital Patient Transfers

Presented to:
AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Clinical Handover Initiative (RFT 3760607)

Delivering a **Healthy WA**

Acknowledgements:

Project Managers: Madeleine Connolly & Pauline Crommelin from WAHCS and Adele Lake from Royal Perth Hospital, WA

Project Leaders: Ms J Porteous, Director of safety and quality WA Country health service and Dr. T. Stewart-Wynne, Assistant director of clinical services Royal Perth Hospital

Suggested Citation:

Western Australia Country Health Service (2009). Improving clinical handover in inter-hospital patient transfers – public report on pilot study. Perth: WACHS

Disclaimer:

This pilot study was funded by the Australian Commission on Safety and Quality in Health Care (ACSQHC) as part of the National Clinical Handover Initiative. Each study within the Initiative aimed to design transferable improvement tools and solutions for handover that could be localised to different contexts. This Public Report provides a summary of the pilot study undertaken; for additional details please contact ACSQHC.

ACSQHC acknowledges that the information contained in this one-year study presents initial developments and supports longer-term research and evaluation. The information presented here does not necessarily reflect the views of the Commission, nor can its accuracy be guaranteed.

Table of contents

List of figures and tables

Abbreviations used

AIMS	Advanced Incident Management System
ERHS	Emergency Rescue Helicopter Service
FESA	Fire and Emergency Service Authority
IHPT	Inter-hospital patient transfer
iSoBAR	Concept for structured verbal handover format (Identify, situation, observation, background, agreed plan, read back)
MDS	Minimum data set
RFDS	Royal Flying Doctor Service (Western Operations)
RPH	Royal Perth Hospital
SJAA	St Johns Ambulance Association (WA)
WACHS	WA Country Health Service

Abstract

Complex processes are involved in both referral and the arranging of patient transport in the WA health system. WACHS in partnership with Royal Perth Hospital (RPH) undertook a project to identify the risk factors involved in acute patient transfers and to trial strategies that would assist in addressing the risk factors identified. A minimum dataset form was developed, specifically for care of the deteriorating adult medical patient, involuntary mental health patients and obstetric emergency patients. RPH also created an educational toolkit based on the mnemonic iSoBAR to aid training on standardising inter-hospital transfers.

Trials were held across the seven regions of WACHS, with encouraging initial feedback from staff. WACHS encountered an environment both ready for an opportunity to streamline process and improve communication, but also resistant to change due to perceived duplication of the form. A small qualitative audit of the project six months after implementation found support for the iSoBAR toolkit, however further evaluation of these trials are needed. Some sites have adopted it across into other areas. This study recommends ongoing training and development on iSoBAR, and creating practical guidelines to ensure its implementation.

Executive Summary

Aims:
To research and develop written and verbal clinical handover arrangements to ensure optimal transfer of patients from country health services to tertiary metropolitan health sites ((non trauma), when more acute, complex or intensive intervention is required. More specifically, the objectives of this study were to:

- Identify and analyse patient risk factors involved in inter-hospital patient transfer (IHPT) and develop standardised clinical handover protocols that will reduce the risk for the patient
- Develop a draft minimum data set (MDS) for the agreed patient scope for standardised operating procedures and written standardised documents.
- Develop an educational toolkit to support the IHPT clinical handover program.

Developments:
WA Country Health Service (WACHS) undertook an extensive review of clinical incidents associated with clinical handover and developed a standardised verbal handover format using the mnemonic iSoBAR (identify, situation, observation, background, agreed plan and read back). The minimum data set development has been formulated following extensive consultation with various internal and external stakeholders. The iSoBAR concept and resulting minimum data set (transfer form) is being trialled in six of the seven regions.

Royal Perth Hospital (RPH) has developed a toolkit containing an interactive CD learning package, and created branding and marketing of the iSoBAR concept. These include promotional materials such as posters, brochures and stickers.

Evaluations:
Early evaluation on iSoBAR as a concept has been encouraging but has been limited providing only preliminary results; this is in part due to the time frame and in part due to the variable response rates. Overall staff appeared to be enthusiastic and motivated to be part of the change process whilst the Program Managers were at site. Staff appeared to grasp and understand both the concept and the skill requirement and be able to demonstrate use within their environment. A small qualitative audit was conducted six months after the implementation of iSoBAR. This revealed that the toolkit appears to have provided an effective communication tool to support uptake and spread, although maintaining access to the tools is an issue that will require ongoing commitment of resources.

