

# THE RAID MODEL OF LIAISON PSYCHIATRY

Report on the evaluation of four pilot  
services in east London

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## Executive Summary

University College London Partners (UCLP) was commissioned by City and Hackney, Newham, Tower Hamlets and Waltham Forest Clinical Commissioning Groups (CCG) to undertake an evaluation of four liaison psychiatry services, in order to determine whether the introduction of the Rapid Assessment Interface Discharge (RAID) model is contributing to a system wide improvement in care.

This document is comprised of three separate reports focusing on different outcomes that together provide an overall picture of the value provided by the RAID model. The [first report](#) describes a quantitative analysis of bed usage outcomes and potential savings generated from the introduction of RAID. The [second report](#) describes a cohort study that examines the typical activities of the RAID services and pathways through care, and the [final report](#) describes a qualitative analysis of the experiences of patients and carers referred to RAID, as well as the experience and impact on acute hospital staff.

## Key findings

### [Impact on Service Use Outcomes](#)

When outliers were excluded, analysis of the combined overall impact of RAID across the hospitals showed that:

- There is evidence of an overall decrease in length of stay for patients with mental health and drug and alcohol problems since the introduction of RAID. This is largely driven by a reduction in bed usage for non-elective patients, especially for those with dementia, substance misuse and severe mental illness.
- It is estimated that this reduction has in total saved approximately 2833 bed days in the 2014/15 financial year.
- The potential income that could be generated from filling extra bed capacity after the introduction of RAID is estimated to fall between £1,391,040 and £1,699,920.
- According to the data available, the introduction of RAID does not appear to have had any impact on excess bed days for patients with mental health or drug and alcohol problems. It also appears that the percentage of readmissions for mental health and drug and alcohol patients has increased since the introduction of RAID.

### [Patient Groups and Pathways of Care](#)

- There were significant differences in the profile of patients who are referred to RAID from A&E, and those referred from inpatient wards, and this has a direct impact on the clinical workload of the RAID teams.
- RAID clinicians provide a number of interventions that are largely dependent on the mental health diagnosis of the patient, including assessment of risk, cognitive assessment, medication prescription and review, advice and psycho-education to patients and carers, and brief interventions.
- A key role of RAID appears to be referring patients on to appropriate community mental health and drug and alcohol services, as well as arranging voluntarily or involuntary admission to mental health beds for some patients.
- Though overall there were high rates of re-attendance in A&E and readmission to inpatient wards in the follow up period, most of these attendances were not due to mental health or drug and alcohol related reasons. Even when there were mental health related re-attendances, many patients did not require a second referral to RAID, suggesting acute staff were better able to manage these patients on their own.

## Experience of Staff, Patients and Carers

- Overall, the introduction of the RAID services was considered highly valuable to acute hospital staff, and many felt that access to appropriate care had improved for patients with mental health issues, as well as the quality of care delivered.
- Surveys and interviews suggest that most acute staff are satisfied with the quality of the advice and training they receive from RAID, however some felt that formal training was relatively limited to medical professionals, and that more needed to be done to reach nursing staff.
- Feedback from patients and carers suggests that most were satisfied with the care they received, many feeling reassured and supported by RAID clinicians, although many felt the provision of written information from RAID clinicians would be helpful.
- Surveys and interviews with RAID staff suggest that there are concerns about current staffing levels, especially during out-of-hours. Staff also felt that the mix of skills and expertise within the teams could also be improved, with a particular focus on more senior nursing staff, older adult psychiatric expertise and more psychology input.

## Conclusions

Findings from each of the three reports suggests that overall, the implementation of the RAID model of liaison psychiatry has improved access to appropriate care for patients with mental health or drug and alcohol related issues, and may have improved the quality of care they receive. The services also appeared to be highly valued by acute staff, and appear to have had some positive impact on the skills, knowledge and confidence of acute staff to manage these patients.

While there is some evidence that the introduction of RAID has led to decreased length of stay for these patients, these savings are not in line with savings seen in the original Birmingham RAID evaluation. There are several reasons for this. Firstly, the current socio-political climate has resulted in significant cuts to social care services in east London, and without appropriate community and residential services in place it is unrealistic to expect RAID services alone to significantly impact on outcomes such as length of stay and re-attendances and readmissions.

Secondly, as RAID clinicians are only able to see a fraction of patients with mental health or drug and alcohol related issues within the acute hospital, the main impact that RAID can have on outcomes for these patients is through upskilling acute staff through formal and informal training. If outcomes for the RAID services are to be improved, there will need to be a focus on increasing the amount and scope of training provided, both to medical and nursing staff. In order to achieve this, some services may need to rethink their current staffing levels and structure. Providing more senior nursing staff, as well as therapists such as clinical psychologists, in line with the models outlined in recent recommendations (see Mental Health Partnerships, 2014) may facilitate this.

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# 1. Introduction

## 1.1 Background and Context

Several models of liaison psychiatry have been developed to respond to the growing body of evidence showing the high level of mental illness in general hospital populations and the economic burden of comorbid mental and physical health problems on the NHS (Royal College of Psychiatrists, 2005).

It has been reported that about 27% of patients admitted to medical wards have a mental illness fulfilling DSM-IV criteria (Silverstone, 1996). In addition, the Royal College of Psychiatrists have reported that 80% of all hospital bed days are occupied by people with co-morbid physical and mental health problems (2013), with research showing that psychological and psychiatric comorbidity is correlated with longer length of hospital stay (Aoki, Sato & Hosaka, 2004). Furthermore, nearly a third of people with long-term physical conditions have at least one co-morbid mental health problem, which can exacerbate the person's physical condition and may increase the cost of treatment by between 45% and 75% (Foley, 2013).

There is also a significant burden of mental health problems on emergency departments. For example, there are at least 200,000 self-harm presentations to general hospitals in England each year (Hawton et al., 2007). The costs of alcohol related presentations to A&E each year have been estimated at over £645 million (Department of Health, 2008).

## 1.2 The RAID Model of Liaison Psychiatry

The RAID model of liaison psychiatry was established at Birmingham City Hospital in 2009 (Tadros et al., 2013). It is a multidisciplinary service integrated within the general hospital that provides a single point of access available 24 hours a day and open to all patients over 16 with mental health and drug and alcohol problems presenting to acute care.

The service offers a comprehensive range of mental health specialties within one multi-disciplinary team, which provides clinical support and supervision in mental health interventions, alongside formal and informal training for general acute hospital staff. The model emphasises rapid response, with a target time of one hour within which to assess referred patients who present to A&E and 24 hours for seeing referred patients on inpatient wards. This emphasis on prompt assessment and intervention supports diversion and discharge from A&E, and early discharge from inpatient wards, and thereby should reduce costs associated with inpatient admissions.

The Birmingham RAID model was subject to an economic evaluation by the London School of Economics (LSE) and the Centre for Mental Health in 2011, who suggested cost-savings resulting from the implementation of the service fell in the range of £3.4 to £9.5 million per year (Parsonage & Fossey). These cost savings were achieved through reducing length of stay and avoiding admissions and readmissions to hospital wards, resulting in a total saving of 43-65 occupied beds per day (Tadros et al., 2013).

## 1.3 RAID in East London

Between 2013 and 2015, commissioners from City & Hackney, Newham, Tower Hamlets and Waltham Forest CCGs commissioned pilot RAID-style liaison psychiatry services at four hospitals across east London. These hospitals are:

- Homerton University Hospital
- Newham University Hospital
- The Royal London Hospital
- Whipps Cross University Hospital

### 1.3.1 Homerton University Hospital

Homerton University Hospital serves the London borough of City and Hackney, a population of 246,300<sup>1</sup>. It is one of the most deprived boroughs in England, with high levels of unemployment<sup>2</sup>. The rate of emergency mental health admissions is exceptionally high, with one of the busiest A&E departments in London. Older adults occupy a significant proportion of Homerton hospital beds and have high incidences of depression, dementia and delirium.

The Homerton Psychological Medicine (RAID) service was commissioned by City and Hackney CCG in April 2014. Prior to the introduction of RAID, an existing Psychiatric Liaison Service was in place and saw over 2,600 A&E patients in the 2012/13 financial year. However, there was no dedicated whole time consultant led team in place.

### 1.3.2 Newham University Hospital

Newham University Hospital serves the London borough of Newham, the largest population of all inner London boroughs, with a population of around 308,000<sup>3</sup>. Newham is one of the most diverse areas in the country, with more than 70% of people coming from black and ethnic minority communities. The population has grown rapidly due to the extensive level of housing development planned for the borough, over and above natural population growth and migration<sup>4</sup>.

The Newham RAID service was commissioned by Newham CCG in April 2014. Prior to the introduction of RAID, an existing, consultant-led Acute Psychiatric Liaison Service was in place, and saw over 657 patients in A&E in 2012/13. An additional Older People's Liaison Service saw on average 135 referrals from inpatient wards per month for the same time period.

### 1.3.3 The Royal London Hospital

The Royal London Hospital serves the London borough of Tower Hamlets, one of London's smallest but most densely populated Boroughs, with a population of approximately 254,100<sup>5</sup>. Tower Hamlets is a diverse area, with almost 69% of people coming from minority ethnic communities. There are also high levels of socioeconomic deprivation, as Tower Hamlets is the 7th most deprived borough in the country<sup>6</sup>.

In 2014 Tower Hamlets CCG commissioned a RAID service at the Royal London Hospital, which also provides liaison support to the London Chest and Mile End Hospitals. Prior to the introduction of RAID, two separate liaison psychiatry teams existed within the Trust. The Old Age Psychiatric Liaison Team provided support for patients aged over 65 years, or young people with cognitive impairment, admitted to inpatient wards at Mile End, London Chest and Royal London hospitals. In addition, the EMHALS provided a 24/7 service for patients aged between 18 and 65 years, which covered the inpatient wards and emergency department at the Royal London Hospital only.

### 1.3.4 Whipps Cross University Hospital

Whipps Cross University Hospital serves the London borough of Waltham Forest, with a population of 262,566<sup>7</sup>. It is an ethnically diverse area with high levels of socioeconomic deprivation, and unemployment rates among the worst in England. Data also suggests that the rate of serious mental illness is significantly higher in Waltham Forest than the rate in England as a whole<sup>8</sup>.

The Whipps Cross liaison psychiatry (RAID) service was commissioned by Waltham Forest CCG in September 2013. Prior to the introduction of RAID, psychiatric liaison services were limited. The team

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<sup>1</sup> Census 2011

<sup>2</sup> NHS City and Hackney Clinical Commissioning Group Joint Strategic Needs Assessment, 2011/2012

<sup>3</sup> Census 2011

<sup>4</sup> NHS Newham Clinical Commissioning Group Joint Strategic Needs Assessment, 2010

<sup>5</sup> Census 2011

<sup>6</sup> NHS Tower Hamlets Clinical Commissioning Group Mental Health Joint Strategic Needs Assessment, 2013

<sup>7</sup> Census 2011

<sup>8</sup> NHS Waltham Forest Clinical Commissioning Group Adult Mental Health Joint Strategic Needs Assessment, 2014

consisted largely of mental health liaison nurses that worked within the hospital providing support for adult patients between the ages of 18 to 65 who presented with mental health problems, excluding drug and alcohol problems. One nurse provided assessments for older adult clients, but there was no specialised consultant cover for older adult services.

## 1.4 RAID versus 'CORE' Models

Although each of the hospital sites have attempted to introduce a 'RAID-like' model of liaison psychiatry, through increased staffing, greater skill mix and the provision of 24 hour services, there are many differences between each of teams. Table 1 below shows the staffing arrangements for each of the services for the 2015/16 financial year.

As can be seen, the services differ significantly from each other, and from the original RAID team model introduced to Birmingham in 2009. A better way to describe these services is perhaps with the models recommended in recent guidance from Mental Health Partnerships (2014). This report recommends minimum staffing criteria for varying levels of liaison psychiatry services (see Appendix 1). Comparing the east London services with these models, it can be seen that while the Royal London service appears to meet most of the criteria for an 'Enhanced 24' model, the Newham, Homerton and Whipps Cross services appear to meet most of the criteria for the 'Core 24' model.

Although the term 'RAID' clearly does not necessarily accurately describe each of the east London services, for the purposes of this report we will use the term 'RAID' to cover all services, to reflect the initial intentions of commissioners to introduce this style of liaison psychiatry service.

**Table 1. RAID team staffing for 2015/16**

	Homerton <sup>9</sup>	Newham	Royal London	Whipps Cross
<b>Number of Beds</b>	450	420	1510	672
<b>Consultants</b>	2.8	2.5	4.8	2
<b>Other Medical Staff</b>	2	0.8	1	2
<b>Nurses</b>	0 x Band 8	0 x Band 8	1 x Band 8	0 x Band 8
	2 x Band 7	7.2 x Band 7	12 x Band 7	0 x Band 7
	8 x Band 6	5 x Band 6	2x Band 6	14 x Band 6
<b>Other Therapists</b>	1.5	0	2	0
<b>Team/Clinical Services Manager</b>	1	1	1	2
<b>Admin</b>	1	2.5	2.8	2
<b>Total WTE</b>	18.3	19	26.6	14.8
<b>Best 'Core' Model Fit</b>	Core 24	Core 24	Enhanced 24	Core 24

<sup>9</sup> Due to changes in funding throughout the 2015/16 financial year, the staffing at Homerton changed significantly between October 2015 and March 2016, with funding for a number of roles (including consultant psychologist and all 'other therapists') withdrawn, and fewer WTE nursing and managerial positions. The total WTE staff at the end of the 2015/16 financial year is now 13.9.

## 2. Impact on Service Use Outcomes

University College London Partners (UCLP) was commissioned by City and Hackney, Newham, Tower Hamlets and Waltham Forest Clinical Commissioning Groups (CCG) to undertake an evaluation of four liaison psychiatry services, in order to determine whether the introduction of the Rapid Assessment Interface Discharge (RAID) model is contributing to a system wide improvement in care.

This is the first of three reports, which sets out the findings from a quantitative analysis of bed usage data, and describes the overall impact of the implementation of the RAID model on bed usage for patients with mental health and drug and alcohol problems.

The conclusions from this report should be considered in conjunction with the other two reports commissioned for this evaluation:

- The [second report](#) sets out the findings from a cohort study examining common pathways of care through RAID services across the hospital sites.
- The [third report](#) sets out the findings from a qualitative analysis examining patient and carer experiences of the RAID services, as well as the impact of RAID services on the skills, knowledge and experiences of acute hospital staff.

### 2.1 Aim

The aim of the quantitative analysis was to examine the overall impact of implementing the RAID model, by comparing bed usage data- such as length of stay, excess bed days and readmission to inpatient wards- for patients with mental health or drug and alcohol issues, before and after the introduction of RAID services.

### 2.2 Method

The original evaluation of RAID in Birmingham (Tadros et al., 2013) used an approximate string matching method to evaluate the RAID intervention. Although it was originally proposed that we should replicate this method, there were concerns about the significant loss in sample size for the Tadros analysis that has also been raised by other authors (Parsonage & Fossey, 2011). In the Tadros study, the process of matching patients in the pre- and post-RAID time periods led to a very small, and potentially unrepresentative sample.

We considered the feasibility of this method based on data received from the hospitals. This highlighted a number of issues with the nature of the data, and drew attention to the very small post-RAID sample size available within the east London dataset. We therefore concluded that matching patients seen by the RAID teams with pre-RAID controls seen at the same hospitals was not feasible.

We explored alternative methods of patient grouping. In the main analysis, we decided to identify patients admitted to the hospitals by using groups of mental health diagnoses, and explore whether there were changes in outcomes during the period before and after the RAID services were implemented.

Additionally, in order to further understand some of the variation in length of stay and excess bed days across the hospitals in the pre- and post-RAID periods we sought to identify distinct groups of patients beyond mental health diagnosis using latent class methods (LCA). The results of the LCA are presented in appendix 6<sup>10</sup>.

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<sup>10</sup> Limitations of the available data also meant that the LCA approach provided little additional information over that obtained from the diagnostic groups.

### 2.2.1 Data

The data was provided by North East London Commissioning Support Unit (NEL-CSU), and was anonymised to ensure that patient data was not identifiable. Unfortunately, as a data sharing agreement was not in place between NEL-CSU and Waltham Forest, data was only available for Homerton, Newham and Royal London hospitals. The dataset provided by NEL-CSU captured routinely collected data for patients admitted to these three hospital sites between April 2012 and December 2014. This included both elective admissions and emergency admissions. The dataset included all patients over the age of 18 who were admitted to hospital during the study period.

### 2.2.2 Outcome Measures

The key focus of the analysis was the impact on bed use. Three service utilisation measures were used for the analysis:

1. Mean length of hospital stay (LoS)
2. Mean number of excess bed days (Xbds). This is calculated as the number of additional days of an admission for a given health resource group (HRG), over and above the trim point.
3. Number of readmissions within 30 days. An episode of care was coded as a readmission if it occurred within 30 days of the previous discharge.

These outcomes are routinely recorded within the hospital sites, and were included within the data provided by NEL-CSU.

