



West Midlands Academic Health Science Network

RAID (Rapid Assessment, Interface and Discharge)
Innovation Audit Report

October 2016

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Achieving change together

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Section 1: Introduction and Background



Innovation Assurance Audit - Background

West Midlands Academic Health Science Network (WM AHSN) is seeking to demonstrate to NHS England, NHS Improvement and the membership of the WM AHSN that there have been a number of demonstrable examples of significant additional innovation outcomes that have been driven through the work undertaken by WM AHSN. These outcomes in turn will influence and improve patient pathways at a significant level both regionally and nationally. This includes how the introduction of innovation, combined with the transformation of clinical practice, has delivered improved healthcare outcomes and other benefits for patients through adoption and diffusion of ground breaking best practice.

To demonstrate this, the AHSN has undertaken two innovation assurance audits to confirm and challenge the innovation arising from developments in those areas. This report focusses on the innovation arising from RAID, the psychiatric liaison service for acute hospitals model developed by Birmingham and Solihull Mental Health Trust and now in use across other hospitals in the West Midlands (and beyond). While a number of previous evaluations have taken place of RAID and its impact, this report aims at the innovations arising since the original RAID implementation. The output (this report) is a communications pack of key messages and other content for publication on Meridian that can be used with NHS England and AHSN members to:

- Enable national recognition that the West Midlands region is achieving its innovation and transformation targets
- Influence the on-going development of RAID in other parts of the country.



Rapid Assessment, Interface and Discharge (RAID) Project Summary

Project AIM

The RAID model involves rapid assessment of patients so that they can receive appropriate interventions for their physical and mental health, either in the community or in hospital. The team operates on a 24/7 basis, with the aim of assessing patients within 1 hour of presenting at A&E and within 24 hours if admitted to the hospital.

Project OBJECTIVES

- Offer a comprehensive range of mental health specialties within one multi-disciplinary team, so that all patients over 16 can be assessed, treated, signposted or referred appropriately
- Operate 24 /7; emphasise rapid response, with a target time of 1 hour to assess referred patients who present to A&E and 24 hours for seeing referred patients on wards.
- Meet the mental health needs of all adult patients in the hospital, including those who self-harm, have substance misuse issues or have mental health difficulties commonly associated with old age
- Provide formal teaching and informal training on mental health difficulties to acute staff throughout the hospital.
- Put an emphasis on diversion and discharge from A&E and on the facilitation of early, effective discharge from general admission wards.

Project INPUTS

- Funding for a team of Liaison Psychiatrists, nurses and support. Typical cost of £1M for team funded by combining existing staff with approx. £400K new funding.
- Street Triage teams incl police, paramedic, and RAID nurse

Project ACTIVITIES

- The team is multi-skilled to enable comprehensive assessment, referral and treatment of all patients over 16, and operates across the hospital.
- The team assesses patients and provides a range of interventions, signposts patients to appropriate services, provides clinic appointments, and refers patients to GPs and other organisations providing support in the community setting. In addition, the RAID team train other hospital staff to improve awareness and clinical practice around mental health.
- Patients are referred to the service for a range of conditions, the most frequent are deliberate self-harm, depression, cognitive impairment confusion and dementia, alcohol misuse, thoughts of suicide, and psychosis.

Project OUTPUTS

- Up to 5:1 financial return to commissioners and acute hospital trusts
- Financial benefit in Police time diverted to escorting A&E patients (2 officers for up to 20 hours =£500).
- Proven cost-saving and quality improvement in pathways and education through provision of memory clinics in acute hospital
- Support for Section 136 patients provided much quicker due to proactive approach to find such patients in the hospital system
- Prevention of each section 136 - £3K
- Parallel physical and mental health assessment
- Focus on frequent attenders (200-250) as identified by A&E, police and community Trust
- Provide tele-support and a mobile workforce to move resources as required to deal with 'hotspots' across hospitals
- Improved awareness of MH issues in frontline service delivery functions. Improved delivery of compassionate care.