More rigorous evaluation of these trials across WACHS regions is needed. This study recommends that iSoBAR be incorporated into hospital orientations with more training and development for staff, a better co-ordination of care and that clinical handover documents be developed for implementation at state level.

Context

Organisational profiles

The WA Country Health Service (WACHS) is the single biggest Area Health Service in Western Australia, and the largest country health system in Australia. It services an area of some 2.53 million square kilometres with a combined regional population of 454,000 people (representing almost a third of the State's total population), including 44,900 Aboriginal people (representing around 10% of the State's total population).

WACHS currently employs around 5,662 full-time equivalent staff, including 2,310 nurses and 180 salaried doctors, and also contracts 150 Visiting Medical Officers. Each year on average, WACHS manages 325,000 emergency department visits (excluding other forms of emergency responses characteristic of rural health), 96,000 hospital discharges, and 380,000 inpatient bed days across the state. WACHS is composed of 7 regions: South West, Great Southern, Wheatbelt, Goldfields, Midwest, Pilbara and Kimberley (see Figure 1).

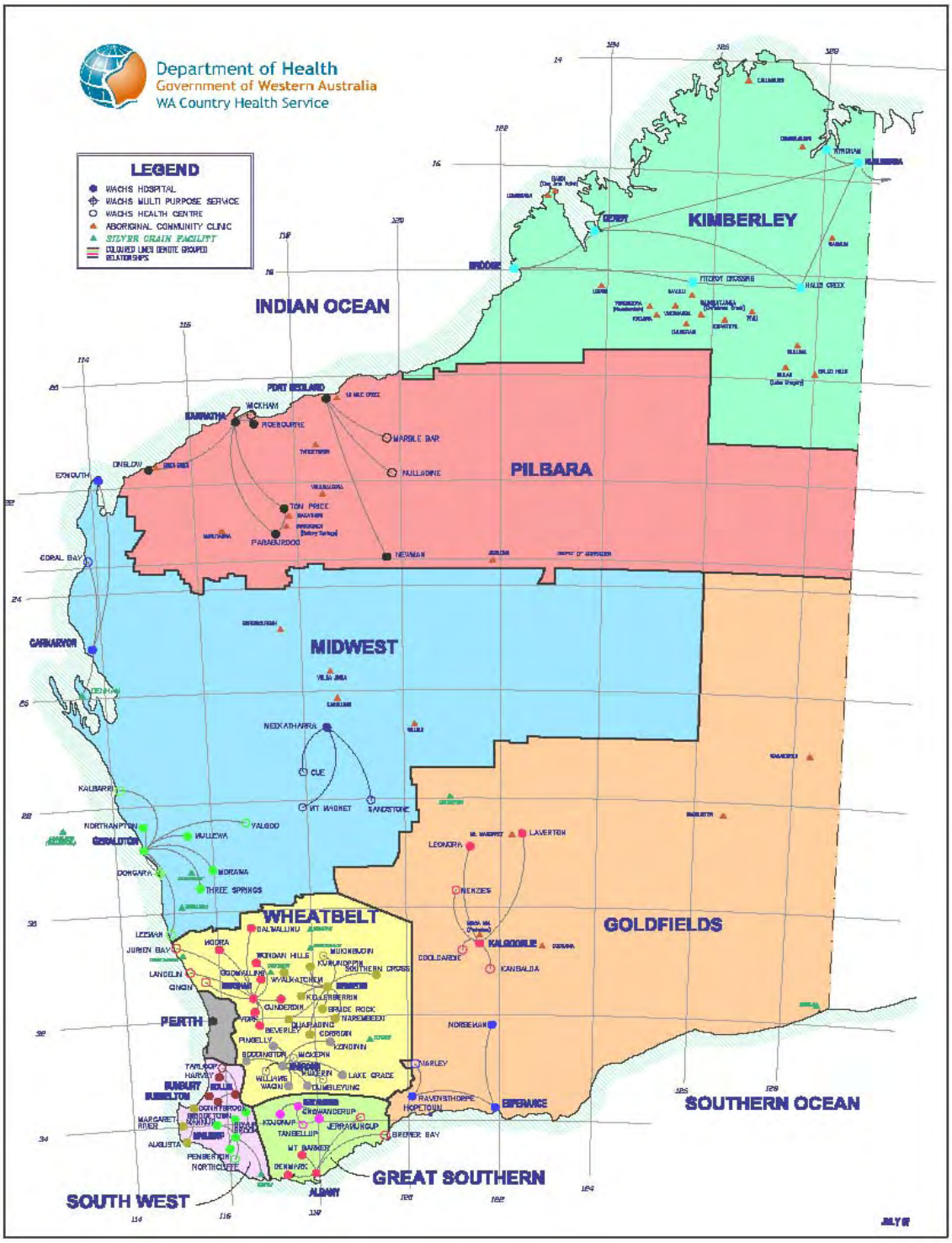
Services are dispersed across the state and include 6 regional hospitals, 15 district hospitals (integrated district health services) and 50 small hospitals. There are 26 mental health services, 3 multi-purpose sites, 8 gazetted nursing posts and 39 remote area nursing posts. There are also 2 state government nursing homes and numerous community health services and child health services throughout the state.