### 2.2.3 Outliers

Following discussions with the RAID teams and with NEL-CSU, it was agreed that we would consider the impact of outliers within the dataset. Outliers were defined as those patients admitted with a LoS over 30 days. Two analyses were conducted; one including the full sample of admitted patients, and one where outliers were excluded. The results of the 'outliers excluded' analysis are presented in the main body of this report, whereas the results of the full sample analysis are shown in appendix 2.<sup>11</sup>

The rationale for this decision is that patients with a LoS greater than 30 days are often affected by external factors outside of hospital control, such as a lack of social support within the community, and therefore become 'stuck' in hospital for longer. If this is the case, it would be difficult to demonstrate the impact of RAID for these patients, as external factors cannot be accounted for.

### 2.2.4 Pre- and Post-RAID Groups

RAID services were initiated at different time points across the three hospitals included in the sample. Each service indicated an initial start date, as well as a later date where they considered themselves to be operating close to full capacity. The intervening period between these times has been used as a transition period in this analysis, to reflect the fact that RAID services are a new development that may take time to be fully established. The analysis therefore did not use data taken from the transition period. The time points taken to reflect 'initial' and 'established' RAID services at each hospital are displayed in Table 2.

**Table 2. Month that initial and established RAID teams were introduced at the hospitals**

	Initial	Established
<b>Homerton</b>	April 2014	July 2014
<b>Newham</b>	February 2014	April 2014
<b>Royal London</b>	April 2014	July 2014

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<sup>11</sup> In comparing the analysis presented in the main body of this report with that in appendix 2, the inclusion of outliers results in greater variability and inconsistency in bed usage outcomes. This unfortunately limits our ability to make conclusions about the potential effect of the RAID teams.

In order to provide a more reliable estimate, it was decided to explore the difference in a 6 month period before the introduction of the RAID teams and the 6 months after the introduction of the established RAID teams. Six months was chosen because it was also the maximum available time of established team data available for Homerton and the Royal London. Outcomes for the initial RAID period were not included, as this was seen as an intermediate stage before the established service was available.

### 2.2.5 Mental Health Disorder Groups

The data provided contained information on each patient’s ICD-10 diagnoses, with space available for up to 12 independent diagnoses to be listed. The ICD-10 diagnostic codes for Mental and Behaviour disorders all begin with F, and therefore any diagnosis starting with F suggested a mental health patient. However, it was found that a large number of patients had F codes relating to the use of tobacco only, and this was not considered a mental health disorder for the purpose of this analysis. Where the only F code diagnosis was associated with tobacco use these patients were excluded from the analysis.

In order to refine the analysis, ICD-10 diagnoses were clustered to form subgroups of mental health patients. We identified, in conjunction with clinical advice, eight groups, displayed in Table 3. In cases where patients had multiple diagnoses that fell in more than one of these groups, such as substance misuse and co-occurring depression, the diagnosis that was recorded first (closest to the primary diagnosis) was used for coding. The two exceptions to this rule were for dementia and severe mental illness, where a diagnosis in either of these categories was considered as the primary diagnosis regardless of the actual position of the ICD code.

**Table 3. Included mental health disorders**

<b>Mental Health Groups</b>	<b>Number of patients</b>	<b>Percent of sample</b>
<b>Dementia</b>	6493	11.07%
<b>Substance Misuse</b>	10352	17.65%
<b>Severe Mental Illness</b>	4415	7.53%
<b>Depression and Anxiety Disorders</b>	13323	22.71%
<b>Delirium</b>	842	1.44%
<b>Eating Disorders</b>	87	0.15%
<b>Ante/Peri-Natal MH Conditions</b>	302	0.51%
<b>Personality Disorders</b>	319	0.54%
<b>No Included MH Diagnosis</b>	22520	38.40%

Over 38% of cases included in the sample did not include a mental health diagnosis that fell into one of these groups, primarily because their listed diagnoses related to tobacco misuse or physical disabilities/conditions only. Some diagnoses occurred very infrequently within the sample. Due to the very low numbers of patients in the eating disorders, ante/perinatal and personality disorder diagnostic groups, these groups were excluded from further analysis in this report.

## 2.3 Analysis by Mental Health Group

For the main analysis we sought to examine the changes in bed utilisation for different groups of mental health patients admitted to inpatient wards, before and after the introduction of RAID services. Although initial analysis was undertaken to compare the effect of RAID at each hospital site, there was considerable variation and inconsistency in the pattern of results which made interpretation difficult (see appendix 5). As splitting the analysis by hospital resulted in much smaller numbers of patients, we

instead decided to include all relevant mental health patients from Homerton, Newham and the Royal London in the main analysis.

### 2.3.1 Length of Stay

We first sought to examine differences in average LoS for patients admitted before and after the introduction of RAID, across all three hospital site.

As shown in figure 1, independent samples t-tests revealed that overall there was a statistically significant decrease in average LoS for mental health patients in the post-RAID period ( $t= 2.19, p= 0.028$ ). This reduction appears to be driven by significant decreases in the average LoS for patients with dementia ( $t= 2.60, p= 0.009$ ), substance misuse ( $t= 2.89, p= 0.004$ ), and severe mental illness ( $t= 1.98, p= 0.047$ ) after the introduction of RAID.

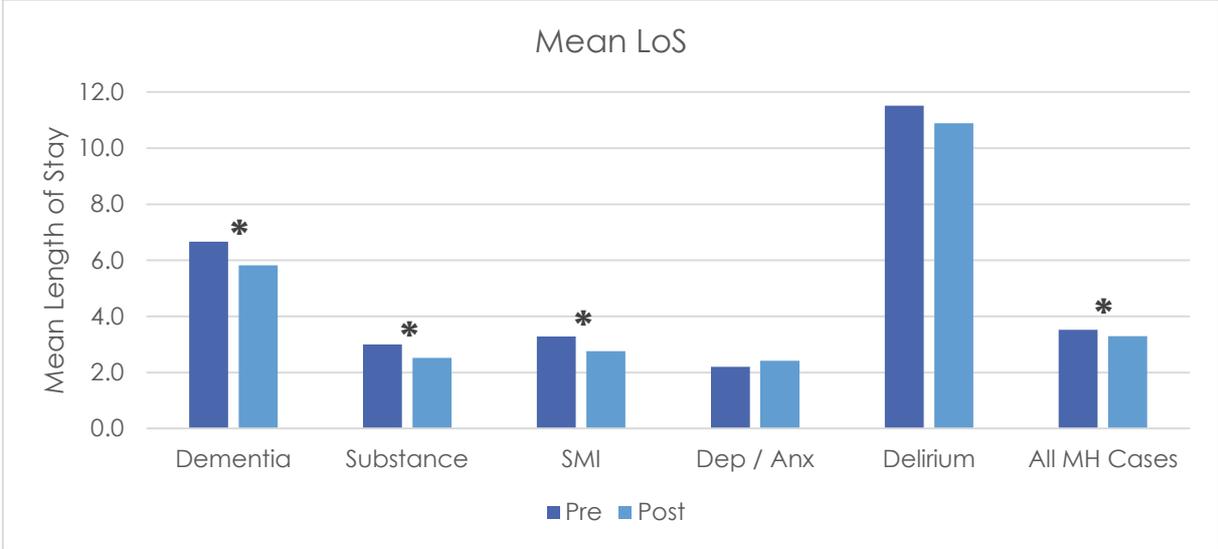


Figure 1. Mean LoS by mental health group and RAID study period (outliers excluded).

### 2.3.2 Excess Bed Days<sup>12</sup>

We then sought to examine differences in average Xbds before and after the introduction of RAID, across all three hospital sites.

As shown in Figure 2, there appears to be an overall trend toward decreased Xbds after the introduction of RAID, however independent samples t-tests reveal that this is not statistically significant. This trend appears to be driven by decreases in Xbds for patients with dementia, substance misuse and severe mental illness, although again these did not reach statistical significance.

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<sup>12</sup> At the request of NEL-CSU an additional analysis was conducted to examine Xbds, which only included cases where at least one Xbd was recorded. This analysis can be found in appendix 3. This analysis produced the same pattern of results as seen in the main analysis, and so conclusions drawn about the impact of RAID on Xbds would be the same.

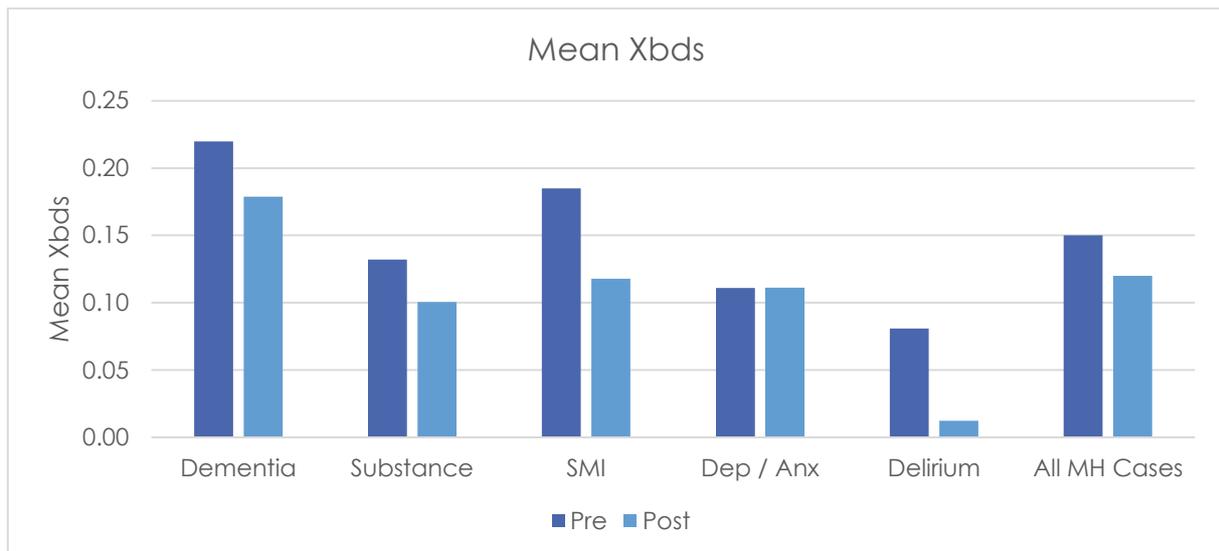


Figure 2. Mean Xbds by mental health group and RAID study period (outliers excluded).

### 2.3.3 Readmissions

We then sought to examine differences in the amount of readmissions to inpatient wards, before and after the introduction of RAID. We counted the number of episodes of care that were readmissions and compared this to total number of mental health admissions in each time period, to provide a percentage of readmissions episodes in each RAID study period. Figure 3 shows the percentage of cases that were readmissions within 30 days for each mental health group, before and after the introduction of RAID.

To explore for any statistically significant differences in the percentage of readmissions, two-proportion Z-tests were performed. This analysis showed that the percentage readmissions significantly increased for all mental health cases ( $z=-5.649$ ,  $p<0.000$ ), substance misuse ( $z=-6.13$ ,  $p<0.000$ ) and severe mental illness ( $z=-2.4916$ ,  $p=0.013$ ) in the post-RAID period.

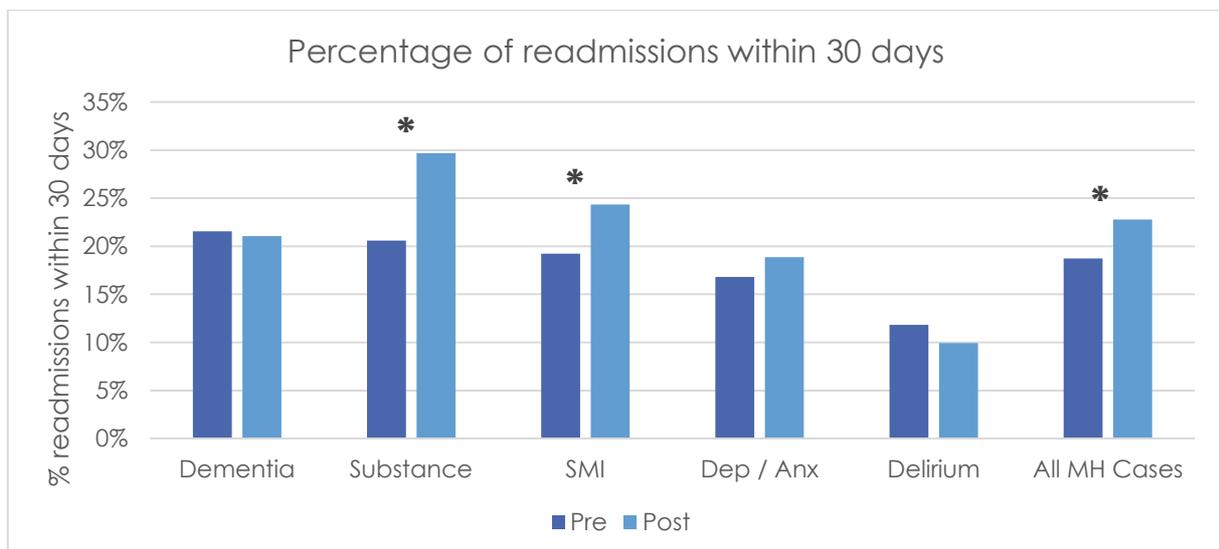


Figure 3. Percentage of episodes of care that were readmissions within 30 days by mental health group and RAID study period.

## 2.4 Analysis by Admission Type and Mental Health Group

In the next stage of the analysis we explored whether there were differences in the pattern of outcomes for patients who had an elective admission, compared to those who were admitted as an emergency, where outliers were excluded. In order to do this, the previous analysis was replicated, splitting patients into 'elective' and 'non-elective' admissions using the 'point of delivery' variable in the dataset.

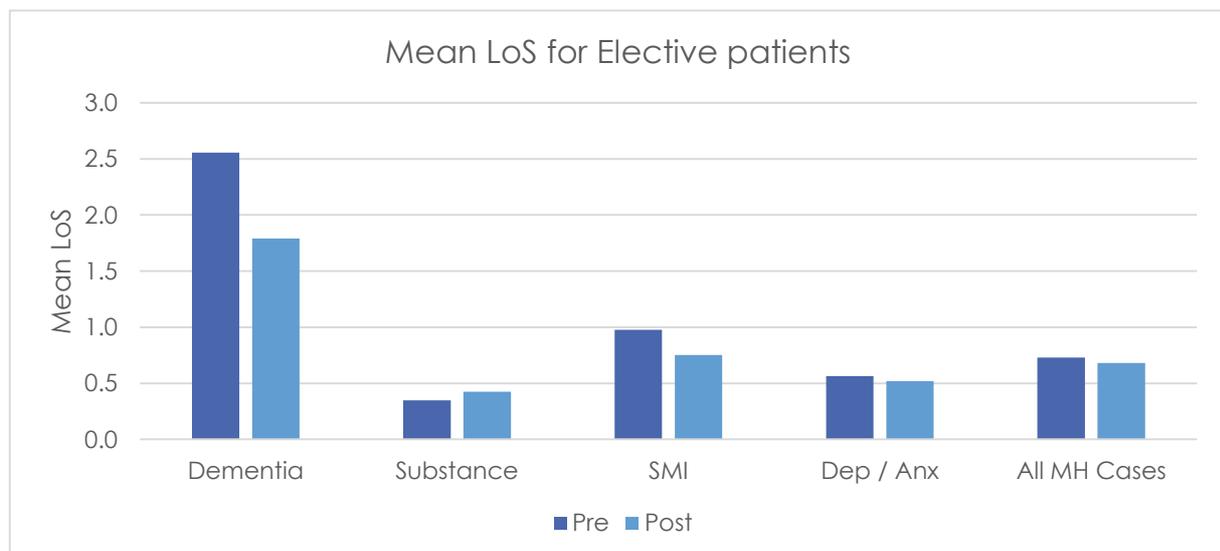
Table 4 displays the number of elective and non-elective admissions in each mental health group in both the pre- and post-RAID periods, across all three hospital sites. This shows that there were a higher number of mental health admissions, both elective and non-elective, in the post-RAID period, compared to the pre-RAID period. There were also a lot more non-elective cases than there were elective cases in both time periods. The very small numbers of elective admissions where a mental health problem has been diagnosed suggests that the bulk of the work for the RAID teams lies with mental health and drug and alcohol patients who are admitted as an emergency.

**Table 4. Frequency of elective and non-elective patients by mental health group (outliers excluded)**

Mental Health Group	Elective		Non-Elective	
	Pre-RAID	Post-RAID	Pre-RAID	Post-RAID
<b>Dementia</b>	70	115	931	992
<b>Substance</b>	290	476	1,223	1,452
<b>Severe Mental Illness</b>	180	165	599	633
<b>Depression / Anxiety</b>	859	831	1,509	1,471
<b>All MH Cases</b>	1,415	1,607	4,532	4,832

### 2.4.1 Elective admissions

As might be expected, the mean LoS was much lower for elective patients than non-elective patients within both RAID study periods. As shown in figure 4, there appears to be an overall decrease in the mean LoS for mental health patients in the post-RAID period. There also appears to be a slight increase in average LoS for patients with substance misuse, although independent samples t-tests revealed that none of these trends were statistically significant.



*Figure 4. Mean LoS for elective patients by mental health group and RAID study period (outliers excluded).*

As shown in figure 5, there appears to be more variation in average number of Xbds for each mental health group. For dementia patients, Xbds in the post-RAID period seem much higher compared to the pre-RAID period. For the other mental health groups, there appears to be decreases in Xbds in the post-RAID period, although again none of these trends were statistically significant.