Section 2: Project Approach

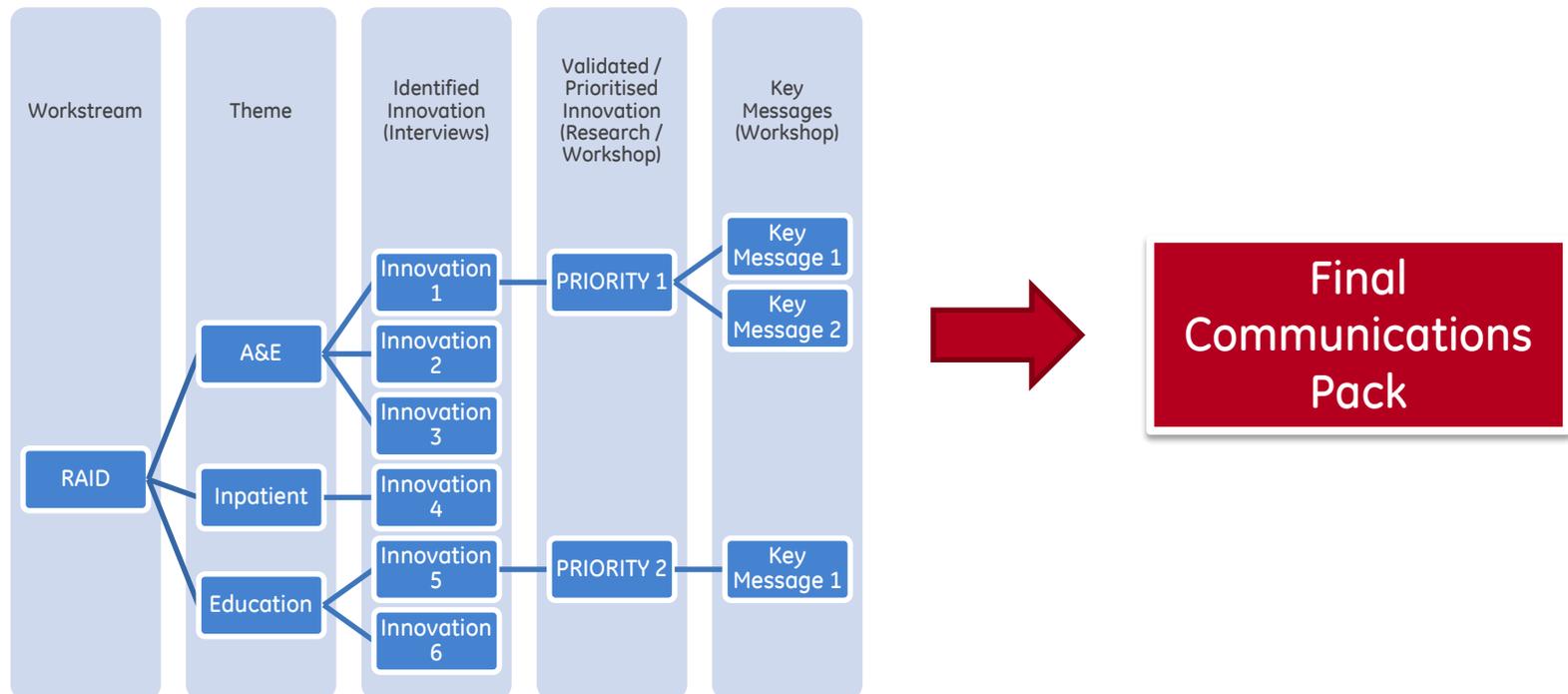


Project Approach

Following an initial project mobilisation meeting with Tony Davis (WM AHSN sponsor), a number of key themes for the review were agreed and communicated to project stakeholders.