Royal Perth Hospital (RPH) is located in the Perth CBD and is the Major Trauma and Burns Centre for the state. RPH has approximately 530 medical and surgical day and multi-day beds, 49 intensive/high dependency beds, with another 190 Rehabilitation beds at the Shenton Park Campus, employing over 7000 staff members (about 4,700 full-time equivalents - FTE). RPH treats about 73,000 in-patients a year, receives about 225,000 outpatient attendances annually, and has one of the busiest emergency departments in Australia, with more than 54,000 presentations a year. RPH also provides approximately 13% of services to rural and remote regions of Western Australia.

Inter-hospital transfers

Complex processes are involved in both referral and the arranging of patient transport, relying heavily on multiple health professionals having local knowledge of the WA health system and the differing service delineations both within the Perth metropolitan area health services and within WACHS. Crucial clinical time is utilised by having to 'shop' for both the metropolitan hospital bed and the transport provider. In 2005/06 WACHS transferred over 10,000 patients to another acute care facility within Western Australia. Over 7,000 of these inter hospital patient transfers included the Royal Flying Doctors Service (RFDS) and/or the St Johns Ambulance Association (SJAA).

Figure 1: WA Country Health Service regions



At the commencement of the clinical handover project it was anticipated that a number of separate enabling strategies to improve inter-hospital transfer in WA would be developed concurrently. Presently, the coordination and governing process for transfer of the clinically deteriorating patient are fragmented. There are specific processes for the transfer of trauma victims and neonates and these are established and well defined. However, for patients that are outside these two groups, there is a lack of defined processes for the access to clinical advice, triage and coordination of transport, finding a bed in an appropriate facility and the transfer of accountability. These less than optimal processes have the potential to weaken the impact of the clinical handover project.

Inter-hospital transfer of the critically ill or injured patient is affected by distance. If the destination is less than 200kms flying distance from Jandakot airport in Perth, patients have access to the Emergency Rescue Helicopter Service (ERHS). The helicopter is owned by FESA and tasked by SJAA. If a medical practitioner is required on flight, this is staffed by the Royal Flying Doctors (RFDS). Road ambulance may also be used for distances less than 200kms. Distances that are greater than 200kms rely on the RFDS, with ambulance transfer to and from the airstrip.

Objectives:

1. Identify and analyse patient safety risks associated with clinical handover of inter hospital transfers.
2 Develop a draft minimum data set (MDS) for the agreed patient scope for standardised operating procedures and written standardised documents.
3. Develop an implementation package (toolkit) to support IHPT (inter-hospital patient transfer) clinical handover program.
4 Develop an implementation strategy for the pilot of the MDS, and standard operating procedures to support clinicians to affect safe clinical handover using a MDS that is transferable to other health services.

WACHS Reported Clinical Incidents

Adverse events relating to handover impact on patients and the organisation, leading to situations such as delays in treatment, increased length of stay, patient complaints, injury, and may contribute to a sentinel event. The development of clinical handover systems, such as standard operating procedures, has been shown to help in the reduction of system failures that currently exist [1, 2, 3]. Tracing and remedying failures is always complex and trying to incorporate these remedies across several systems and providers is challenging. The quality of current clinical handover practice could be described as ad-hoc in its delivery and format. It depends too heavily upon individuals and does not enlist systems to help rectify identified issues.