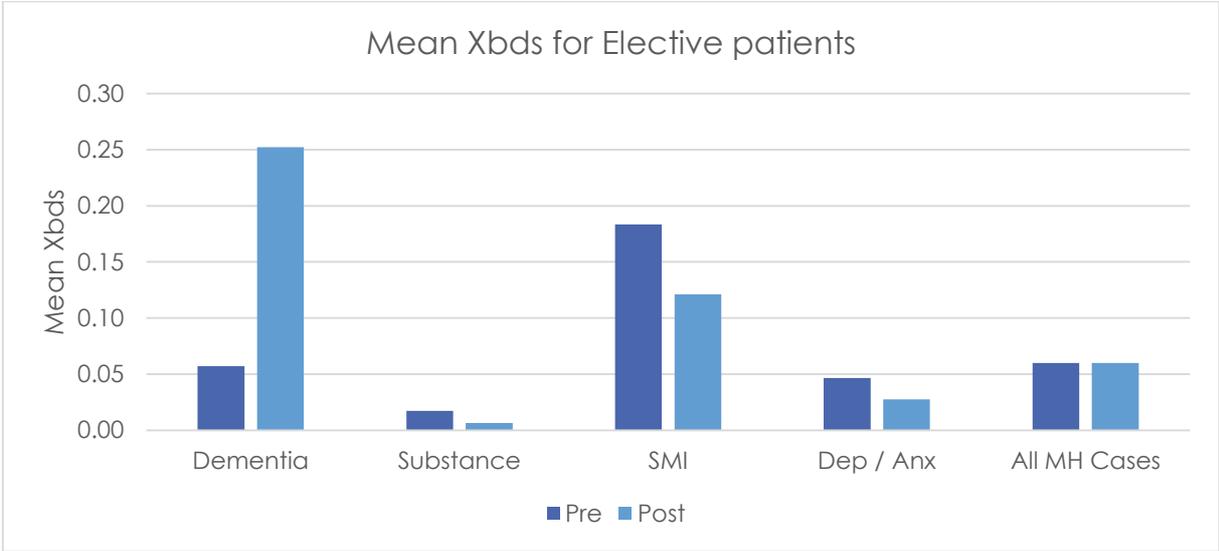


Figure 5. Mean Xbds for elective patients by mental health group and RAID study period (outliers excluded).

It should be noted that the very low number of elective admissions in both the pre- and post-RAID periods means that any statistical analysis is of limited value, and indeed there were no statistically significant differences found.

2.4.2 Non-Elective admissions

As shown in figure 6, overall there was a trend towards decrease LoS for all mental health cases in the post-RAID period, but this did not reach statistical significance. Average LoS significantly decreased for patients with dementia ( $t=1.996, p=0.046$ ), substance misuse ( $t=2.106, p=0.035$ ) and severe mental illness ( $t=2.196, p=0.028$ ) in the post-RAID period. There was also statistically significant increase in mean LoS for depression and anxiety sufferers ( $t=-1.971, p=0.049$ ).

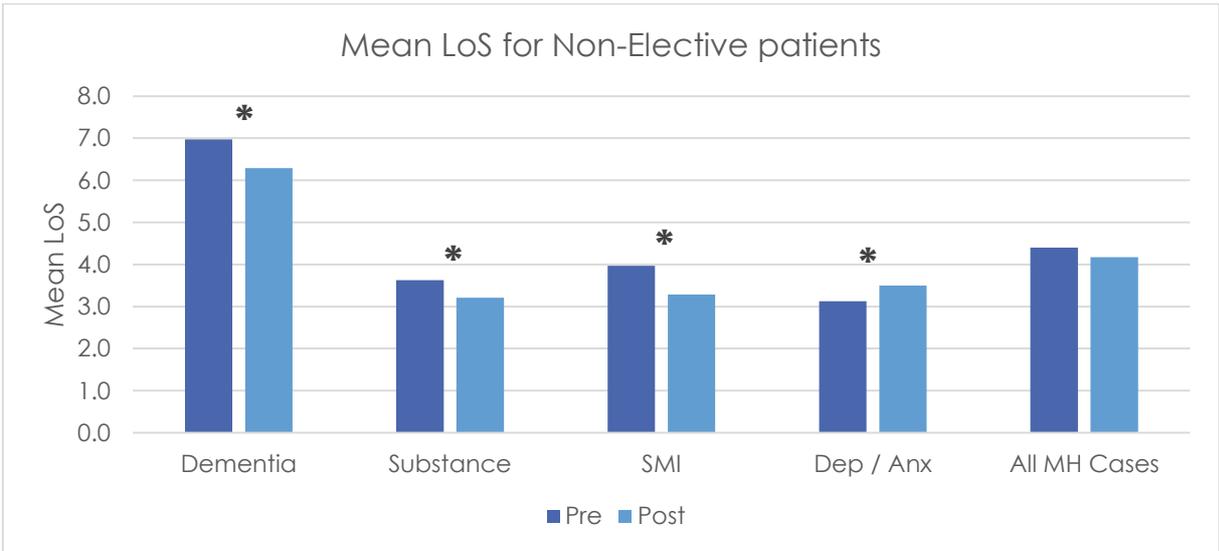


Figure 6. Mean LoS for non-elective patients by mental health group and RAID study period (outliers excluded).

As shown in Figure 7, there appears to be an overall decrease in the average number of Xbds for mental health patients, however this was not found to be statistically significant.

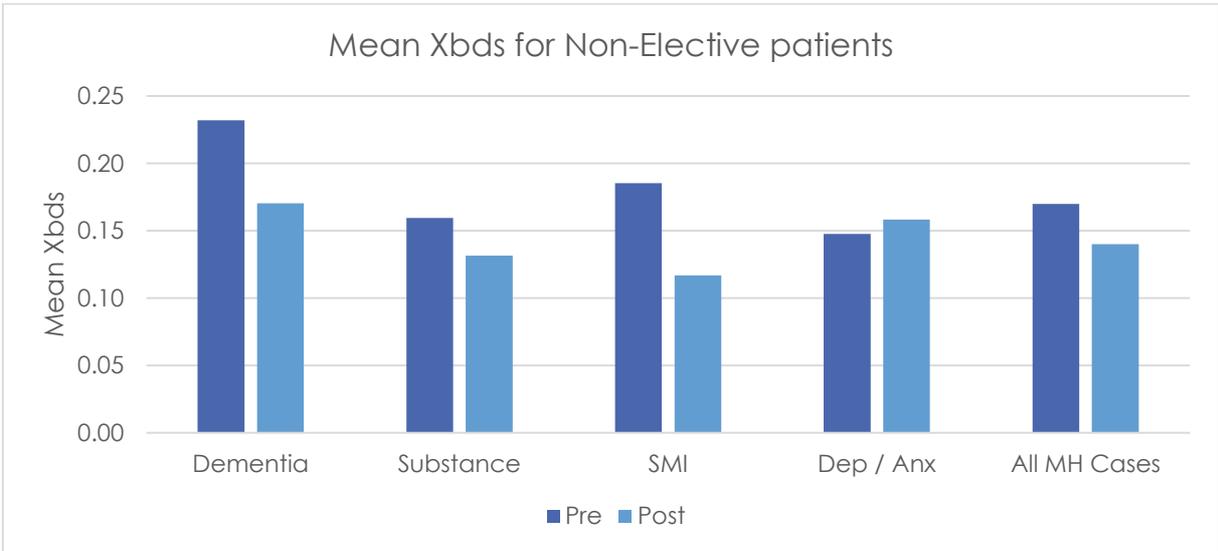


Figure 7. Mean Xbds for non-elective patients by mental health group and RAID study period (outliers excluded).

### 2.5 Overall Effect of RAID

Examining the overall effect of implementing the RAID model across all three hospital sites, there appears to have been a significant decrease in the average length of stay for patients admitted with a mental health diagnosis, when outliers are excluded. When outliers are excluded from the analysis, it was found that the average length of stay decreased by 6.25% after the introduction of RAID.

It is important to consider this within the general context of bed usage within Barts Health NHS Trust and Homerton University Hospital NHS Foundation Trust. Hospital episode statistic data<sup>13</sup> shows that between 2013/14 and 2014/15 financial years, the average length of stay for all admitted patients within Barts Health increased by 4.7%. At Homerton University Hospital, the average length of stay for all admitted patients increased by 2.8% within the same period. Given this context, the decrease in bed usage for mental health patients over this period lends confidence to the idea that the RAID model has had a positive impact.

Looking at the average number of excess bed days, when outliers are removed the number of excess bed days for each mental health group is extremely small both before and after the introduction of RAID. The lack of variance in excess bed days once outliers are removed may account for the fact that the introduction of RAID appears to have little impact on this outcome.<sup>14</sup>

Turning to the number of readmissions to inpatient wards within 30 days of discharge, overall there appeared to be a very high proportion of readmissions in both the pre- and post-RAID periods. For

<sup>13</sup>

<http://www.hscic.gov.uk/searchcatalogue?productid=19420&q=title%3a%22Hospital+Episode+Statistics%2c+Admitted+patient+care+-+England%22&sort=Relevance&size=10&page=1#top>

<sup>14</sup> It is interesting to note that when the full sample of patients with mental health diagnoses was included (see appendix 2) there was a significant increase in excess bed days overall after the introduction of RAID. As previously suggested, this could in part be a results of a lack of social support within the community, with some patients admitted to wards potentially becoming ‘stuck’ for longer.

context, Hospital Episode Statistics show that in the 2011/12 financial year the overall proportion of readmissions within 30 days of discharge across England was 11.5%.<sup>15</sup> However, research has shown that the overall proportion of readmissions for high risk patients - which could include those with chronic illnesses such as dementia, older adults and those from deprived areas- is between 47.7% and 88.7% (Billings et al., 2012).

From the results of the analysis there appears to be a significant increase in readmissions for mental health patients after the introduction of RAID. Research shows that there are a number of factors that affect readmissions rates within acute hospitals. We would anticipate that the introduction of RAID-style teams could have a positive impact on certain factors such as providing psycho-education to patients while in hospital, discharge planning and providing follow-up appointments (Vigod et al., 2013). However, some factors that significantly impact the likelihood of readmission are largely out of the control of liaison psychiatry, including social factors such as homelessness or residential care (Lorine et al., 2015), and a lack of effective services within the community (Zhang, Harvey & Andrew, 2011). In order to fully understand the increase in readmissions seen in the current analysis we would need to take into account broader changes to social care and population health within the boroughs of City and Hackney, Newham and Tower Hamlets.

## 2.6 Effect of RAID for Different Mental Health Groups

As part of this analysis we sought to examine the differential effect of the introduction of RAID for groups of mental health patients. When outliers are excluded from the analysis, results show an overall reduction in bed usage for patients with dementia, substance misuse and serious mental illness across the hospitals. There appears to be a trend towards increased bed usage for patients with depression and anxiety. However, it is possible that this could reflect an increased recognition and clinical coding of mood and anxiety disorders on the part of general hospital staff, which would be expected after the introduction of a RAID team that provides advice and training. Depressed and anxious patients who did not have a clinical diagnosis, but who may well have had a long length of stay, would not have been included in the pre- RAID dataset. If coding has increased after the introduction of RAID, then these patients would become part of the post-RAID mental health group and could potentially inflate the average length of stay.

In fact, the introduction of a national CQUIN in 2014/15 to improve diagnosis and clinical coding in mental health means patients with a variety of mental health conditions, who are likely to have a longer length of stay, would be included in the post-RAID sample, where they may not have been captured in the pre-RAID sample. As such, the average length of stay for the post-RAID period could be inflated for many mental health groups. This should be taken into context when examining the impact of RAID, as the magnitude of any positive effects could potentially be weakened.

Looking at the analysis of elective and non-elective admissions provides further clarity about the impact of RAID services. The decrease in the average length of stay for patients in these mental health groups is specifically being driven by a reduction in bed usage for patients admitted as an emergency to the hospitals after the introduction of RAID, rather than those who had an elective admission.

This is perhaps unsurprising, given that patients admitted through A&E are likely to be more unwell than those admitted electively, and therefore benefit more from RAID input. Indeed, given that patients electively admitted had on average a shorter length of stay and less excess bed days than those admitted as an emergency, it is unlikely that the introduction of the RAID model would have much of an impact for these patients.

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<sup>15</sup> <http://www.hscic.gov.uk/catalogue/PUB12751/hes-emer-read-hosp-28-days-disc-2002-2012-rep.pdf>

## 2.7 Savings Associated with RAID

The final stage of the analysis was to examine any potential for savings associated with the introduction of the RAID teams in east London. Potential savings were quantified both in terms of the number of bed days saved after the introduction of RAID, and the potential income for the providers generated from backfilling saved bed days.

### 2.7.1 Bed Days Saved

Table 5 shows how the number of bed days saved were calculated. First, the change in average LoS between the pre- and post-RAID periods was multiplied by the total number of mental health admissions in the post-RAID period. As the post-RAID period in this analysis only covered a 6 month period, the number of bed days saved in this time was multiplied by 2 in order to obtain the likely number of bed days saved in the 12 month post-RAID period.

**Table 5. Number of bed days saved in 6 month and 12 month post-RAID period across three hospital sites**

	Pre-RAID period (6 months)		Post-RAID period (6 months)		Pre-Post RAID difference	Bed days saved (6 month)	Bed days saved (12 month)
	n	Mean LoS	n	Mean LoS	Change in Mean LoS		
<b>All MH Cases (outliers excluded)</b>	5,947	3.52	6,439	3.30	0.22	1416.6	2833.2

The results suggest that reductions in bed usage for mental health patients after the introduction of RAID has in total saved approximately 2833 bed days in the 2014/15 financial year, across all hospital sites.

### 2.7.2 Potential for Generating Income

The number of bed days saved can also be expressed in terms of potential income generated for the providers. In order to roughly estimate the potential income generated by backfilling the extra bed days, the extra capacity created by the bed days saved in the 12 month post-RAID period was converted into the number of freed up admissions or 'spells'.

In order to do this, the number of saved bed days in the 12 month post-RAID period was divided by the average LoS for all admissions within that time. The LoS for all admissions is used, rather than for just those with a mental health problem, because it cannot be assumed that any extra capacity will be filled with patients with a mental health or drug and alcohol diagnosis.

It is important to note that our analysis does not differentiate bed day savings that are directly attributable to Barts Health NHS Trust and Homerton University Hospital NHS Foundation Trust. In fact, Hospital Episode Statistics show that the average LoS for admissions within each of these Trusts varies significantly:

- The average LoS for all admissions in 2014/15 for Barts Health NHS Trust was 4.4 days.
- The average LoS for all admissions in 2014/15 for Homerton University Hospital NHS Foundation Trust was 3.6 days.

As Table 6 shows, these two figures were used to calculate a range for potential income generated for providers.

To calculate this, the number of spells saved was multiplied by the national average cost of a non-elective admission (spell)<sup>16</sup>. Prices for a non-elective admission were chosen because Hospital Episode Statistics show that emergency admissions account for the highest proportion of all admissions within both Barts Health NHS Trust (44% of admissions) and Homerton University Hospital NHS Foundation Trust (33% of admissions). It is therefore more likely that any extra capacity created after the introduction of RAID would be filled by patients admitted as an emergency.

**Table 6. Range for potential income generated through backfill of saved bed days**

Number of Saved Days	Average LoS for All Admissions	Number of Admissions (Spells) Saved	National Average Cost of Non-elective Admission	Potential Income Generated
2,833	4.4	644	£2,160	£1,391,040
2,833	3.6	787	£2,160	£1,699,920

This analysis shows that with a fairly crude calculation, it is possible to show that income could be generated from the reduction in average LoS for patients with mental health and drug and alcohol problems after the introduction of RAID, assuming all extra bed availability is backfilled.

The potential income generated from extra bed capacity after the introduction of RAID across all three hospital sites is estimated to fall between £1,391,040 and £1,699,920. It is important to note that this estimate captures the combined potential income for Barts Health NHS Trust and Homerton University Hospital NHS Foundation Trust. It is not possible to conclude from this analysis the proportional income generated for each individual hospital site. Indeed, it is likely that the introduction of RAID team in some of those hospitals had led to greater potential for income than others, due to the fact that some hospitals had a much higher number of mental health admissions in the post-RAID period than others.

## 2.8 Discussion

This analysis has provided evidence of decreased bed usage for some groups of mental health patients since the introduction of RAID in east London, resulting in bed day savings and potentially generating income to providers through increased bed availability. Whether these changes are directly attributable to the RAID team's presence, or if other external factors have influenced these results is less clear.

The introduction of the RAID model could have had a direct role in reducing bed usage for mental health patients. The RAID teams may have accomplished this through providing support for general hospital staff by direct assessment of mental health patients, providing psychological care to complement and enhance physical care and recovery, and securing better transitions to community mental health services and faster transfers to mental health beds where needed.

The reduction in bed usage could also be indirectly attributable to the RAID team's presence, as they are able to provide training and advice to medical staff, increasing their confidence in identifying and managing comorbid physical and mental health conditions themselves. As previously mentioned the introduction of RAID teams may have also brought more focus to the presence of mental health and drug and alcohol problems within the general hospital, which could have resulted in improvements in diagnostic coding.