5 semi-structured interviews were undertaken with a variety of people involved with the RAID project to identify a long list of potential innovations that could form part of the final communication pack. These innovations were summarised against the agreed themes and the benefits of each innovation documented. The full Innovation Audit Summary for this project can be found in Appendix 1.

The core project team then undertook an initial assessment of each of the longlisted potential innovations to identify a draft shortlist of innovations that were highly innovative and unique to the West Midlands. The impact of the innovation on the RAID project itself or its stakeholders was also assessed as part of this process. The Innovation Summary, and the outputs of the prioritisation exercise, were circulated to project stakeholders for review and comment to develop the final shortlist of innovations for the communications pack which were agreed. along with the key messages that needed to be communicated to the key stakeholder audiences for this work.



Innovation Review Outputs

The following diagram summarises the key outputs from each stage of the process outlined on the previous page.

Mobilisation Outputs

Service Model - A&E

Service Model - Inpatient

General

Review Themes

Interview Outputs

14 Potential Areas of Innovation

Workshop Outputs

5 highly innovative, unique developments



Section 3: Key Innovation Profiles



Key Innovation 1 – Service Model - A&E : Section 136 patients

Innovation Description

Intentional scouting across the hospital for Section 136 patients to provide more appropriate care in the Trust 'safe haven'

Key Benefits

- Support for Section 136 patients is provided much quicker due to this proactive approach to find such patients in the hospital system.

Key Messages

- A Section 136 'place of safety' has been set up in the Oleaster facility close to the Queen Elizabeth Hospital, making hospital transfers more straightforward.
- Although this is national initiative and is repeated elsewhere, the difference in Birmingham is that there is a strong 'intentional scouting' function that searches the hospital for Section 136 patients and takes them proactively as soon as they are ready to be moved on from their current point of care in the hospital.



Key Innovation 2 – Service Model - A&E : Street Triage

Innovation Description

Provision of Street Triage team comprising a Police Officer, a Paramedic and a mental health nurse in a mobile unit (usually a car). Seen as a 'blue-light' service for Mental Health

Key Benefits

- Rapid and parallel assessment of physical and mental health needs in situ
- Prevention of Section 136 cases (costing £3k a time)
- Improved ability to deal with frequent / repeat cases with a specially trained team

Key Messages

- West Midlands were the first area to include a paramedic as part of the Street Triage team, which has brought significant benefits to the operational delivery of the service
- Inter-agency collaboration and support has delivered significant benefit for the patient in providing timely physical and mental assessment and care, often in the patients home.
- Repeat uses of this service have been identified and other service interventions put in place to support those requiring frequent intervention, saving time and money.
- Section 136 cases are being avoided by dealing with patients early in their mental health episode.



Key Innovation 3 – Service Model - A&E : Psychiatric Decision Unit

Innovation Description

Establishment of a psychiatric decision unit (PDU) to assess patients away from A&E (in a similar manner to CDU and SDU for medical and surgical patients respectively)

Key Benefits

- Reduces length of stay in A&E
- Reduces demand on A&E
- Takes referrals straight from the Street Triage team, reducing A&E load
- Better support for 'frequent flyers' and those who have on-going support needs

Key Messages

- The PDU has been effective in reducing A&E Length of Stay and ensuring patients receive care in the most appropriate setting.
- By integrating with other services such as the Street triage team (which refers direct to the PDU rather than to A&E), support for reducing A&E attendance has been significantly improved.



Key Innovation 4 – Service Model - A&E : Test Bed and Clinical Dashboard

Innovation Description

RAID plus – Test bed programme with live capacity and demand modelling, patient portal, tele-triage and a focus on prevention of people getting into crisis

Development of a clinical dashboard to record impact and provide feedback

Key Benefits

- Focus on frequent attenders (200-250) as identified by A&E, police and community services
- Provide tele-support and a mobile workforce to move resources as required to deal with 'hotspots' across the 5 hospitals
- Dashboard captures economic impact of intervention and supports clinicians with real-time feedback.