There is an acknowledged lack of evidence-based best practice. There has been very little or no formal training given on how to effectively 'handover'. Clear accountability is lacking under the current informal structures. The analysis of incidents related to clinical handover has been used to guide the development of standardised operating procedure (both written and verbal). Specifically, WACHS have tried to address the issue of clarity by

ensuring that the agreed plan for transfer of the patient and accountability of care is defined in both written and verbal handover protocols.

Stakeholder Consultation for the Minimum Data Set

Establishing a written minimum data set requirement to affect a safe clinical handover required considerable consultation with both internal and external stakeholders. The initial data set was sourced from Margaret Walker (Flinders Medical Centre, South Australia) following her presentation at the Improving Clinical Handover Conference in Sydney (Oct 2007). Emergent, transport provider specific, psychological and obstetric data was added. Comment and input was sought from external stakeholders, which included the Royal Flying Doctor Service-Western Operations (RFDS), the St Johns Ambulance Association (SJAA), emergency, trauma and intensive care consultants at Royal Perth Hospital and clinicians from Sir Charles Gardner Hospital, Graylands Hospital, Fremantle Hospital and King Edward Memorial Hospital. Internal stakeholders consulted included WACHS psychiatric senior clinicians, medical and nursing (including obstetric) clinical staff, Health Information Management (HIM) staff and project team members.

Consultation occurred across many mediums; the most commonly used were face to face initially and then via email correspondence. Table 1 below shows the resulting minimum data set required for a written handover after incorporating all the participants' responses.

Table 1: Resulting Minimum Data Set – written

Type of information		Service Requirement	Clinical Requirement
HIM DATA	Medicare	Y	
	Ambulance Fund	Y	
	Vet Affairs- colour	Y	
	Aboriginal or Torres Strait Islander descent	Y	
	Interpreter required	Y	Y
	Know organ donor	Y	Y
	Contact person, relationship and aware of transfer	Y	Y
Identifiers	Time and date	Y	Y
	Name/Designation, Health site receiving and referring	Y	Y
	Name, DOB/age, gender, address	Y	Y
	Usual General practitioner	Y	Y
Observations/ Assessment Data	Airway, breathing, circulation, disability, Glasgow coma score, normal cognitive state	Y (tasking of transfer)	Y

	Physiological data (temperature, pulse, blood pressure, respiratory rate, pain score)	Y	Y
Medical management	Principle diagnosis, other diagnoses	Y	Y
	Past medical history (surgical history)	Y	Y
	Airway management plan	Y	Y
	Notation for resuscitation status		Y
	Allergies (medications)		Y
	Intravenous fluids		Y
	Tests/investigations due or completed results		Y
Ongoing management	Mobility	Y	Y
	Pressure risk	Y	Y
	Dietary needs, fasting status	Y	Y
Safety risk	Medications, mental health, bariatric, pressure	Y	Y
Medications	Current episode of medications and effect	Y	Y
Other	Intravenous lines - peripheral and central, include failed attempts, insertion details and site details	Y	Y
Elimination	Fluid balance chart		Y
	Continent/incontinent	Y	Y
	Drains	Y	Y
Social	Relevant social issues	Y	Y
PSYCHIATRIC	Mental status exam		Y
	Presentation history- known or new		Y
	Forms - requirement for police escort	Y	Y
	Other agency involvement including telephone advice link for rural after hours advice	Y	Y
	Case Worker		Y
	Sedation effect and link to airway management plan	Y	Y
	Forensic risk	Y	Y
	Treatment this admission by whom		Y
	Reason for transfer		Y
TRANSFER SPECIFIC DATA	Weight (pt and escort, luggage)	Y	Y
	Height	Y	
	Level of escort i.e. self, carer, driver, ambulance officer, paramedic, doctor, nurse, police	Y	Y
	WACHS Urgency of transfer- allocation and signed by the most senior clinician	Y	Y
	Mode of transport- private, health service car, SJAA, ERHS, RFDS	Y	Y

	Positioning of patient	Y	Y
	Stretcher, sitting, restraint	Y	Y
ACCEPTING HOSPITAL	Referral hospital/doctor/ward	Y	Y
	Information faxed through to this site		Y

Development of clinical handover documents

Verbal clinical handover documents - iSoBAR

Research conducted by the Australian Council on Safety and Quality in Health Care has shown there is a large gap in policy and research regarding clinical handover[4]. There has been much work relating to the Situation, Background, Assessment and Recommendation (SBAR) concept of a structured format on how to handover. Review of sentinel events demonstrated the need for more clarity and an agreement of a plan of care that defines the responsibility for action. Inclusion of the read back/check ensures not only shared understanding but also reinforcement of this step.