Indeed, given that the RAID teams are only able to directly see a fraction of mental health and drug and alcohol patients within the general hospital, it is likely that any impact on bed usage will be an indirect

<sup>16</sup> Department of Health reference costs for 2013/14 financial year were used: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/380322/01\\_Final\\_2013-14\\_Reference\\_Costs\\_publication\\_v2.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/380322/01_Final_2013-14_Reference_Costs_publication_v2.pdf)

effect of up-skilling general hospital staff. This would fit with the objectives of the RAID model. In fact, in the Birmingham evaluation, the introduction of the RAID team led to a greater reduction in length of stay for those in the RAID-influence group, who were not directly seen, than for those who were seen by the team (Tadros et al., 2013).

Yet there are a number of external factors that should be considered when interpreting the findings of this analysis. Service use outcomes used in the analysis may have been affected by wider environmental variables, such as changes in other aspects of hospital practices during the post-RAID period. The LSE evaluation of the Birmingham RAID service (Parsonage & Fossey, 2011) highlighted the possibility that differences in outcomes could have been caused by other changes in the hospital or health service that occurred during the course of the study.

In the Tadros evaluation, additional social worker capacity and expansion of social care to provide home care packages may have facilitated earlier discharge from hospital for certain groups of patients, therefore decreasing length of stay (Parsonage & Fossey, 2011). This highlights the fact that without appropriate community based services and pathways of onward referral, it would be unrealistic to expect RAID services to positively impact outcomes.

Similarly, service utilisation outcomes may have been affected by changes in the number of available mental health beds within each area. For instance, a decrease in availability would inhibit transfers of patients with complex mental health needs, with acute hospital beds becoming 'blocked'. Additionally, changes in national policy or education could potentially exert upwards pressure on the use of acute in-patient beds for patients with mental health problems. In combination, these external factors are likely to be larger drivers of bed usage within acute hospitals than anything RAID services could provide alone.

It should also be noted that the conclusions drawn from this analysis are limited by a reliance on routinely collected data from each of the hospital sites, in which the accuracy of clinical coding may be poor, especially for mental health and drug and alcohol diagnoses. In fact, through discussions with each of the RAID teams concerns were raised over the low frequency of certain mental health diagnoses in the sample. Specifically, it was felt that the low number of patients with a diagnosis of delirium, self-harm or personality disorder in the current data did not reflect clinical practice. It is therefore unlikely that the data accurately captures bed usage data for all patients with mental health and drug and alcohol problems in the pre- and post-RAID periods.

Finally, while length of stay, excess bed days and readmissions were the only outcomes used in this analysis, they are not the only outcomes of import to clinical and cost-effectiveness. For instance, a slightly longer time spent assessing a patient in hospital, making onward referrals or setting up appropriate packages of care within the community could reduce the need for re-attendances to A&E in the future. This analysis relied exclusively on data from inpatient admissions at each of the hospitals. However, a large proportion of the work conducted by RAID teams occurs in A&E, where assessment of patients and consultation with general hospital staff may enable the teams to prevent unnecessary admissions to inpatient wards, facilitate swift discharge and appropriate referrals to community mental health and drug and alcohol services. The findings of this report therefore only capture a fraction of the potential impact of implementing the RAID model. We would therefore recommend that other outcomes are taken into consideration when decisions are made regarding the clinical and cost effectiveness of RAID services.

## 3. Patient Groups and Pathways of Care

University College London Partners (UCLP) was commissioned by City and Hackney, Newham, Tower Hamlets and Waltham Forest Clinical Commissioning Groups (CCG) to undertake an evaluation of four liaison psychiatry services, in order to determine whether the introduction of the Rapid Assessment Interface Discharge (RAID) model is contributing to a system wide improvement in care.

This is the second of three reports, which sets out the findings from a cohort study examining common pathways of care through RAID services across the hospital sites.

The conclusions from this report should be considered in conjunction with the other two reports commissioned for this evaluation:

- The first report sets out the findings from a quantitative analysis of bed usage data, and describes the overall impact of the implementation of the RAID model on bed usage for patients with mental health and drug and alcohol problems.
- The third report sets out the findings from a qualitative analysis examining patient and carer experiences of the RAID services, as well as the impact of RAID services on the skills, knowledge and experiences of acute hospital staff.

### 3.1 Aim

The aim of the cohort study was to examine the role of RAID services in each patient's journey through the acute hospital and disposal, as well as their potential impact on longer term outcomes after discharge, with the intention of establishing common pathways of care for different groups of patients seen by the RAID teams.

The study characterises the nature of the work conducted by the RAID teams, with a focus on describing the clinical features of groups or 'cohorts' of patients that are frequently referred to the RAID teams and the reasons that acute staff give for these referrals. The study also categorises the type of interventions delivered by the RAID teams for each of these cohorts.

### 3.2 Method

We carried out a retrospective case-note review of electronic records for patients referred to the RAID teams across the four hospitals in September 2015. For each team, we identified the first 50 patients consecutively referred from A&E, and the first 50 patients consecutively referred from an inpatient ward (including those referred from the Clinical Decision Unit or Acute Assessment Unit). Data was therefore collected for a total of 400 patients across the hospital sites.

The following details were collected for each patient:

- *Demographics*: age; gender; ethnicity
- *Clinical characteristics*: reason for referral to RAID; mental health diagnosis; physical health diagnosis; whether the patient had self-harmed; whether the patient was already known to mental health or drug and alcohol services
- *RAID intervention*: time taken for RAID to respond to referral; number of face-to-face contacts with RAID; type of interventions provided; whether the Mental Health Act was employed
- *Disposal*: destination on discharge from RAID; length of stay for patients admitted to an acute bed
- *Onward referral*: whether RAID made an onward referral to community mental health or drug and alcohol services
- *Follow up*: number of attendances in A&E (that did not result in admission) in the 3 months since first referred to RAID, the reason for these attendances and whether they resulted in referral to RAID; number of emergency admissions in the 3 months since referral to RAID, and whether these admissions resulted in referral to RAID; whether they frequently attended (5 or more attendances/emergency admissions) in the follow up period.

### 3.2.1 Reason for Referral

The reasons given by acute staff for referral to RAID were grouped together to form 14 broad categories:

- Behavioural Assessment/Management
- Assessment of Cognitive Function
- Confusion
- Depression/Anxiety Symptoms
- Known Mental Health Disorder
- Medically Unexplained Symptoms
- Medication Prescription/Management
- Mental Health Act Request
- Non-Compliance/Refusing Treatment
- Psychotic Symptoms
- Self-Harm (Actual)
- Substance Misuse
- Self-Harm/Suicidal Ideation
- Unclear

For many patients there was more than one reason for referral provided, and as such these categories were not mutually exclusive. Each referral could be categorised into a maximum of two of the above groups.

### 3.2.2 RAID Interventions

Six distinct categories were used to describe the types of interventions provided by the RAID teams, as shown in table 7. The basis of these categories was the typology developed by Guthrie and colleagues (2015), which we modified to best fit the range of interventions indicated within our sample. For many patients RAID provided more than one intervention, and as such the categories were not mutually exclusive.

**Table 7. Description of RAID interventions**

RAID Intervention	Description
<b>Assessment</b>	Psychosocial assessment, mental state examination, risk assessment and/or assessment of cognitive function
<b>Advice and Psycho-Education</b>	Verbal or written advice or psycho-education provided to patients and/or carers about common psychological problems and potential lifestyle changes
<b>Assessment of Mental Capacity</b>	Assessment of capacity to consent to a therapeutic procedure or post-discharge placement, or ability to self-discharge
<b>Medication Treatment/Management</b>	Starting or continuing treatment with psychotropic medication, or stopping, restarting, switching or adjusting medication
<b>Discharge and Transfer Planning</b>	Discussion with patients and/or carers about post-discharge support options, living arrangements, or voluntary transfer/admission to a mental health bed
<b>Brief Intervention</b>	Treatment of patients' mental health, substance misuse or social issues using either a brief psychological intervention, brief alcohol intervention or social worker intervention

### 3.2.3 Mental Health Diagnosis Categories

Overall there was a range of ICD-10 psychiatric diagnoses included in the data, which were grouped together to form ten mental health diagnostic categories:

- Anxiety/Stress Related Disorders
- Bipolar Affective Disorder
- Delirium
- Dementia/Cognitive Impairment
- Depression
- Personality Disorder
- Schizophrenia/Schizotypal/Delusional Disorders
- Substance Abuse
- Other
- No Current Mental Health Disorder

These categories were not mutually exclusive, and each patient could be categorised into a maximum of two of these groups.

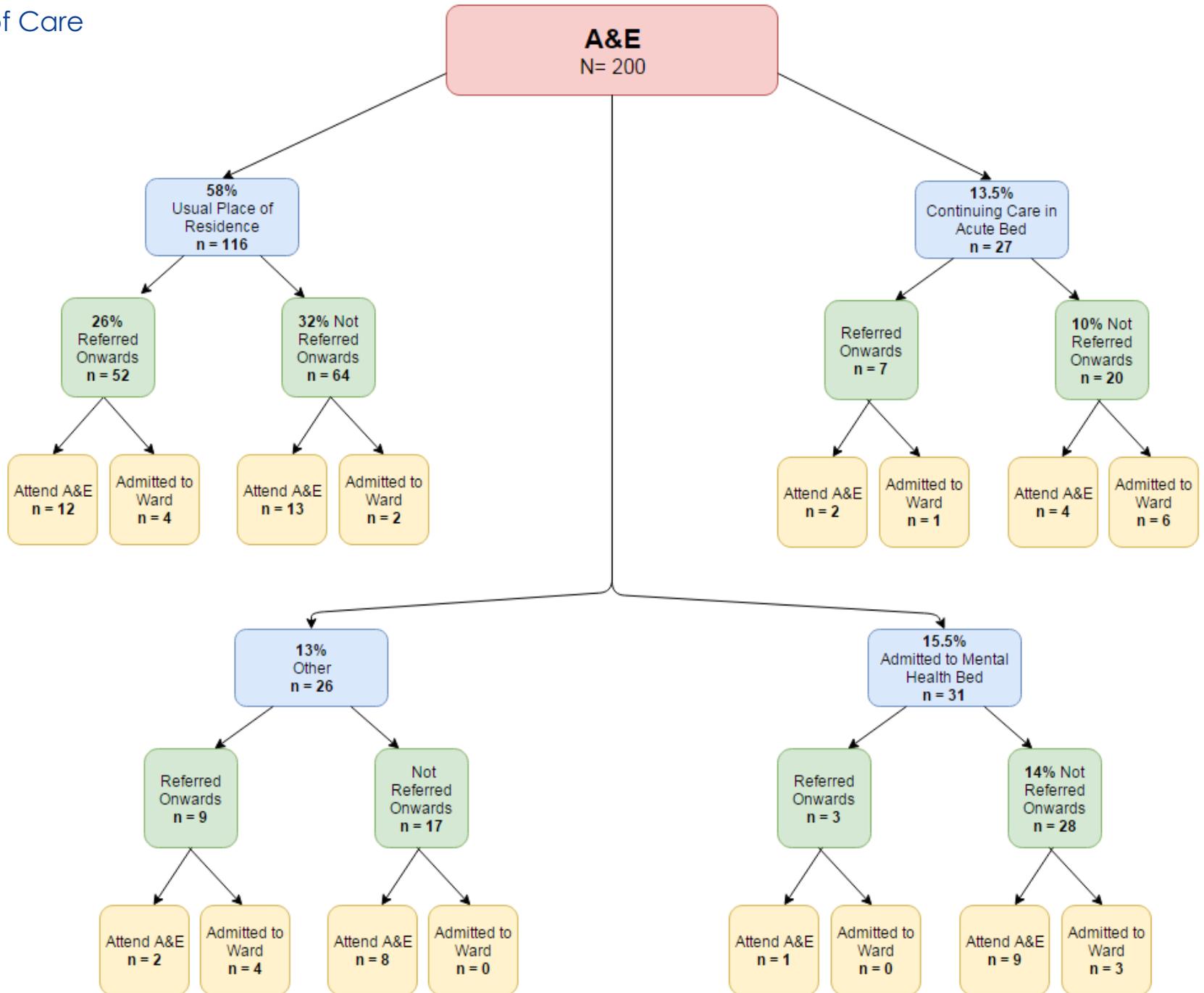
### 3.3 Pathways of Care

RAID Intervention

Discharge Destination

Onward Referrals

3 Month Follow Up

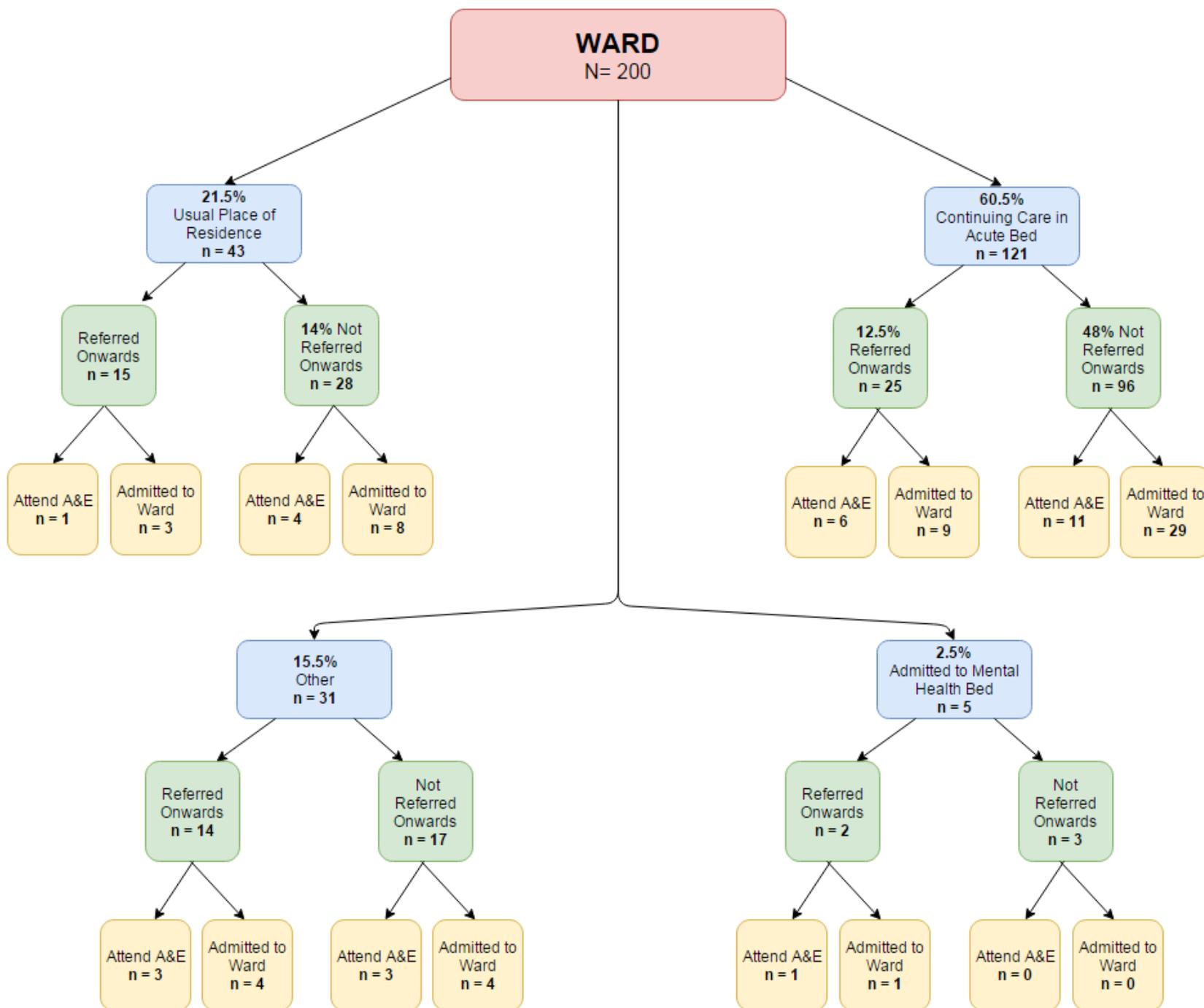


RAID Intervention

Discharge Destination

Onward Referrals

3 Month Follow Up



Summary statistics for patients referred from A&E and patients referred from inpatient wards are provided in table 8 below. Some of the key features and differences between these two cohort groups will now be described and compared.

### 3.3.1 A&E Cohort

Compared to patients referred to RAID from inpatient wards, patients referred from A&E appeared to be a more complex and higher risk group. They were typically younger, had much higher levels of self-harm, were more likely to be homeless or live in sheltered accommodation, and had higher rates of serious mental illness. Unsurprisingly, more patients in this group were already known to community mental health or drug and alcohol services.

Actual self-harm or thoughts of self-harm or suicide accounted for the majority of referrals from patients in A&E (50.5%).

RAID was able to see most patients within the target response time of one hour. The fast-paced nature of the RAID teams' work in A&E meant that most patients were seen by RAID once, and the total number of face-to-face contacts for this group was 253. While most patients received an assessment, and some received advice and psycho-education, a large part of RAID's work with this group appears to be in arranging admission to mental health beds, of referring patients on to appropriate community mental health or drug and alcohol services.