Key Messages

- Although only at an early stage of development, RAID plus will enhance the existing, well proven RAID model of care and enable it to address some of the key limitations with the existing model
- The use of technology, in particular a 'command centre' style capacity and demand management system and tele-triage services, will better support both the operation of psychiatric liaison services, and the care this service provides.
- The clinical dashboard is used to capture the clinical state to provide a real-time performance feedback loop to staff across all RAID teams, helping them to continually improve service delivery.
- The dashboard is used to record the benefits including the economic impact in terms of the cost avoidance of the RAID intervention, which helps build the evidence base for other organisations to invest in the service as well as demonstrating the BSMHT return on investment.



Key Innovation 5 – Education & Awareness

Innovation Description

Education and awareness. Training for clinicians and nursing staff to raise the profile of Mental Health in the pathway, with innovative development of the '4D' classroom based training course and two on-line assessment modules in self-harm and delirium.

Senior clinical leaders shared approach and experience nationally.

Key Benefits

- Improved awareness of Mental Health issues in frontline service delivery functions
- Improved delivery of compassionate care
- Improved skills in the wider workforce to deal with patients presenting with mental health conditions
- Sharing WM experience resulted in roll-out of RAID to Trusts nationally.

Key Messages

- A proactive approach to education has meant that Mental Health issues are more widely understood and while some patients require to be seen by RAID teams, others are benefitting from receiving care from mainstream physical health teams trained in RAID principles
- West Midlands has focussed on developing training interventions that service teams require, including the 4D classroom based course and the AHSN funded on-line training
- While having a specialist RAID team has meant A&E staff no longer provide psychiatric elements of care, there has been a drive to provide education around triage within these teams, thereby improving the overall mental health service provision
- The RAID service now has sufficient prominence in the main acute hospitals in Birmingham to influence and drive changes in physical and mental health service delivery
- West Midlands RAID team and senior clinical leaders spent time sharing experiences, approach, models, dashboards and data, resulting in development by the National Collaborative Centre for the benefit of the wider NHS.



Section 4: Summary



Summary of the Overall Key Messages (Page 1 of 3)

Innovation	Benefits/Impact	Key Messages
Service Model - A&E : Section 136 patients	<ul style="list-style-type: none"> • Support for Section 136 patients is provided much quicker due to the proactive approach to finding such patients in the hospital system. 	<ul style="list-style-type: none"> • Setting up a Section 136 'place of safety' in the Oleaster facility close to QE hospital. • Strong 'intentional scouting' that searches the hospital for Section 136 patients and takes them proactively into the Oleaster.
Service Model - A&E : Street Triage	<ul style="list-style-type: none"> • Rapid parallel assessment of physical and mental health needs in situ, • Prevention of Section 136 cases (costing £3k a time), • Improved ability to deal with frequent / repeat cases with a specially trained team 	<ul style="list-style-type: none"> • Inter-agency collaboration and support works for the benefit of the patient to provide timely physical and mental assessment and care. • Repeat cases can be identified and better managed, saving time and cost. • Section 136 cases can be avoided by treating earlier in the episode.
Service Model - A&E : Psychiatric Decision Unit (PDU)	<ul style="list-style-type: none"> • Reduces A&E length of stay and demand on A&E. • Provides better support for 'frequent flyers' and those who have on-going support needs 	<ul style="list-style-type: none"> • Care is provided in a more appropriate setting than in A&E. • The Street triage team also takes referrals direct to the PDU rather than to A&E which again reduces A&E attendance overall



Summary of the Overall Key Messages (Page 2 of 3)