Encompassing the transfer of accountability required an expansion on SBAR. Whilst SBAR covered the salient points, it did not lead the user through a defined sequence and therefore left delivery open to interpretation as to the requirements of each step. WACHS felt that the term iSoBAR could incorporate accountability in the "Agree a plan" and "Read back" headings. There was also a marketing appeal in aligning to the rural sector with the visual cue represented by the isobar pressure lines. The term was suitable given the pressure staff felt they were under in handing over clinically deteriorating patients and it reflected the environmental factors of some of the WACHS regions, such as annual cyclones.

Written clinical handover documents – MR184 form

The agreed minimum data set was drafted into a medical record format for trial. The WACHS project team identified the ability to replace an outdated adult transfer form (Department of Health) with this newly-formatted form helping to eliminate some duplication of data and the need for a separate adult and child form. It also created an opportunity for future data collection and audit to monitor improvement. Additionally, it presented an opportunity to incorporate the iSoBAR concept into the written minimum data set to reinforce the concept.

Each transport service has its own documentation requirements. While RFDS have indicated that they are not able to alter their current booking form due to aeronautical obligations, there are similarities in the type of transfer data required by all transport providers. Obstetric data is currently well covered in the WA Neonatal Team (WANTS) document, managed through King Edward Memorial Hospital (KEMH). The documentation is very specific; well accepted by those using the service and as such was not included in this handover document.

Currently psychiatric patients requiring transport via RFDS are tasked for transfer as a priority 3 (this equates to up to 36 hours to fly out). As these patients are required to be

sedated for transfer, an airway management plan was included on the trial document. It is anticipated that this would be better suited to mental health sedation clinical pathway, which is out of the scope of this project.

Regional Trials

An implementation plan was designed for the sites to provide a structured approach to instigation. In all regional visits the aim was to:

- Highlight the issues related to clinical handover of those patients requiring inter-hospital patient transfer (using AIMS, sentinel event data and coroner's report)
- Test the iSoBAR concept as a tool to improve verbal handover
- Test the minimum data set (medical record MR184)

Initial Pilot Site – The Kimberley

Within WACHS the Kimberley region is the furthest from Perth. It comprises a regional referral centre based in Broome and two smaller procedural sites at Derby and Kununurra. There are three smaller district hospitals based at Wyndham, Halls Creek and Fitzroy Crossing. Additionally, there are a number of very remote nursing posts.

The Project Managers each undertook over 8000 km of air or road travel during this 7-day period. They were able to provide information, promote discussion, clarify and address issues and raise awareness in both medical and nursing streams in four hospital sites. To ensure maximum coverage, visits accommodated all nursing shifts, time was spent with ward and department nursing staff, senior nurses and medical staff were invited to and attended sessions. During this time 53 staff were educated on both the iSoBAR concept and the trial of the MR184 (v0.01) adult/child transfer form.

Comments to the project officers at the start of the trial identified a trend in belief of medical staff and their responsibilities with regard to the transfer paperwork. To further reinforce the concept of iSoBAR and the minimum data set, the Associate Director of Clinical Services (RPH) attended the Broome Medical Advisory Committee monthly meeting (Feb 2008). The engagement of medical staff was enhanced by having a Medical Practitioner discuss the concepts and proved to be an effective change management strategy of inclusion. This ensured interdisciplinary involvement, and for the process not just to be seen as a nursing venture.

Other Trial Regions

Table 2 below outlines the sites of other trials throughout the different regions of WAHCS. Included are some observations and comments on iSoBAR and the medical handover form. Project managers spent time travelling out to each region and this was appreciated by staff. Nursing staff in all shifts were engaged and video conferencing was also used when face-to-face was impractical with a specific site. Overall, a large number of staff throughout the regions have been trained on iSoBAR and the MR184 form.