The rate of re-attendance in A&E is slightly lower for this group compared with those referred from the ward. However, those who did re-attend in the follow up period were more likely to re-attend for mental health or drug and alcohol related reasons (54.5% of all A&E re-attendances). A high proportion of those re-attending due to mental health reasons were subsequently referred to RAID for a second time.

### 3.3.2 Ward Cohort

Compared to patients referred to RAID from A&E, patients referred from inpatient wards appeared to be a more physically unwell group, with comorbid mental health issues that were often age related. They were typically older, with much lower rates of self-harm or other risk factors, with unsurprisingly high rates of dementia and delirium. Far fewer patients were already known to community mental health or drug and alcohol services.

Requests for assessment of cognitive function, or assessment of depression and anxiety symptoms accounted for the majority of referrals from patients on the wards.

RAID was able to see almost all patients within the target response time of 24 hours. Target response times were successfully met for more patients on the wards than for those referred from A&E. However, this is unsurprising given the limited timeframe to see patients in A&E. The nature of the RAID teams' work on inpatient wards meant that many patients were seen on more than one occasion, and the total number of face-to-face contacts for this group was 456. While almost all patients received an assessment, RAID was also able to provide more time-intensive interventions for many patients, including medication treatment and management, delivering brief interventions and assisting with discharge and transfer planning. Fewer patients in this group were referred on to community mental health or drug and alcohol services, which may reflect the nature of mental health issues for these patients, or could suggest that intervention provided by RAID while the patients were in hospital eliminated the need for further intervention for many cases.

The rate of re-attendance in A&E is relatively high for this group, and most of those who did re-attend in the follow up period were subsequently re-admitted to an acute bed. This is unsurprising given that this group of patients are older and more physically unwell. There does appear to be a sub-group of patients who returned to A&E in the follow up period without being admitted, and half of these attendances were due to mental health or drug and alcohol related issues (50.6%). Interestingly, very few of these mental health related re-attendances resulted in referral to RAID for a second time.

**Table 8. Summary statistics for patients referred to RAID from A&E and from wards**

	Referred from A&E (n= 200)	Referred from Ward (n= 200)	
<b>Age</b>	Median= 36	Median= 73.5	
<b>Gender</b>	47.5% Female	50.5% Female	
<b>Ethnicity</b>	52.5% White	55% White	
<b>Known to Services</b>	41.5%	23%	
<b>Risk Factors</b>	<ul style="list-style-type: none"> <li>• 8% Homeless</li> <li>• 6% Sheltered/Supported accommodation</li> <li>• 11% brought in by police/section 136</li> </ul>	4% Homeless	
<b>Physical Health</b>	79.5% No physical health problem	<ul style="list-style-type: none"> <li>• 54.5% One physical health problem</li> <li>• 29.5% Multiple physical health problems</li> </ul>	
<b>Reason for Referral</b>	<ul style="list-style-type: none"> <li>• 56 (28%) Self-harm (actual)</li> <li>• 45 (22.5%) Self-harm/Suicidal ideation</li> <li>• 28 (14%) Substance misuse</li> <li>• 22 (11%) Psychotic symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• 47 (23.5%) Depression/Anxiety symptoms</li> <li>• 46 (23%) Assessment of cognitive function</li> <li>• 27 (13.5%) Substance misuse</li> <li>• 19 (9.5%) Known mental health disorder</li> </ul>	
<b>Mental Health Diagnosis</b>	<ul style="list-style-type: none"> <li>• 63 (31.5%) Depression</li> <li>• 61 (30.5%) Substance Abuse</li> <li>• 42 (21%) Schizophrenia/Schizotypal/Delusional Disorder</li> <li>• 33 (16.5%) Personality Disorder</li> </ul>	<ul style="list-style-type: none"> <li>• 67 (33.5%) Dementia</li> <li>• 38 (19%) Substance Abuse</li> <li>• 33 (16.5%) Depression</li> <li>• 30 (15%) Delirium</li> </ul>	
<b>Self-Harm</b>	29%	8%	
<b>Response Time</b>	<ul style="list-style-type: none"> <li>• 86% seen in target response time</li> </ul>	<ul style="list-style-type: none"> <li>• 95.5% seen in target response time</li> </ul>	
<b>RAID Interventions</b>	<ul style="list-style-type: none"> <li>• 87% Assessment</li> <li>• 18.5% Advice and psycho-education</li> <li>• 8.5% Brief intervention</li> <li>• 8% Medication treatment/management</li> </ul>	<ul style="list-style-type: none"> <li>• 90% Assessment</li> <li>• 30.5% Medication treatment/management</li> <li>• 19.5% Advice and psycho-education</li> <li>• 16% Brief intervention</li> <li>• 13.5% Discharge and transfer planning</li> </ul>	
<b>Use of MHA</b>	8 patients (4%)	5 patients (2.5%)	
<b>RAID Contacts</b>	Mean= 1.26 (SD= 0.77)	Mean= 2.28 (SD= 2.13)	
<b>Discharge Destination</b>	<ul style="list-style-type: none"> <li>• 58% Usual place of residence</li> <li>• 15.5% Admitted to mental health bed</li> <li>• 13.5% Admitted to an acute bed</li> <li>• 13% Other</li> </ul>	<ul style="list-style-type: none"> <li>• 60.5% Continuing care in acute bed</li> <li>• 21.5% Usual place of residence</li> <li>• 15.5% Other</li> <li>• 2.5% Admitted to mental health bed</li> </ul>	
<b>Length of Stay</b>	Median= 1 day	Median= 16 days	
<b>Onward Referrals</b>	35.5%	28%	
<b>3 Month Follow Up</b>	<ul style="list-style-type: none"> <li>• <b>65 patients attend A&amp;E (32.5%)</b></li> <li>• <b>7 patients frequent attenders (3.5%)</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>72 patients attend A&amp;E (36%)</b></li> <li>• <b>6 patients frequent attenders (3%)</b></li> </ul>	
	51 patients not admitted: <ul style="list-style-type: none"> <li>• 132 attendances</li> <li>• 72 attendances related to MHDA issues</li> <li>• 58 attendances referred to RAID</li> </ul>	20 patients admitted to an acute bed: <ul style="list-style-type: none"> <li>• 35 admissions</li> <li>• 21 admissions referred to RAID</li> </ul>	29 patients not admitted: <ul style="list-style-type: none"> <li>• 81 attendances</li> <li>• 41 attendances related to MHDA issues</li> <li>• 5 attendances referred to RAID</li> </ul>

### 3.3.3 Cohorts

In order to identify groups of patients commonly referred to RAID, each patient was categorised into a distinct cohort group. We assigned patients to cohorts based on the mental health diagnosis category that was most relevant to the current presentation, and not necessarily their primary mental health diagnosis. Summary statistics are presented for each of the cohorts in the tables 9 to 14 below. Pathways of care for patients in each cohort are also shown in appendix 7.

#### 3.3.3.1 Depression/Anxiety Cohort

Ninety-five (23.8%) of the patients referred to RAID were grouped into a cohort of those with depression, anxiety and common mental health issues.

**Table 9. Depression/Anxiety cohort summary statistics**

	Referred from A&E (n= 62)	Referred from Ward (n= 33)	
<b>Age</b>	Median= 34	Median= 60	
<b>Gender</b>	54.8% Female	57.6% Female	
<b>Ethnicity</b>	45.2% White	51.5% White	
<b>Known to Services</b>	30.6%	9.1%	
<b>Risk Factors</b>	6.5% Homeless	3% Homeless	
<b>Physical Health</b>	82.3% No physical health problem	<ul style="list-style-type: none"> <li>66.7% One physical health problem</li> <li>24.2% Multiple physical health problems</li> </ul>	
<b>Reason for Referral</b>	<ul style="list-style-type: none"> <li>22 (35.5%) Self-harm (actual)</li> <li>18 (29%) Self-harm/Suicidal ideation</li> <li>12 (19.4%) Depression/Anxiety symptoms</li> </ul>	<ul style="list-style-type: none"> <li>17 (51.5%) Depression/Anxiety symptoms</li> <li>4 (12.1%) Self-harm (actual)</li> </ul>	
<b>Mental Health Diagnosis</b>	<ul style="list-style-type: none"> <li>49 (79%) Depression</li> <li>20 (32.3%) Anxiety/Stress Related Disorder</li> <li>7 (11.3%) Substance Abuse</li> </ul>	<ul style="list-style-type: none"> <li>23 (69.7%) Depression</li> <li>14 (42.4%) Anxiety/Stress Related Disorder</li> </ul>	
<b>Self-Harm</b>	37.1%	12.1%	
<b>RAID Interventions</b>	<ul style="list-style-type: none"> <li>96.8% Assessment</li> <li>9.7% Advice and psycho-education</li> <li>9.7% Brief intervention</li> </ul>	<ul style="list-style-type: none"> <li>90.9% Assessment</li> <li>39.4% Medication treatment/management</li> <li>18.2% Advice and psycho-education</li> </ul>	
<b>Use of MHA</b>	4 patients (6.5%)	No patients (0%)	
<b>Discharge Destination</b>	<ul style="list-style-type: none"> <li>74.2% Usual place of residence</li> <li>14.5% Admitted to a mental health bed</li> <li>8.1% Admitted to an acute bed</li> </ul>	<ul style="list-style-type: none"> <li>54.5% Continuing care in an acute bed</li> <li>39.4% Usual place of residence</li> </ul>	
<b>Length of Stay</b>	Median= 1 day	Median= 13 days	
<b>Onward Referrals</b>	46.5%	36.4%	
<b>3 Month Follow Up</b>	<ul style="list-style-type: none"> <li><b>14 patients attend A&amp;E (22.6%)</b></li> <li><b>1 patient frequent attender (1.6%)</b></li> </ul>	<ul style="list-style-type: none"> <li><b>12 patients attend A&amp;E (36.4%)</b></li> <li><b>0 patients frequent attenders</b></li> </ul>	
	12 patients not admitted: <ul style="list-style-type: none"> <li>23 attendances</li> <li>14 attendances related to MHDA issues</li> <li>12 attendances referred to RAID</li> </ul>	3 patients admitted to an acute bed: <ul style="list-style-type: none"> <li>3 admissions</li> <li>1 admission referred to RAID</li> </ul>	6 patients not admitted: <ul style="list-style-type: none"> <li>6 attendances</li> <li>0 attendances related to MHDA issues</li> <li>0 attendances referred to RAID</li> </ul>

### 3.3.3.2 Dementia/Delirium Cohort

Eighty-two (20.5%) of the patients referred to RAID were grouped into a cohort of those with cognitive impairment, primarily due to dementia and delirium. Almost all patients in this group were referred to RAID from wards (97.6%), with only two patients referred from A&E. As such, summary statistics are only presented below for those referred from inpatient wards.

**Table 10. Dementia/Delirium cohort summary statistics**

Referred from Ward (n= 80)				
<b>Age</b>	Median= 84			
<b>Gender</b>	57.5% Female			
<b>Ethnicity</b>	53.8% White			
<b>Known to Services</b>	17.5%			
<b>Risk Factors</b>	5% Sheltered/Supported accommodation			
<b>Physical Health</b>	<ul style="list-style-type: none"> <li>• 51.2% One physical health problem</li> <li>• 43.8% Multiple physical health problems</li> </ul>			
<b>Reason for Referral</b>	<ul style="list-style-type: none"> <li>• 40 (50%) Assessment of cognitive function</li> <li>• 12 (15%) Behavioural assessment/management</li> <li>• 11 (13.8%) Depression/Anxiety symptoms</li> </ul>			
<b>Mental Health Diagnosis</b>	<ul style="list-style-type: none"> <li>• 64 (80%) Dementia</li> <li>• 28 (35%) Delirium</li> <li>• 8 (10%) Depression</li> </ul>			
<b>Self-Harm</b>	0%			
<b>RAID Interventions</b>	<ul style="list-style-type: none"> <li>• 97.5% Assessment</li> <li>• 33.8% Medication treatment/management</li> <li>• 15% Discharge/Transfer planning</li> </ul>			
<b>Use of MHA</b>	1 patient (1.3%)			
<b>Discharge Destination</b>	<ul style="list-style-type: none"> <li>• 76.3% Continuing care in an acute bed</li> <li>• 15% Institutional/residential care</li> </ul>			
<b>Length of Stay</b>	Median= 22 days			
<b>Onward Referrals</b>	21.3%			
<b>3 Month Follow Up</b>	<ul style="list-style-type: none"> <li>• <b>31 patients attend A&amp;E (38.8%)</b></li> <li>• <b>1 patient frequent attender (1.3%)</b></li> </ul>			
	<table border="0"> <tr> <td>9 patients not admitted:</td> <td>26 patients admitted to an acute bed:</td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>• 18 attendances</li> <li>• 5 attendances related to MHDA issues</li> <li>• 3 attendances referred to RAID</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• 35 admissions</li> <li>• 6 admissions referred to RAID</li> </ul> </td> </tr> </table>	9 patients not admitted:	26 patients admitted to an acute bed:	<ul style="list-style-type: none"> <li>• 18 attendances</li> <li>• 5 attendances related to MHDA issues</li> <li>• 3 attendances referred to RAID</li> </ul>
9 patients not admitted:	26 patients admitted to an acute bed:			
<ul style="list-style-type: none"> <li>• 18 attendances</li> <li>• 5 attendances related to MHDA issues</li> <li>• 3 attendances referred to RAID</li> </ul>	<ul style="list-style-type: none"> <li>• 35 admissions</li> <li>• 6 admissions referred to RAID</li> </ul>			

### 3.3.3.3 Serious Mental Illness Cohort

Eighty-one (20.3%) of the patients referred to RAID were grouped into a cohort of those with serious mental illness.

**Table 11. Serious mental illness cohort summary statistics.**

	Referred from A&E (n= 52)	Referred from Ward (n= 29)
<b>Age</b>	Median= 36	Median= 49
<b>Gender</b>	40.4% Female	48.3% Female
<b>Ethnicity</b>	40.4% White	55.2% White
<b>Known to Services</b>	59.6%	69%
<b>Risk Factors</b>	<ul style="list-style-type: none"> <li>• 11.5% Homeless</li> <li>• 9.5% Sheltered/Supported accommodation</li> </ul>	3.4% Sheltered/Supported accommodation
<b>Physical Health</b>	73.1% No physical health problem	<ul style="list-style-type: none"> <li>• 58.6% One physical health problem</li> <li>• 17.2% Multiple physical health problems</li> </ul>
<b>Reason for Referral</b>	<ul style="list-style-type: none"> <li>• 13 (25%) Psychotic symptoms</li> <li>• 11 (21.2%) Known mental health disorder</li> <li>• 9 (17.3%) Self-harm/Suicidal ideation</li> </ul>	<ul style="list-style-type: none"> <li>• 9 (31%) Known mental health disorder</li> <li>• 5 (17.2%) Self-harm (actual)</li> <li>• 4 (13.8%) Psychotic symptoms</li> </ul>
<b>Mental Health Diagnosis</b>	<ul style="list-style-type: none"> <li>• 42 (80.8%) Schizophrenia/Schizotypal/Delusional Disorder</li> <li>• 12 (23.1%) Bipolar Affective Disorder</li> <li>• 9 (17.3%) Substance Abuse</li> </ul>	<ul style="list-style-type: none"> <li>• 21 (72.4%) Schizophrenia/Schizotypal/Delusional Disorder</li> <li>• 8 (27.6%) Bipolar Affective Disorder</li> </ul>
<b>Self-Harm</b>	13.5%	17.2%
<b>RAID Interventions</b>	<ul style="list-style-type: none"> <li>• 76.9% Assessment</li> <li>• 23.1% Advice and psycho-education</li> <li>• 11.5% Medication treatment/management</li> </ul>	<ul style="list-style-type: none"> <li>• 100% Assessment</li> <li>• 41.4% Medication treatment/management</li> <li>• 24.1% Discharge and transfer planning</li> </ul>
<b>Use of MHA</b>	3 patients (5.8%)	3 patients (10.3%)
<b>Discharge Destination</b>	<ul style="list-style-type: none"> <li>• 53.8% Usual place of residence</li> <li>• 23% Admitted to a mental health bed</li> <li>• 15.4% Self-discharged/went AWOL</li> </ul>	<ul style="list-style-type: none"> <li>• 37.9% Usual place of residence</li> <li>• 34.5% Continuing care in an acute bed</li> <li>• 17.2% Admitted to a mental health bed</li> </ul>
<b>Length of Stay</b>	Median= 15 days	Median= 8 days
<b>Onward Referrals</b>	36.5%	31%
<b>3 Month Follow Up</b>	<ul style="list-style-type: none"> <li>• <b>17 patients attend A&amp;E (32.7%)</b></li> <li>• <b>3 patients frequent attenders (5.8%)</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>9 patients attend A&amp;E (31%)</b></li> <li>• <b>2 patients frequent attenders (6.9%)</b></li> </ul>
	15 patients not admitted: <ul style="list-style-type: none"> <li>• 47 attendances</li> <li>• 25 attendances related to MHDA issues</li> <li>• 16 attendances referred to RAID</li> </ul>	4 patients admitted to an acute bed: <ul style="list-style-type: none"> <li>• 6 admissions</li> <li>• 4 admissions referred to RAID</li> </ul>
		7 patients admitted to an acute bed: <ul style="list-style-type: none"> <li>• 15 admissions</li> <li>• 3 admissions referred to RAID</li> </ul>

### 3.3.3.4 Substance Abuse Cohort

Sixty-five (16.25%) of the patients referred to RAID were grouped into a cohort of those with substance abuse issues.