Innovation	Benefits/Impact	Key Messages
Service Model - A&E : Test Bed	<ul style="list-style-type: none"> • Focus on frequent attenders (200-250) as identified by A&E, police and community services. • Provide of tele-support and a mobile workforce to move resources as required to deal with 'hotspots' across hospitals 	<ul style="list-style-type: none"> • Builds on the existing, well-proven RAID model • Technology will be used to better manage both direct patient care and operational delivery of the service.
Service Model - A&E : Clinical Dashboard	<ul style="list-style-type: none"> • Dashboard captures economic impact of intervention, and supports clinician with real-time feedback 	<ul style="list-style-type: none"> • The clinical dashboard is used to capture the clinical state to provide a real-time performance feedback loop to staff across all RAID teams. • The dashboard is used to record the benefits including the economic impact including the cost avoidance of the RAID intervention.



Summary of the Overall Key Messages (Page 3 of 3)

Innovation	Benefits/Impact	Key Messages
<p>General : Education & Awareness</p>	<ul style="list-style-type: none"> • Improved awareness of Mental Health issues in frontline service delivery functions. • Improved delivery of compassionate care • Sharing West Midlands experience resulted in roll-out of RAID to Trusts nationally. 	<ul style="list-style-type: none"> • Education has meant that Mental Health issues are more widely understood. Patients benefit from being cared for by both RAID and RAID-aware teams. • The RAID team have trained clinicians and nurses to triage for mental health issues. Different models are used to deliver training including a classroom based learning course and AHSN funded on-line learning modules. • Senior clinical leaders invested time to disseminate experience and learnings regionally and nationally, resulting in a benefit for the wider NHS.



Appendix 1: Innovation Audit Summary Longlist



Innovation Description	Benefits
Parallel physical and mental health assessments	<ul style="list-style-type: none"> • Mental health support provided quicker to patients with identified needs. • 2 hour turnaround time now possible • Handover to Home Care Team with appropriate treatment plan • Improved support to families, especially in suicide attempts • Significant reduction in police officer time, direct cost (£500) and opportunity cost from running parallel assessment where a police presence was involved • Adopted 1 hour, 4 hour, 24 hour targets and measured results of 95% on target
RAID teams can admit directly rather than having to do through other teams	<ul style="list-style-type: none"> • Patients receive inpatient support they need much quicker due to reduction in service steps required (i.e. no need to go through Home Treatment team)
Intentional scouting across the hospital for Section 136 patients for Section 135 'safe haven'	<ul style="list-style-type: none"> • Support for Section 136 patients provided much quicker due to proactive approach to find such patients in the hospital system
Street triage with paramedic in the car (first to do this). Combination of Police Officer, Paramedic and nurse.	<ul style="list-style-type: none"> • Rapid assessment of physical health needs in situ • Parallel physical and mental health assessment • Prevention of Section 136 cases (costing £3k a time) • Improved ability to deal with frequent / repeat cases with a specially trained team



Innovation Description	Benefits
Establishment of a psychiatric decision unit (PDU) to assess patients away from A&E (similar to CDU and SDU)	<ul style="list-style-type: none"> • Reduces A&E Length of Stay • Reduces demand on A&E • Takes referrals straight from Street Triage team - reducing A&E load • Better support for 'frequent flyers' and those who have on-going support needs
RAID plus – Test bed programme with live capacity and demand modelling, patient portal, tele-triage and a focus on prevention of people getting into crisis	<ul style="list-style-type: none"> • Focus on frequent attenders (200-250) as identified by A&E, police and community Trust • Provide tele-support and a mobile workforce to move resources as required to deal with 'hotspots' across the 5 hospitals
Embedded in General Medicine practice - provide linkage to Mental Health Trusts and provide all mental health aspects	<ul style="list-style-type: none"> • Clinicians don't need to do MH Trust referral. Clinicians supported with specialist MH skills - don't need to maintain MH skills • In some Trusts, psychology is integrated with RAID team.
LPs closely integrated with Acute General Medicine teams. They use the same computer systems, access control badges etc.	<ul style="list-style-type: none"> • LPs and RAID team seen as part of Acute team and not a hand-off. Has benefits for team work, effective patient pathways, response times. • Staff have been given honorary contracts with acute trusts, attend management and staff meetings, access IT and building systems.
Using existing MH resources in Acute hospitals as foundation for RAID team, e.g. Alcohol and Elderly care teams.	<ul style="list-style-type: none"> • Approx. £600k of typical target £1M budget for setting up RAID teams can be realised by using existing resources who would typically be restricted to narrow focus but can now provide triage across all patient types.