Table 2. Observations from other trial regions

Region	*Sites*	*Observations / Comments*
Mid West	Carnarvon (all shifts), Exmouth (via videoconference), Geraldton (all shifts), Kalbarri, Northampton, Three Springs, Dongara staff	• Reception was positive from most sites, with some staff attending on their rostered days off. Staff generally showed a willingness to implement immediately. • Geraldton Regional Hospital emerged as a 'champion' and the concept of iSoBAR has been extended to all handovers not just for transferring patients. • At Northampton Hospital, patients presenting to the Emergency Department are not admitted but transferred to Geraldton Regional Hospital. Staff appeared keen to utilise the new MR 184 for this purpose.
Pilbara	Port Hedland (all shifts), Karratha (all shifts) and via videoconference to Onslow, Tom Price, Paraburdoo, Newman and Roebourne	• 62 staff were seen at two locations and a further 9 staff contacted through video conferencing • Reception was positive, with staff keen to be part of a change process.
Wheatbelt	Southern Cross, Lake Grace and Dalwallinu	• 24 staff were seen at three locations. • These sites were specifically identified as they fall outside the acceptable distance for routine helicopter retrieval, as they are more than 200 km from Perth. • Once again the reception was positive with staff keen to be part of a change process.
South West & Greater Southern	Various sites across the region	• South West (40 staff trained) and Great Southern (120 staff trained) opted to implement a trial independently. All resources were made available and regular contact was maintained to allow clarification and provide guidance as required.

Early Feedback from the Trials

A range of responses were given, from positive through to non-engagement. Table 3 provides a summary of each region and examples of staff feedback on iSoBAR and/or the handover form. Overall staff appeared to be enthusiastic and motivated to be part of the change process whilst the Program Managers were at site. Staff appeared to grasp and understand both the concept and the skill requirement and be able to demonstrate use within their environment.

While it was well-received on the whole, it appears staff at some sites do not routinely utilise the MR184 form to handover the patients due to perceived duplication. Cultural management of multiple sites within each region also operated very differently and there was some resistance to imposing standardisations. Nominating a specific person at each site can facilitate consistency in training, implementation and evaluation processes.

Table 3. Staff feedback on trials

Region	*Staff Feedback*
Kimberley	Some dissatisfaction with the form was expressed as well as the ongoing requirement to photocopy notes. There was some expression of interest in further education on this topic. *I always think that I give too much detail but I worry that I will miss something – this helps*
Mid West	*So far we have only heard one non-positive, everyone else, inclusive of the Clinical Nurses are being extremely supportive.* *I'm excited about the support that you have received from the staff.* *Day 1 – MO –"it was slow but I certainly was given all the information"*
Pilbara	There were very polarised opinions, with some sites enthusiastic about iSoBAR while others questioned if it would really impact on the issues. These were stated as duplication of information, medical staff input to transfer information and dissatisfaction with the lack of space on the form. *Overall iSoBAR was accepted really well – We ran out of copies and had to go back to the other one and there was a general groan about that.* *I don't think we trialled it for long enough (and we didn't have any real complex cases to truly test it) to be able to give you any anecdotes on how it improved the hand over process or prove that there where any reductions in clinical risk.*
Wheatbelt	*It was a great pleasure to be able to spend time with [the Project Manager], she was really good value and totally switched on to what is needed and our day to day risks, and we had a transfer within hours of her departure to trial the system on…it was an enormous boost for the staff morale here to think she would travel so far and to see an obvious resolution to a problem that has been niggling away at us for months…really really happy to have been involved in this…* *Easy to use but printing and boxes too small*
South West	Overall opinion from the staff was that the form would improve the process of handover. They felt the form looked complex but would not be able to give opinion or feedback on the form until they had used it and become familiar with it.
Greater Southern	Staff interviewed all agreed that the form was a substantial forward movement in this area – a lot more formal, rigorous and sequential than previous documentation. A lot of strong reports though that form does need some review. Font too small, and not enough space to actually write information in – suggested converting to A3 landscape style of document. Clinical staff reported that they would like more training in this area – as a 1 off formal small group session.

Development of the educational toolkit

Based upon the project guidelines, work was done on the development of an educational toolkit within Royal Perth Hospital (RPH). The toolkit primarily focussed on the iSoBAR process developed by WACHS as the communication strategy for performing an inter-hospital transfer, in conjunction with a basic understanding of different communication styles based on the DISC profiling as requested by WACHS.