**Table 12. Substance abuse cohort summary statistics**

	Referred from A&E (n= 36)	Referred from Ward (n= 29)	
<b>Age</b>	Median= 40.5	Median= 46	
<b>Gender</b>	30.6% Female	24.1% Female	
<b>Ethnicity</b>	61.1% White	72.4% White	
<b>Known to Services</b>	30.6%	17.2%	
<b>Risk Factors</b>	13.9% Homeless	10.3% Homeless	
<b>Physical Health</b>	83.3% No physical health problems	<ul style="list-style-type: none"> <li>• 41.4% One physical health problem</li> <li>• 10.3% Multiple physical health problems</li> </ul>	
<b>Reason for Referral</b>	<ul style="list-style-type: none"> <li>• 14 (38.9%) Substance misuse</li> <li>• 9 (25%) Self-harm/Suicidal ideation</li> <li>• 6 (16.7%) Psychotic symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• 20 (69%) Substance misuse</li> <li>• 4 (13.8%) Self-harm/Suicidal ideation</li> </ul>	
<b>Mental Health Diagnosis</b>	<ul style="list-style-type: none"> <li>• 36 (100%) Substance Abuse</li> <li>• 9 (25%) Depression</li> </ul>	29 (100%) Substance Abuse	
<b>Self-Harm</b>	16.7%	10.3%	
<b>RAID Interventions</b>	<ul style="list-style-type: none"> <li>• 88.9% Assessment</li> <li>• 27.8% Advice and psycho-education</li> <li>• 22.2% Brief intervention</li> </ul>	<ul style="list-style-type: none"> <li>• 69% Assessment</li> <li>• 48.3% Advice and psycho-education</li> <li>• 37.9% Brief intervention</li> </ul>	
<b>Use of MHA</b>	No patients (0%)	1 patient (3.4%)	
<b>Discharge Destination</b>	<ul style="list-style-type: none"> <li>• 41.7% Usual place of residence</li> <li>• 27.8% Admitted to an acute bed</li> <li>• 16.7% Unknown</li> </ul>	<ul style="list-style-type: none"> <li>• 37.9% Continuing care in an acute bed</li> <li>• 34.5% Unknown</li> <li>• 24.1% Usual place of residence</li> </ul>	
<b>Length of Stay</b>	Median= 1 day	Median= 7.5 days	
<b>Onward Referrals</b>	33.3%	48.3%	
<b>3 Month Follow Up</b>	<ul style="list-style-type: none"> <li>• <b>16 patients attend A&amp;E (44.4%)</b></li> <li>• <b>1 patient frequent attender (2.8%)</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>13 patients attend A&amp;E (44.8%)</b></li> <li>• <b>2 patients frequent attenders (6.9%)</b></li> </ul>	
	7 patients not admitted: <ul style="list-style-type: none"> <li>• 16 attendances</li> <li>• 13 attendances related to MHDA issues</li> <li>• 6 attendances referred to RAID</li> </ul>	9 patients admitted to an acute bed: <ul style="list-style-type: none"> <li>• 13 admissions</li> <li>• 7 admissions referred to RAID</li> </ul>	6 patients not admitted: <ul style="list-style-type: none"> <li>• 28 attendances</li> <li>• 24 attendances related to MHDA issues</li> <li>• 1 attendance referred to RAID</li> </ul>

### 3.3.3.5 Personality Disorder Cohort

Thirty-five (8.75%) of the patients referred to RAID were grouped into a cohort of those with personality disorders. Almost all patients in this group were referred to RAID from A&E (85.7%), with only 5 patients referred from inpatient wards. As such, summary statistics are only presented below for those referred from A&E.

**Table 13. Personality disorder cohort summary statistics**

Referred from A&E (n= 30)				
<b>Age</b>	Median= 36.5			
<b>Gender</b>	60% Female			
<b>Ethnicity</b>	73.3% White			
<b>Known to Services</b>	66.7%			
<b>Risk Factors</b>	13.3% Sheltered/Supported accommodation			
<b>Physical Health</b>	90% No physical health problem			
<b>Reason for Referral</b>	<ul style="list-style-type: none"> <li>• 15 (50%) Self-harm (actual)</li> <li>• 5 (16.7%) Self-harm/Suicidal ideation</li> <li>• 4 (13.3%) Depression/Anxiety symptoms</li> </ul>			
<b>Mental Health Diagnosis</b>	<ul style="list-style-type: none"> <li>• 30 (100%) Personality Disorder</li> <li>• 9 (30%) Substance Abuse</li> <li>• 4 (13.3%) Depression</li> </ul>			
<b>Self-Harm</b>	50%			
<b>RAID Interventions</b>	<ul style="list-style-type: none"> <li>• 86.7% Assessment</li> <li>• 13.3% Advice and psycho-education</li> <li>• 10% Discharge and transfer planning</li> </ul>			
<b>Use of MHA</b>	No patients (0%)			
<b>Discharge Destination</b>	<ul style="list-style-type: none"> <li>• 53.3% Usual place of residence</li> <li>• 20% Admitted to a mental health bed</li> <li>• 13.3% Self-discharged/went AWOL</li> </ul>			
<b>Length of Stay</b>	Median= 1 day			
<b>Onward Referrals</b>	30%			
<b>3 Month Follow Up</b>	<ul style="list-style-type: none"> <li>• <b>14 patients attend A&amp;E (46.7%)</b></li> <li>• <b>0 patients frequent attenders</b></li> </ul>			
	<table border="0"> <tr> <td>13 patients not admitted:</td> <td>2 patients admitted to an acute bed:</td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>• 28 attendances</li> <li>• 20 attendances related to MHDA issues</li> <li>• 14 attendances referred to RAID</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• 2 admissions</li> <li>• 2 admissions referred to RAID</li> </ul> </td> </tr> </table>	13 patients not admitted:	2 patients admitted to an acute bed:	<ul style="list-style-type: none"> <li>• 28 attendances</li> <li>• 20 attendances related to MHDA issues</li> <li>• 14 attendances referred to RAID</li> </ul>
13 patients not admitted:	2 patients admitted to an acute bed:			
<ul style="list-style-type: none"> <li>• 28 attendances</li> <li>• 20 attendances related to MHDA issues</li> <li>• 14 attendances referred to RAID</li> </ul>	<ul style="list-style-type: none"> <li>• 2 admissions</li> <li>• 2 admissions referred to RAID</li> </ul>			

### 3.3.3.6 Other Cohort

Forty-two (10.5%) of the patients referred to RAID did not appear to fit into the main five cohorts, but did appear to have some similarities and so were grouped into an 'other' cohort. This group was split into those who were referred from A&E (42.9%) and those referred from wards (57.1%) in order to better capture similarities between patients. The A&E group appears to include those with self-harm or high levels of risk, in the absence of other diagnosed mental health issues. The ward group appears to capture patients for whom there is a diagnostic query about their mental health.

**Table 14. Other cohort summary statistics**

	Referred from A&E (n= 18)	Referred from Ward (n= 24)	
<b>Age</b>	Median= 27	Median= 66	
<b>Gender</b>	61.1% Female	54.2% Female	
<b>Ethnicity</b>	55.6% White	37.5% White	
<b>Known to Services</b>	5.6%	0%	
<b>Risk Factors</b>	5.6% Sheltered/Supported accommodation	4.2% Sheltered/Supported accommodation	
<b>Physical Health</b>	72.2% No physical health problem	<ul style="list-style-type: none"> <li>54.2% One physical health problem</li> <li>29.2% Multiple physical health problems</li> </ul>	
<b>Reason for Referral</b>	<ul style="list-style-type: none"> <li>7 (38.9%) Self-harm (actual)</li> <li>4 (22.2%) Self-harm/Suicidal ideation</li> </ul>	<ul style="list-style-type: none"> <li>12 (50%) Depression/Anxiety symptoms</li> <li>4 (16.7%) Assessment of cognitive function</li> </ul>	
<b>Mental Health Diagnosis</b>	16 (88.9%) No Current Mental Health Disorder	22 (91.7%) No Current Mental Health Disorder	
<b>Self-Harm</b>	38.9%	8.3%	
<b>RAID Interventions</b>	<ul style="list-style-type: none"> <li>77.8% Assessment</li> <li>27.8% Advice and psycho-education</li> </ul>	<ul style="list-style-type: none"> <li>83.3% Assessment</li> <li>16.7% Advice and psycho-education</li> <li>12.5% Brief intervention</li> </ul>	
<b>Use of MHA</b>	1 patient (5.6%)	No patients (0%)	
<b>Discharge Destination</b>	<ul style="list-style-type: none"> <li>61.1% Usual place of residence</li> <li>22.2% Admitted to an acute bed</li> </ul>	<ul style="list-style-type: none"> <li>79.2% Continuing care in an acute bed</li> <li>20.8% Usual place of residence</li> </ul>	
<b>Length of Stay</b>	Median= 1.5 days	Median= 19 days	
<b>Onward Referrals</b>	5.6%	8.3%	
<b>3 Month Follow Up</b>	<ul style="list-style-type: none"> <li><b>3 patients attend A&amp;E (16.7%)</b></li> <li><b>2 patients frequent attenders (11.1%)</b></li> </ul>	<ul style="list-style-type: none"> <li><b>4 patients attend A&amp;E (16.7%)</b></li> <li><b>0 patients frequent attenders</b></li> </ul>	
	3 patients not admitted: <ul style="list-style-type: none"> <li>17 attendances</li> <li>Unclear number of attendances related to MHDA issues</li> <li>10 attendances referred to RAID</li> </ul>	2 patients admitted to an acute bed: <ul style="list-style-type: none"> <li>11 admissions</li> <li>7 admissions referred to RAID</li> </ul>	1 patient not admitted: <ul style="list-style-type: none"> <li>1 attendance</li> <li>0 attendances related to MHDA issues</li> <li>0 attendances referred to RAID</li> </ul>

## 3.4 Findings

There appear to be many differences across the cohort groups in terms of clinical characteristics, the clinical workload required from RAID and the interventions they provide, and in terms of disposal, onward referral and attendances and admissions in the follow up period. Taken together, the tables above provide a picture of the type of interventions RAID services may provide for patients, as well as common pathways for patients in each cohort group. Some of the main trends and important findings for the cohort study are discussed below.

### 3.4.1 Clinical Characteristics

#### 3.4.1.1 Known to services

For almost all of the cohort groups, patients referred to RAID from A&E were more likely to already be known to community mental health or drug and alcohol services than those referred from the wards. There was one exception to this, where a higher proportion of patients in the serious mental illness group who were referred from the wards were known to services. One explanation for this is that patients referred from wards were on average older than those referred from A&E, and as such they are more likely to have had a diagnosis for a longer time and therefore may have already established good relationships with community services. Since the median age of patients referred from A&E was younger, it might suggest that a larger proportion of these patients were in the early stages of developing serious mental illness. The high rates of admission to mental health beds for patients referred from A&E in this group, as well as the high rates of onward referral, would appear to support this.

#### 3.4.1.2 Self-Harm

For almost all of the cohort groups, self-harm rates were higher for those referred from A&E. This is unsurprising, given that self-harm accounts for approximately 5% of all presentations to A&E (Care Quality Commission, 2015). The one exception to this is for the serious mental illness cohort, where self-harm rates were higher for those referred to RAID from wards. This may be explained by the fact that a significant minority of patients referred from wards in this group were actually referred from clinical decision units or acute care units (41.4%), where patients who have seriously injured themselves or overdosed are typically admitted. This in part would explain why in the serious mental illness cohort, those referred from A&E and those referred from the ward appear to have relatively similar clinical presentations.

### 3.4.2 RAID Intervention

Table 15 shows the number of face-to-face contacts carried out by the team for each of the cohort groups. Patients in the depression/anxiety cohort group accounted for 31% of referrals, and approximately 34% of the face-to-face workload of RAID clinicians working in A&E. Patients in the dementia/delirium cohort accounted for 40% of referrals, and approximately 40% of the workload of RAID clinicians working on the wards.

Patients in the serious mental illness cohort, while only accounting for 14.5% of referrals from the ward, accounted for approximately 22% of the face-to-face workload for RAID clinicians. Patients referred from the ward in this group had the highest average number of contacts with RAID out of any group, with RAID delivering medication treatment and management, discharge and transfer planning and use of the mental health act for a very high proportion of patients. This suggests that patients referred from wards with serious mental illness are complex and very time and resource intensive for RAID clinicians.

**Table 15. Distribution of RAID resources by cohort group**

Cohort Group	A&E		Ward	
	Referrals <i>n</i> (%)	Face-to-Face Contacts <i>n</i> (%)	Referrals <i>n</i> (%)	Face-to-Face Contacts <i>n</i> (%)
<b>Overall</b>	200 (100%)	253 (100%)	200 (100%)	456 (100%)
<b>Depression/Anxiety</b>	62 (31%)	85 (33.6%)	33 (16.5%)	72 (15.8%)
<b>Dementia/Delirium</b>	2 (1%)	2 (0.8%)	80 (40%)	180 (39.5%)
<b>Serious Mental Illness</b>	52 (26%)	58 (22.9%)	29 (14.5%)	100 (21.9%)
<b>Substance Abuse</b>	36 (18%)	52 (20.6%)	29 (14.5%)	50 (11%)
<b>Personality Disorders</b>	30 (15%)	36 (14.2%)	8 (4%)	8 (1.8%)
<b>Other</b>	18 (9%)	24 (12%)	20 (7.9%)	46 (10.1%)

### 3.4.3 Disposal

For all of the cohort groups, patients referred to RAID from A&E were most likely to be discharged home to their usual place of residence, and there were relatively few admissions to acute beds for most groups. Cohort groups with high levels of self-harm and substance abuse issues had higher levels of admission to acute beds, which is unsurprisingly given that patients in these groups would be more likely to require a short admission, for example to monitor a patient's physical health after an overdose, or for an alcohol detox.

RAID clinicians in A&E were involved in planning admissions to mental health beds for a number of patients, especially those in the serious mental illness and personality disorder cohorts, which suggests that many of these patients were acutely unwell. There was a high proportion of self-discharges within these two cohort groups. This could suggest that a key role for RAID is to liaise with a patient's community mental health team (which most patients in these groups are already known to) to alert them of the patient's presentation at and subsequent self-discharge from A&E.

For all of the cohort groups, patients referred to RAID from inpatient wards were likely to be continuing care in an acute bed on discharge from RAID, or be discharged home to their usual residence.

### 3.4.4 Onward Referral

For almost all of the cohort groups, patient's referred to RAID from A&E were more likely to be referred on to community mental health or drug and alcohol teams than those referred from inpatient wards. The one exception to this was in the substance abuse cohort, where there were more onward referrals made for inpatients. This may reflect the fact that fewer patients referred from wards with substance abuse issues were already known to services than those referred from A&E. The very high rate of onward referral for these patients (48.3%; the highest of any group) suggests that RAID has established strong links with drug and alcohol services and clear pathways for referral.

Similarly, the high rate of onward referral for patients in the depression/anxiety cohort who are referred from A&E (46.5%) suggests RAID has established clear pathways for referral to community mental health services, including psychological services.

Patients in the 'other' cohort who were referred from A&E were the least likely to receive an onward referral, despite the fact that they had very high rates of self-harm, and few were already known to services. This may be explained by the fact that most patients in this group did not have a diagnosed mental health disorder recorded on the electronic system, so may not have been considered appropriate for formal referral to community mental health services. It could be possible that patients in this group were signposted to mental health and psychological services, however data for signposting was not consistently recorded across hospital sites and therefore could not be analysed.

### 3.4.5 Follow Up

Rates of attendance in A&E in the follow up period were similar for patients referred to RAID from A&E and those referred from inpatient wards, for most of the cohort groups. This is surprising, given that patients referred from wards were typically much older and more physically unwell than those referred from A&E. However, it should be noted that the follow up period captured data for three months after the initial referral to RAID, rather than three months after a patient was discharged from hospital. This means that some older and more physically unwell patients could have remained in hospital for the entirety of the follow up period. They would therefore not have any opportunity to re-attend A&E or be readmitted.

Unsurprisingly, patients in the dementia/delirium cohort group had the highest rates of A&E attendance in the follow-up period, and most of those patients were subsequently readmitted. However, very few of these readmissions required RAID's re-involvement (17.5%).

Patients in the serious mental illness, substance abuse and personality disorder cohorts also had very high rates of attendance in A&E in the follow up period. However, these groups appeared to include a high proportion of vulnerable patients who were homeless or lived in sheltered/supported accommodation. Recent research has shown that up to 70.3% of homeless patients either attend A&E or are readmitted to hospital within 30 days of discharge (Doran et al., 2013).

For the substance abuse cohort, it is interesting to note that there were similar rates of attendance in A&E and re-admission in the follow up period for both patients referred to RAID from A&E and those referred from wards. However, patients who were originally referred to RAID from A&E were more likely to be referred to RAID again if they re-attended, compared to those who were originally seen by RAID on an inpatient ward. This suggests that patients referred from A&E will end up requiring more of RAID clinicians' time and resources. This could reflect the fact that when RAID was able to see a patient referred from an inpatient ward, they had more time and greater opportunity to provide brief drug and alcohol interventions, and advice and psycho-education.