General

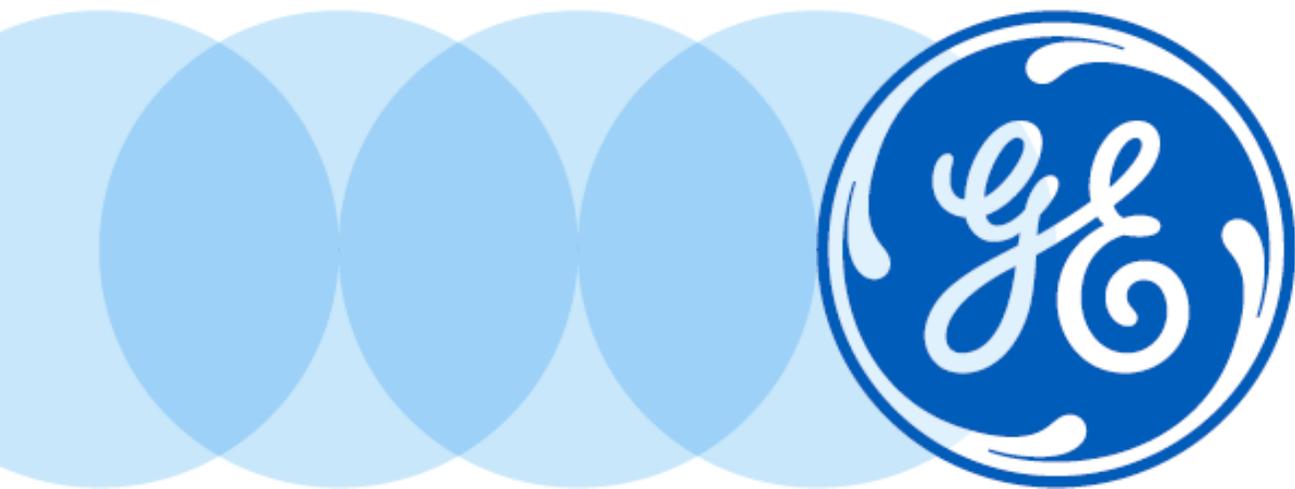
Innovation Description	Benefits
<p>Education and awareness. Training for clinicians and nursing staff. Raised profile of MH in pathway</p>	<ul style="list-style-type: none"> • Improved awareness of MH issues in frontline service delivery functions. • Improved delivery of compassionate care
<p>Senior clinical leaders shared approach and experience nationally.</p>	<ul style="list-style-type: none"> • Sharing West Midlands experience resulted in roll-out of RAID to Trusts nationally.
<p>Developed specialisation within RAID team. There are 4 areas that have been focused on as specialisms:</p> <ol style="list-style-type: none"> 1. A&E incl. suicide 2. Older Adult 3. Drug and Alcohol 4. LTC 	<ul style="list-style-type: none"> • Upskill RAID team, provide focused service to patients by type. Provide general cover across all disciplines for triage
<p>Clinical Dashboard</p>	<ul style="list-style-type: none"> • Clinical status – feedback to support clinicians • Data to demonstrate efficacy and cost avoidance • Data to simplify referrals process.



Service Model - Inpatient

Innovation Description	Benefits
Increased elderly care consultant numbers	<ul style="list-style-type: none">• Increased presence and visibility• Seeking to increase speed of referral and reduction in Length of Stay (LoS) even further through this additional investment





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