Extensive research was undertaken on both national and international problems associated with sub-optimal clinical handovers. Currently there are numerous strategies and tools being utilised worldwide to address this problem. The World Health Organisation endorsed communication strategy for safer handover, SBAR (Situation, Background, Assessment, and Recommendation) provided the framework around which iSoBAR was developed. This evidence base provided the framework for the material within the learning package, along with DISC profiling to discuss differences in communication styles.

The educational toolkit is comprised of an e-Learning format (web-based and CD) a self directed learning unit, pre & post learning questionnaires and supporting materials to assist the uptake of the iSoBAR concept. The validation module is considered as an essential element of the toolkit to maximise transferability. The use of the education toolkit as a competency-based program was not possible in the pilot phase of toolkit implementation, but this could be achieved through future training of assessors within WACHS to utilise the validation package.

There were several issues to consider concerning the web platform of the online package:

- a platform to be selected for uploading the package onto the web
- what capabilities exist for tracking and reporting
- system capabilities and requirement for the package would need to address the issue of differing operating systems that end-users have access to in rural areas
- the online capabilities of various rural areas
- developing a system that can be accessed from a variety of locations containing a facility for 'continued progress' (restarting from the same area of the program when the site was last accessed by each user)

The Metamorphosis package was the platform adopted within the WA Country Health Service. The package was published in CD format and distributed to the pilot sites.

Marketing of the iSoBAR visual identity

RPH was also responsible for the development of marketing tools such as posters, brochures, and associated material to enhance the WACHS communication and implementation plan for the project, as well as general marketing of the project within the health media.

The e-Learning format has the capability for printing a written document which can be utilised as a hardcopy self directed learning unit. A package of other supporting material was also developed and sent to the pilot hospitals by WACHS to support the uptake of the

iSoBAR concept and reinforce the message and visual identity. These included lanyards, posters, brochures, fridge magnets, stickers and pens.

Promotion of the project was undertaken via communication with key stakeholders within the Royal Flying Doctor Service and within RPH about the project objectives and timelines. The aim of the project - to standardise the handover process for patients undergoing an inter-hospital transfer - were detailed and comments were invited on the iSoBAR transfer form content to address the needs of the receiving staff. Further marketing was undertaken through the use of media via a written article, which was created and submitted to various health publications. Rural areas received promotional materials, undertaken by WACHS, which were placed in all relevant wards and units in pilot hospital sites.

Qualitative Evaluation of the Pilot Project

To assess the effectiveness of the program and training package, a small audit was undertaken 6 months after the implementation of the minimum data set form and iSoBAR. Eleven WACHS staff from across 5 regions participated in phone-based interviews to discuss the level of uptake and utilisation of the tools, according to the framework provided by Rogers'[5] 'diffusion of innovations' theory and the Clinical Excellence Commission[6]. Some of the key attributes described in the theory and tested in the evaluation were:

- The *nature of the innovation* (the innovation is to conduct clinical handover using the iSoBAR process)
- The perceived *relative advantage* of the innovation over existing or no systems
- *Compatibility* of the new innovation with existing systems
- *Complexity* associated with adopting the innovation
- *Trialability* - ease of trialling the new innovation
- *Observability* - perceived improvements to a system after implementing the new innovation
- *Communication channels* used to promote and/or support the implementation of the new innovation
- *Time taken* to implement
- *Social system* (reaching critical mass) spread and sustainability of the new innovation (Mass marketing/ interpersonal)

In summary, the innovation of the iSoBAR clinical handover toolkit was well understood and supported. Compatibility responses were conflicting as some staff indicated that there were no pre-existing processes, other staff indicated that the tools had been implemented in addition to existing tools while others were unsure. The complexity of the iSoBAR process was rated by most respondents as low. However suggestions for improvement to the design of the form were made, and staff have been encouraged to modify the process with their own context so long as the central iSoBAR process remains consistent.

A good level of trialability was evident, particularly where the issues of the concept and the iSoBAR tool are separated from the issue of the detail or content of the form. The

perceived improvements to system after implementing iSoBAR (observability) were positive. The principle frustrations seemed to relate to crossing organisational boundaries. The toolkit appears to have provided an effective communication tool to support uptake and spread although maintaining access to the tools is an issue that will require ongoing commitment of resources and an upgrade of IT architecture and systems.