Across all cohort groups, even when there were high rates of attendance and readmission in the follow up period that were due to mental health or drug and alcohol related reasons, not all patients were referred to RAID again. This could suggest that the advice and training provided by RAID when liaising with acute staff meant that they felt better able to manage some mental health problems themselves.

It is important to note that the cohort study only captures face-to-face contacts with patients and carers, and does not capture all other aspects of RAID work including liaising with acute staff, providing teaching and training for medical and nursing staff, attending multi-disciplinary team meetings, phone calls, writing letters and reports to GPs and community services, and service audit and development. In order to understand whether the support and advice provided by RAID has indeed improved the skills and confidence of acute staff to manage mental health and drug and alcohol issues without referring on to RAID, the final report in this evaluation will present findings from surveys and interviews conducted with acute staff.

## 4. Experience of Staff, Patients and Carers

University College London Partners (UCLP) was commissioned by City and Hackney, Newham, Tower Hamlets and Waltham Forest Clinical Commissioning Groups (CCG) to undertake an evaluation of four liaison psychiatry services, in order to determine whether the introduction of the Rapid Assessment Interface Discharge (RAID) model is contributing to a system wide improvement in care.

This is the final of three reports, which sets out the findings from a qualitative analysis examining patient and carer experiences of the RAID services, the impact of RAID services on the skills, knowledge and experiences of acute hospital staff, and the experience of RAID staff of working within these teams. The conclusions from this report should be considered in conjunction with the other two reports commissioned for this evaluation:

- The first report sets out the findings from a quantitative analysis of bed usage data, and describes the overall impact of the implementation of the RAID model on bed usage for patients with mental health and drug and alcohol problems.
- The second report sets out the findings from a cohort study examining common pathways of care through RAID services across the hospital sites.

### 4.1 Aim

The aim of qualitative study was to examine the experience of care for patients and carers who are seen by the RAID services. The study also aimed to describe the impact of the RAID services on the skills and knowledge of acute hospital staff, and their experience of working alongside the RAID teams to treat and manage patients with mental health or drug and alcohol issues. The study also captures the experience of RAID clinicians in setting up the new services, the achievements and challenges they've faced, and areas for improvement going forwards.

### 4.2 Method

We administered surveys and conducted semi-structured interviews with a purposive sample of patients, carers and members of staff within each of the four hospital sites.

#### 4.2.1 Surveys

With the permission of the Psychiatric Liaison Accreditation Network (PLAN), we adapted the standardised patient and carer experience survey, as well as the acute staff survey and the RAID staff survey used by PLAN.

##### 4.2.1.1 Patient and Carer Surveys

We administered the patient experience surveys in-person over an 8 week period to patients who were admitted to a hospital ward, and who had been seen by the RAID team. Patients were identified by each of the RAID teams and informed that they would be approached by a UCLP researcher to complete the survey. Where there was a carer involved, the RAID team first spoke to the patient in order to ascertain whether they were comfortable with their carer being approached by UCLP to complete the survey. We administered the carer experience surveys either in person when a carer visited the ward, or over the phone where appropriate.

##### 4.2.1.2 Acute Staff

In order to best capture the idiosyncratic relationships between the RAID teams and acute hospital staff, we approached a range of departments and inpatient wards to complete the acute staff experience survey at each hospital. As well as approaching staff in A&E at each site, each RAID team identified inpatient wards and departments where they had frequent contact with acute staff, as well as those where they did not have frequent contact, but were an area in which the RAID teams would like to establish greater contact and build working relationships with. Acute hospital staff in each of the

identified departments were provided with written copies of the survey to complete, which were collected by UCLP researchers at the end of the study period.

As the RAID team at Newham University Hospital has recently completed their self-assessment as part of the PLAN accreditation cycle, we used data from the acute staff surveys that were already gathered and sent to us by PLAN.

#### 4.2.1.3 RAID Staff

All members of the RAID teams at each hospital site were asked to complete an online version of the RAID staff experience survey. Again, as the RAID team at Newham University Hospital had recently completed their self-assessment for PLAN accreditation, we used data from the RAID staff surveys that were already gathered and sent to us by PLAN.

### 4.2.2 Interviews

Semi-structured interviews were conducted with patients and carers, acute hospital staff and RAID staff at each of the hospitals. The interviews were intended to capture change in the patient experience of care, the quality of the care delivered as well as changes in professional practice since the introduction of the RAID model.

#### 4.2.2.1 Patients

Patients were approached to take part in a semi-structured interview if they met the following criteria, and spoke an adequate level of the English language:

1. Currently admitted as an inpatient on a hospital ward
2. Had been seen by the RAID team for assessment and/or treatment
3. Had an identified mental health or drug and alcohol problem

Potential participants were not able to take part in an interview if they were under the age of 18, or had cognitive impairment that effected their ability to consent to participate, or their ability to be interviewed.

Eleven participants were first identified by each of the RAID teams, who approached the patients to briefly inform them about the study. When approached by the UCLP researcher, participants were provided with an information sheet with details of the evaluation, and were asked to provide written consent to take part in the interview. Interviews were conducted in person on the in-patient ward, in a secluded space or private room where possible.

#### 4.2.2.2 Acute Staff

Eighteen acute staff members were purposively sampled from the range of departments and inpatient wards that had been identified by each RAID team. Staff sampling was designed to reflect a broad range of professional experience and responsibility, and included nursing staff, allied health professionals, junior doctors and medical consultants.

UCLP researchers emailed a copy of the information sheet to potential staff identified by the RAID teams, in order to schedule a time to conduct the interview. Interviews were conducted on a one-to-one basis, and staff were asked to give written consent to participate.

#### 4.2.2.3 RAID Staff

Seventeen staff members from the RAID teams were also approached by UCLP to take part in a semi-structured interview. Staff sampling was designed to capture the range of different skills and expertise within the teams, and different levels of responsibility, and included psychiatric consultants, nursing staff, staff working with older adults and allied health professionals such as psychologists. Most interviews were conducted on a one-to-one basis, and staff were asked to give written consent to participate.

#### 4.2.2.4 Thematic Analysis

Following a process of familiarisation with the transcribed interviews, an inductive approach was used to identify codes and themes progressively throughout the analysis (Hsieh & Shannon, 2005). To analyse the data, interview transcripts were independently coded verbatim by two researchers, and systematically indexed and organized into relevant themes and sub-themes.

Two separate thematic frameworks were used for patient and carer interviews, and for acute and RAID staff interviews. For patient and carer interviews, some of the quality statements in the NICE *Patient Experience in Adult NHS services*<sup>17</sup> were used as the basis of the thematic framework, and were adapted so that the themes were relevant to RAID services. For staff interviews, the broad areas identified by the CCGs and other stakeholders and outlined in the original UCLP RAID evaluation proposal were used as the bases of the thematic framework. These were:

1. Access
2. Efficiency
3. Knowledge
4. Outcomes

### 4.3 Patient Experience

#### 4.3.1 Survey Results

In total 55 patients and four carers completed the experience surveys across the four hospital sites. Findings from some of the key survey questions are presented in Table 16.

Overall, most patients and carers were satisfied with the amount of time spent with the RAID clinicians, and felt they were treated with dignity and respect. Most reported that they would recommend the RAID service to someone else who was in a similar situation to them or to the person they care for. However, far fewer patients and carers were satisfied with the information provided by the RAID clinicians. This may stem from the fact that very few patients or carers were provided with written information about their mental health problems or explaining what would happen next in their treatment.

**Table 16. Patient experience of care survey results**

<b>Were you:</b>	<b>% Satisfied</b>
<b>Satisfied with the amount of time the RAID clinician spent talking to you</b>	83.1%
<b>Satisfied with the information provided by RAID</b>	64.4%
<b>Offered a written summary explaining what was discussed in the assessment and what would happen next</b>	18.6%
<b>Offered written information about any mental health problems you may have been experiencing</b>	16.9%
<b>Treated with dignity and respect</b>	86.4%
<b>Would you recommend the RAID service to someone who was in a similar situation</b>	81.4%

<sup>17</sup> <https://www.nice.org.uk/guidance/cg138/chapter/Quality-statements>

## 4.3.2 Interview results

### 4.3.2.1 Theme 1: Respect

Many of the patients and carers interviewed reported that they felt RAID clinicians had treated them with dignity and respect when conducting the assessment, and during follow-up meetings. Some patients described feeling as though the RAID staff had genuine concern for their wellbeing:

*"I think that that respect has been there. And they have let me know very clearly what is within their capabilities to say yes and no, and where it relies on someone else that they can only do their best" (Patient)*

*"You know, there was genuine care, there was: I'm not going to be here tomorrow but I will make sure someone pops in to see if you're okay" (Patient)*

### 4.3.2.2 Theme 2: Communication

Similarly, patient and carers provided positive feedback about the communication they had with the RAID clinicians. Many felt that the RAID staff were very clear, polite and were actively listening to them, while others describe feeling reassured when communicating with the clinicians:

*"They were well polite, and they were listening too, because they felt for me" (Patient)*

*"Because the way they talk to me, you know, they make me feel very strong" (Patient)*

*"As I've got learning difficulties, I understand some of it, but not all of it. But I told them that but they explained quite frequently and easily" (Patient)*

### 4.3.2.3 Theme 3: Knowledge of Names, Roles and Responsibilities of RAID Professionals

The feedback from patients and carers about whether RAID staff had clarified their role and responsibility in the patient's treatment was mixed. While some commented that the RAID clinicians had introduced themselves and explained what their role was, many expressed a desire for written information from the RAID teams, such as a pamphlet describing the service:

*"Oh they were well polite, they introduced me who they were, but I can't remember their names" (Patient)*

*"No, we had no written information at all, in fact I can't remember the name of the consultant so I'd like to know that" (Patient)*

*"You know, when you are bombarded with lots of information it's nice to take away something on a piece of paper and I didn't... I would have liked that to refer back to" (Carer)*

### 4.3.2.4 Theme 4: Information Provided about Treatment

Similarly, the feedback from patients and carers about the information provided by RAID about their care was mixed. Some described positive experiences in which RAID actively involved the patient and carer in decisions about their treatment, and provided clear information about what their care plan was. However, some patients and carers were confused about whether they would be seen by RAID clinicians again, or what they could expect during their stay in hospital and on discharge:

*"I saw [the RAID clinician], I think, four times. And she was quite clear that it will be very difficult to do a long-term care plan and what is it that we could identify that would help me get through the next couple of days without wanting to end my life again, which was the most important. Because we could do it as, you know, it wasn't long-term, we'd have a week or less, or more, you know. So we identified what was needed and that's what we stuck on which was just get through the next couple of days, which was good, so, yes" (Patient)*

*"As I understand it [the RAID team will] contact us [if needed]. It would be nice to know what's going on actually" (Carer)*

#### 4.3.2.5 Theme 5: Experience and Impact of Care

Almost all of the patients and carers interviewed provided positive feedback about the overall experience of being seen by the RAID team, and the impact that this had on their care. Many commented that the RAID clinicians were very fast in providing intervention, while others expressed their gratitude that the RAID team was helping them through a difficult situation:

*“They basically intervened very quickly and got me through the first few days which could have been me either walking out or doing something stupid again or just trying to manage me and give me something of hope until other things could actually be done” (Patient)*

*“I’m very appreciative of the quick interventions that were provided. Everything was open; nothing was promised that couldn’t be delivered, so that was very good” (Patient)*

*“Yes, it’s helped us [from] the point of view that somebody’s hopefully taking care of a very, very difficult situation for the whole family” (Carer)*

*“They’ve helped me. They’ve opened the jar up and made me see a little bit of a light” (Patient)*

## 4.4 Acute Staff Experience

### 4.4.1 Survey Results

In total, 83 acute staff members completed the experience surveys across the four hospital sites. This includes 58 staff members approached by UCLP, as well as previous data obtained for 25 staff members from Newham hospital.

#### 4.4.1.1 Satisfaction

Results from the acute staff survey on satisfaction with RAID procedures and input are shown in Table 17 below. Overall, there appeared to be a relatively high proportion of staff who were satisfied with the RAID teams’ speed of response to referrals, and the amount of mental health related input provided by RAID clinicians. While the majority of acute staff surveyed were satisfied with the amount of advice provided by the RAID teams, overall less than half were satisfied with the amount of training opportunities provided.

We next compared the responses of acute staff from departments where each RAID team has frequent contact, to those where RAID has less frequent contact. Overall it appeared that staff from high contact wards were less satisfied with the input provided by RAID and their response to referrals. While more staff from high contact departments were satisfied with the amount of training provided by RAID than those in the low contact departments, they were less satisfied with the amount of advice provided by RAID clinicians.

This may be due to the fact that the departments who already have frequent contact with the RAID teams are those where there are a high proportion of patients with mental health or drug and alcohol issues. It is therefore unsurprising that acute staff in these departments want RAID clinicians to respond to referrals more quickly and provide greater input and advice.

Finally, we compared responses from medical staff, including consultants and junior doctors, with nursing staff and allied health professionals. Across all categories, it appears that a much greater proportion of medical staff were satisfied with the input and support of RAID clinicians than nursing staff.

**Table 17. Acute staff satisfaction with RAID input and procedures**

Satisfied with:	Overall	High Contact Ward	Low Contact Ward	Medical	Nursing/AHP
Amount of Mental Health Input	80.7%	76.7%	83.8%	95.2%	64.5%
Response to Emergency Referrals	71.1%	67.4%	78.4%	83%	62.8%
Response to Urgent Referrals	74.7%	69.8%	83.8%	90%	61.1%
Response to Routine Adult Referrals	75.9%	65.1%	86.5%	90.1%	61.1%
Response to Routine Older Adult Referrals	74.7%	69.8%	78.4%	90.1%	59.3%
Amount of Training	49.4%	51.2%	48.6%	63.4%	30.7%
Amount of Advice	71.1%	69.8%	75.7%	86.1%	57.6%

#### 4.4.1.2 Skills, Knowledge and Confidence

Results of the acute staff survey on questions regarding the impact of training and advice from RAID on the skills, knowledge and confidence of acute staff are presented in Table 18. Data was only obtained for 58 acute staff, as the surveys from acute staff at Newham did not include these questions. As there did not appear to be any differences in responses for acute staff from high or low contact wards, or from medical or nursing staff, the overall results are presented.

Overall, acute staff felt that training, advice and supervision provided by RAID had somewhat improved their skills, knowledge and confidence. There were some areas where RAID appeared to have a larger impact on acute staff, namely in recognising and identifying mental health and drug and alcohol issues, preventing and managing challenging behaviour, and understanding and providing dementia care.

**Table 18. Impact of RAID on acute staff skills, knowledge and confidence**

To what extent do you feel that the training, advice and supervision you have received from RAID have improved skills, knowledge and/or confidence in the following areas:	Median*
Recognising and identifying mental health or drug and alcohol problems	3
Confidence to deal with patients with mental health or drug and alcohol problems	2
Communicating with people with mental health or drug and alcohol problems	2
Assessing and managing risk	2
Preventing and managing challenging behaviour	3
Detecting and managing acute disturbance in patients	2.5
Understanding and managing self-harm and suicidality	2
Dementia care	3
Legislation regarding involuntary patients	2

\*Answers were given on a scale of 1 (not at all) to 5 (very much)

#### 4.4.1.3 Patient Outcomes

69 of the 83 acute staff surveyed responded to the question of whether the involvement of the RAID team improved patient outcomes. All of those that responded felt RAID involvement did improve outcomes for patients.