The sample size was extremely small and thus whilst this evaluation provides some useful information, strong conclusions cannot be drawn. Nonetheless the respondent's comments and examples provide a rich source to base further change management approaches. Four months after the evaluation took place there is evidence of ongoing spread. The iSoBAR toolkit has been a success but like all good practice innovations requires ongoing support and nourishing from leaders.

Future actions and recommendations

Maintaining the momentum and enthusiasm for any change is paramount. Resource availability both financial and human will be required to provide ongoing education and practical support of the system. Reshaping the system in response to the feedback of those who use it will allow the system to evolve and become part of working culture. Engaging all stakeholders in the process would aid success.

The system is transferable to other sites and services; it is simple in its approach but would suit any setting where health care information needs to be transferred. The collaboration between RPH and WACHS has highlighted the potential for transferability across health services. This collaboration was recognised with those involved in setting up the project receiving an award from the Office of Safety and Quality.

The transferability of the iSoBAR concept is already apparent. The South West Region is using the iSoBAR for transferring patients from a larger site to a smaller one. Geraldton Regional Hospital is using the iSoBAR concept for all handovers (except obstetric services) and not just those requiring transfer.

Re-evaluation and follow up

The Clinical Handover Initiative Project is concluding but the potential for change and improvement in this area is just beginning. Further evaluation of the project could determine if there has been a change in work place practices and review of AIMS data to determine if there has been a decrease in the number of incidents attributable to clinical handover practices.

The risk of staff having to duplicate information with the minimum data set is acknowledged. If the process is to be successful, WACHS and RFDS must determine strategies on how to work together to overcome this barrier. Cultural management of multiple sites within each region operated very differently and there was some resistance to imposing standardisations.

Development and implementation of clinical handover policy documents

WA State policy framework documents relating to clinical handover have been circulated. The Office of Safety and Quality sought and gained feedback. These documents are not yet ready for release. Pending the release of a state-wide policy, WACHS has developed a draft Clinical Handover Policy. It is in its formative stages and awaiting wider consultation across the WACHS clinical networks.

Central co-ordination of care

It was anticipated that a project aimed at centralising the coordination of patient care would be underway at the same time as this project. Unfortunately this has been delayed and corrective measures are outside of the scope of this project. This does impact on the ability to reduce the documentation duplication and stalls the efforts to ensure the smoother transition of patients transfer. A centralised coordination would benefit clinical staff avoiding the current system of bed and transport provider 'shopping' and would reduce the time that is spent in organisation. It also would benefit those who do not know the WACHS and metropolitan systems or who do not have the personal networks that may aid a transfer. Some of the concerns expressed in feedback relating to the form would be addressed if this system was up and running.

Incorporation of ISoBAR into hospital orientation

As well as training for existing staff, there needs to be a provision made to incorporate the training package into the orientation program for new staff. This would address the problem of high staff turnover within the WACHS environment and ensure the sustainability of the iSoBAR process beyond the pilot phase of the project. This would also be enhanced by training assessors within WACHS to utilise the validation package, which would assist in promoting the utilisation and ongoing success of the project.

References

[1] World Health Organisation (2007). Communication during patient handovers Patient Safety Solutions Volume 1, Solution 3

[2] National Patient Safety Agency (2004). Safer Handover: Safe Patients British Medical Association. London

[3] National Patient Safety Foundation (2005). How Literacy and Communication Initiatives Improve patient Safety Volume 3, Number 2, http://www.npsf.org/download/Focus2005Vol8No3.pdf

[4] Australian Council for Safety and Quality in Health Care (2005). Clinical Handover and Patient Safety – Literature review report. Australian Council for Safety and Quality in Health Care, March 2005. http://www.safetyandquality.org/clinhovrlitrev.pdf

[5] Rogers (1963) cited in Hubbard, W.G and Sandmann, L.R (2007) Using Diffusion of Innovation Concepts for Improved Program Evaluation. *Journal of Extension* Volume 45, Number 5, http://www.joe.org/joe/2007october/a1.php

[6] Clinical Excellence Commission (2008) Enhancing project spread and sustainability: a companion to the 'easy guide to clinical practice improvement'