#### 4.4.2 Interview Results

##### 4.4.2.1 Theme 1: Role of RAID

The acute staff interviewed described the high number of patients with mental health and drug and alcohol issues within the acute hospital, with many in both A&E and on inpatient wards saying they had daily contact with these patients. Staff recognised the importance of liaison psychiatry services in providing care for these patients:

*“I think one in three of our patients come with mental health as part of their presenting [problem]. I think that’s quite old figures, from about five or ten years ago, but I think it probably holds true and part of our care for our patients is the care of their mental health and it’s an important bit of what we do” (A&E Consultant)*

*“To be fair about 70% of our patients at any one time have got a... mental health or cognition problem. So clearly, their inputs into our wards are very important for giving patients the best possible care” (Old Age Consultant)*

Most of the staff interviewed understood the role of liaison psychiatry in the acute hospital and the day-to-day activities of these types of services. While some described the unique qualities of the RAID model of liaison psychiatry, and the role for RAID teams in the hospital, a few were unclear of what the RAID teams actually did:

*“Obviously, they assess patients and advise, they provide a fantastic service if there are doubts around capacity and supporting our decision-making around assessing people’s capacity, they also provide a link with the pre-existing mental health history of the patient” (WARD consultant)*

*“I think a large part of the purpose is, and I may be completely wrong, is to avoid admissions. If they weren’t here with us all the time, we would then probably admit lots of people cautiously, not sure whether we’re dealing with a medical or a mental health problem. Or, if we thought it was a mental health problem, not feeling that we were adequately trained or skilled to decide whether they’re safe to go home or not” (A&E Nurse)*

*“What do [RAID] do? That’s actually a really interesting question; no one really knows” (A&E Nurse)*

##### 4.4.2.2 Theme 2: Access

Overall, the acute staff interviewed felt that access to high quality, appropriate care had improved for patients since the introduction of the RAID teams in the acute hospitals. One of the main areas of improvement noted was the increased access to a patient’s full mental health history, which RAID clinicians can provide through accessing mental health records on systems such as Rio, or by liaising directly with mental health or drug and alcohol services that a patient is known to. Acute staff felt this background information was extremely valuable when assessing and managing risk for these patients:

*“They are there for providing background information. So if I have a patient who has taken an overdose who wasn’t maybe assessable from a psychiatric point of view, I can go right to them and say I’ve got this patient, could you please look them up on RiO and, you know, give me any relevant background information that might be relevant in the immediate management?” (A&E consultant)*

*“Because the Community Mental Health team is run by a different Trust, we don’t get access to any of that documentation so, actually, they are a fantastic conduit for pre-existing information and linking patients” (Ward consultant)*

Another factor that staff felt had improved access was changes to the referral process since the introduction of RAID. Most staff felt that the referral process is now much easier, and that more

patients with mental health or drug and alcohol issues are being referred to RAID as staff feel confident that they will be seen:

*“It’s extremely easy for us to make referrals, and it’s extremely easy for us to get feedback” (A&E consultant)*

*“If I say I want a psychiatry referral it goes on our EPR system, and the next time I come round it’s always been done” (ACU Consultant)*

*“I would say that staff are more likely to refer to [RAID] services for psychiatric assessment because it’s easier to do it” (Ward Nurse)*

However, a number of staff at the Royal London Hospital noted that the referral process could be improved, as it currently involves completing an electronic referral form, which then needs to be followed up with a phone call to make sure the referral has been received:

*“Yes, it is easy to refer on CRS but then I know that you do have to ring them afterwards to tell them that you’ve put the referral. So obviously it would be good if you could just send it electronically and know that it was being received. There is that extra step in there at the moment. I mean, it’s not inconvenient, people answer the phone, but it would be better if it wasn’t there” (Ward Nurse)*

Another way in which acute staff felt access had improved was through faster responsiveness to referrals. Staff described how RAID clinicians were able to see patients referred to them very quickly, within designed target times of one hour in A&E, four hours in Acute Decision Units (ACU), and 24 hours for those on inpatient wards:

*“Perhaps one observation is that where previously it might have taken them longer, they are much more responsive now” (Ward Consultant)*

*“Well they’re supposed to come within four hours and I think they probably do. And they’re very good about coming back to review the patients. So I think it’s a fabulous service, I don’t think you could expect them to come any quicker than four hours quite honestly” (ACU Consultant)*

However, some staff felt that response times to referrals could be improved, especially during out-of-hours in A&E. One staff member attributed the occurrence of psychiatry ‘breaches’ overnight and during weekends as a result of the smaller number of RAID clinicians on duty at those times, combined with higher rates of mental health related presentations to A&E:

*“We do have a lot of psychiatry breaches and it’s mainly because like last week, there was a day I was in charge and there were eight patients at one time and my understanding I think there is three [RAID staff], including a doctor, there are three at a time, so there is nothing much we can do about it other than employing more and more people” (A&E Consultant)*

*“I think that they sometimes struggle out-of-hours because obviously there are fewer members of staff around as well and also often out-of-hours is the time that the people who need mental help are presenting to the ED” (A&E Consultant)*

*“But obviously [the] after hours the [RAID] team is slimmed down a little bit and the main work is in the emergency department unless there’s something critical going on elsewhere. And, you know, if we have surges of three, four, five mentally ill patients then that does put a strain on that team, which would happen anywhere” (A&E Consultant)*

#### 4.4.2.3 Theme 3: Efficiency

Overall, the acute staff interviewed reported that the quality of care delivered to patients with mental health or drug and alcohol issues had improved since the introduction of RAID. Staff felt there were a number of reasons for this, and one of the main factors identified was the increased consultant-level presence within the RAID teams, as opposed to the previous liaison psychiatry services that were in place:

*“So their consultant level intervention in the care of our patients, which is really what makes the quality of what we do a lot better” (A&E Consultant)*

*“Previously, you know, you’d get somebody [from the liaison team who was] fairly junior, they’d try and talk to somebody fairly senior and so three days down the line you’d still not know quite what was happening.... now you get somebody senior and you can believe what they say, [you] know it’s likely to be correct. So I’ve got confidence, they’ve had the training, they know what they’re doing and they will take the action” (ACU Consultant)*

*“I have to say that actually having the consultant psychiatrist in place is basically the best thing since sliced bread” (Ward Consultant)*

Similarly, the greater visibility of the RAID teams compared to the previous liaison services, and their co-location within A&E were identified as factors that had improved joint working between the acute staff and the RAID staff, which had led to better quality of care:

*“The difference in their availability is stratospheric and I think that that is part of the reason why they are working well is that we see them, we know how easy it is to get hold of them” (Ward Consultant)*

*“Well, they’re co-located in the department, they’ve been, as a new team, in for well over a year now. They have a very high profile, a very open-door policy and a very collegiate, cohesive way of working with the emergency department” (A&E Consultant)*

*“The co-location in the department, the open lines of communication, the patient care being patient-centric, and having a, sort of, shared common goal. Yes, it’s radically different [to the old liaison service]” (A&E Consultant)*

Many acute staff felt that the RAID teams had been proactive in seeking out patients with mental health or drug and alcohol issues with acute staff both in A&E and on the inpatient wards. They reported that this had led to better integration and joint working between acute and RAID staff, as well as better identification of patients with mental health and drug and alcohol issues:

*“They’ve done a lot of work in making themselves fit into the department and go out and seek patients who they can help” (A&E Consultant)*

*“I think the consultant coming to the [multidisciplinary team meeting] was really helpful because then it’s a case of the questions that you might not necessarily refer to, or people you might not necessarily flag, then you think, while you’re here let me just flag these individuals. So, I think we picked up more people [with RAID staff] having a visible presence” (Ward Nurse)*

*“It’s a lot more pro-active, people start, on both ends, people are trying to help each other more, I think” (A&E Nurse)*

Most of the acute staff described how the integration between RAID staff and acute staff, and the greater capacity for parallel working has impacted the speed in which patients with mental health issues are able to be assessed, and has encouraged a more holistic, well-rounded approach to patient care:

*“Well we work quite closely together so if we, for example, if we’ve got someone with an overdose we work together in a sort of parallel way” (A&E Consultant)*

*“And I think it also means that the services feel more integrated so it’s not a case of, oh we deal with your medical needs, and this person comes and they deal with your mental health” (Ward nurse)*

However, some acute staff members felt that parallel working could stand to be improved between RAID staff and acute staff:

*“What I’d like to see more of is an attitude that medical and psychiatric assessments can occur in parallel, simultaneously. That a patient can be waiting for the results of a blood test and have their*

*mental health assessment. Which sometimes happens, but I don't think it always happens" (A&E Consultant)*

Most acute staff reported that overall, these factors have led to the provision of better quality care for patients with mental health or drug and alcohol issues, and have ensured that more patients are able to receive appropriate care in a timely fashion:

*"I've just seen that the people that you think get left behind for the wrong reasons, [the RAID team] really advocate for" (Ward Nurse)*

*"Well it certainly gets [the patients] assessed. And care planning is better for those patients now" (Ward Consultant)*

*"I think what's happening is that patients are getting much better treatment, and also we all feel very reassured that we're giving them the right drugs and are treating them appropriately" (ACU Consultant)*

*"The patient just gets the right answers, the right information at the right time and we get the right advice" (A&E Nurse)*

#### 4.4.2.4 Theme 4: Staff Knowledge

All of the acute staff interviewed reported positive experiences of the training they had received from RAID staff, and many reported that it had helped them to perform their day-to-day work. Staff identified many areas in which RAID had provided training, included more general areas such as taking a patient history, assessing and managing risk, preventing and managing challenging behaviours, common presentations of mental health or drug and alcohol issues and how to recognise these, and the use of the Mental Health Act and Mental Capacity Act. Some staff reported that they had received training in areas more specific to their roles, such as managing alcohol withdrawal and detox, managing patients with personality disorder and schizophrenia, assessing and managing delirium, and the use of rapid tranquilisation:

*"I think [the training] was really good for giving us, sort of, being able to have the discussions about this is what we can look for, this is what we're worried about. And, sort of, being able to upskill us or, sort of, give us information" (Ward Nurse)*

*"I think the main thing that it's done is it's given people confidence to take the [patient] history because they now know what kind of questions they should be asking, have found and discussed a couple of ways to ask questions which are often perceived as quite difficult questions and quite difficult conversations to have, and feel much more confident in terms of being able to perform a meaningful risk assessment" (A&E Consultant)*

However, many acute staff reported that the training provided by RAID had been relatively restricted to junior doctors. Acute staff expressed that nursing staff would also benefit from mental health and drug and alcohol training, and some also felt that it would be helpful for RAID teams to provide more training and information on what the role of the service is and the types of patients that would be appropriate for referral:

*"I think the liaison team are more than happy to help us provide any kind of training. I think that the frustration always is not being able to get enough staff trained" (A&E Consultant)*

*"I would love to see the psych nurses and/or consultants do... We have Wednesday morning teaching for nursing staff, come and teach some just basic recognition. It takes years to really understand mental health but just, you know, this is a mental health problem, this isn't a mental health problem" (A&E Nurse)*

*"It might even be helpful if they could come and do some training about what their exact role is because I think we probably blanket referring a bit at the moment - as in, oh well, I don't know, well we'll just get the RAID team to come and see them - as to what their role is specifically, the kind of patients that they see" (Ward Nurse)*

#### 4.4.2.5 Theme 5: Patient and Staff Outcomes

Many acute staff felt that outcomes for patients had improved after the introduction of the RAID services, with some describing positive effects on facilitating discharge from hospital and preventing readmission, the ability to provide appropriate follow-up care, and decreased length of stay for patients admitted to wards:

*"I can think of one particular case where [the patient would] probably still be in [a hospital bed] now, but [the RAID consultant] came along and said no, send her home and I will arrange follow up and things. That's the other thing, if they say they'll arrange follow up you know it's going to be done. So we've had some difficult patients, they undoubtedly facilitated discharge, yes" (ACU Consultant)*

*"all-in-all patients gets assessed very quickly, quicker than before, length of stay is shorter, all round it's a much better service than they had before" (Ward Consultant)*

*"[They have] allowed us to become more efficient in terms of our length of stay, our moving of patients where ordinarily they'd wait for a week to... be seen by the psychiatrist, now we don't have that issue" (Ward Consultant)*

However, some staff expressed that the main impact of introducing the RAID services has been on improving patient care while in the acute hospital, and that the impact on patient flow and bed usage was not of importance to them:

*"I presume [the RAID service] was set up to try and increase patient flow, that's not how I see it as being the most useful thing" (ACU consultant)*

Acute staff described how one of the most important benefits of introducing the RAID model has been better integration between acute hospital staff and liaison psychiatry staff. Many expressed that stronger working relationships has led to a greater sense of support and reassurance for acute hospital staff, allowing them to feel confident that they are providing patients with mental health or drug and alcohol issues with the appropriate care:

*"I get the impression that there's much more, there's a much greater willingness to work together and a much greater will to work together and there's less of a 'them' and 'us'" (A&E Nurse)*

*"The fact that I know that they're there gives me an awful lot of support. So that I can... The fact that I know that they're there means that I can broach the subject of anxiety, depression and know that there is someone who's going to come in and help out once I get agreement for them to come, for the patient to be assessed. So it makes a, it makes a big difference to my day-to-day work knowing that they are there, knowing that they are reliable" (Ward Consultant)*

*"I feel less stressed about looking after a psychiatric patient because I know I'm doing it properly, because I've got someone to hold my hand" (ACU Consultant)*

*"For me I think there's a tangible sense of safety and support that RAID provide to our ward staff and our patients that is difficult to measure but when you take them away it feels different" (Ward Consultant)*

Many of the acute staff commented on the value that the RAID teams provide to the acute hospital, expressing gratitude for the services as well as a desire for the teams to remain:

*"[The RAID staff] are incredibly valuable and we are very grateful to have them, and we would not like for them to go away" (A&E Consultant)*

*"I don't believe one person in this hospital who's looking after patients will ever say the RAID team is not a good idea. It is an excellent idea, it should remain" (Ward Consultant)*

## 4.5 RAID Staff Experience

### 4.5.1 Survey Results

Overall, 51 RAID staff members completed the experience survey. This includes 30 RAID staff who completed the online survey sent by UCLP, as well as previous data obtained for 21 staff members at Newham hospital. The findings from some key questions are presented in Table 19 below.

The results suggest that overall, RAID staff had relatively low levels of satisfaction with the training and education provided to them, the number of staff within the teams and the amount of time they had available to perform their core functions.

Importantly, while most staff felt that communication was effective within each RAID team, only 60.8% felt that each team had enough staff to perform its core functions safely. There were very low rates of satisfaction with the training and education provided to RAID staff, especially in the areas of managing acute disturbance, all areas related to working with older people, and in brief interventions.

**Table 19. RAID staff experience of delivering care survey results**

Question		% Satisfied
Does the team have enough staff to perform its core functions safely?		60.8%
Do you think communication is effective within the team?		74.5%
Are you satisfied with the length of time you are able to spend on each assessment?		60.8%
For clinical staff, have you received sufficient guidance, training or education for each of the following areas:	Conducting mental health assessments	60.8%
	Assessing and managing a patient's risk to self and others	64.7%
	The use of legal frameworks	52.9%
	Detecting and managing acute disturbance in physically ill people, and the use of rapid tranquilisation	49%
	The protection of vulnerable adults and child protection issues, including responding to suspected abuse or domestic violence	70.6%
	Understanding why people self-harm and the difference between self-harm and acts of suicidal intent	60.8%
	Preventing and managing challenging behaviour	62.7%
	Detecting the misuse of alcohol and knowing where to signpost if necessary	64.7%
	Detecting the misuse of drugs and knowing where to signpost if necessary	58.8%
For staff working with Older Adults, have you received sufficient guidance, training or education for each of the following areas:	Detecting and managing dementia in older people	33.3%
	Detecting and managing delirium in older people	31.4%
	Detecting and managing depression in older people	35.3%
	Undertaking specialist assessments of a patient with cognitive impairment	27.5%
For staff who provide therapeutic interventions, have you received sufficient guidance, training or education for the areas you deliver interventions in?		31.4%

## 4.5.2 Interview Results

### 4.5.2.1 Theme 1: Role of RAID

Many of the RAID staff interviewed spoke about the current inequalities in the provision of care between patients with physical health and those with mental health needs within acute hospitals. Staff felt that perhaps the main purpose of RAID services was to promote parity of esteem for patients with mental health and drug and alcohol issues, by ensuring their needs are identified and met while in the hospital:

*“You know, the rates [of mental illness] are high; the rates of identification are very low. So, people’s mental health should be managed better in acute hospitals and I think RAID services do contribute a lot to that” (Consultant Psychiatrist)*

*“Making sure people [with mental health issues] get the treatment, and are treated equally as much as possible, is probably the most important role” (Consultant Psychiatrist)*

*“I think the primary thing is to improve the quality of care given to people with mental health problems in the general hospital because this has been very sorely neglected in the past. So, as well as carrying out assessments ourselves then we’d be keen to improve the skills of the staff generally in the general hospital dealing with people with mental health problems. The other thing is being a bridge signposting to other services in the community, mental health services as well as voluntary services and so on” (Old Age Consultant Psychiatrist)*

### 4.5.2.2 Theme 2: Challenges Faced by RAID Teams

RAID staff discussed a number of challenges that they have faced in setting up and working within the RAID services in the acute hospitals. Many described clinical governance issues relating to IT systems, noting that the use of difference systems within acute and mental health trusts has meant that they are often required to duplicate their notes, or may have difficulties accessing mental health electronic recording systems such as Rio on acute hospital computers. Some staff felt these challenges created potentially risky situations for patient care:

*“We have to write everything that we do on the [acute trust] computer and then transfer that to our own [mental health trust] computer system whilst the medics are using paper notes” (Consultant Psychiatrist)*

*“Before the RAID team started, the previous services weren’t really using the [acute trust] information systems at all. Everything was going on in the [mental health trust] system. And that was something we changed, because obviously...it’s an important part of clinical care.... but obviously that means we then have to record everything on two systems” (Consultant Psychiatrist)*

Many staff also explained how uncertainty about service funding from CCGs had led to anxiety within the teams, had resulted in high staff turnover, and some felt this had effected their ability to perform their role:

*“We have been aware of lots of meetings with commissioners about money and there’s been lots of uncertainty and we haven’t ever really had any clear answers about what’s happening, what will happen with the future of the team... as much as you try not to let it affect your future planning, of course it does, if you think, I’m not going to be in the service for much longer it affects your ability to be motivated and engaged in your job and makes you feel anxious and uncertain. So, that will impact your ability to do your job” (Allied Health Professional)*

*“I think it’ll get a lot better if we have recurrent funding and we know exactly where we are and people know about their job security and we can have a good idea of what the service looks like instead of being worried” (Nurse)*

#### 4.5.2.3 Theme 3: Access

Overall, the RAID staff interviewed felt that access to appropriate treatment for patients with mental health and drug and alcohol issues had improved since the introduction of the RAID model. Many described the pre-existing liaison psychiatry services as smaller, less well staffed and resourced. Staff reported that the increased staffing in the RAID services has allowed more patients to be seen by the RAID teams, and for those patients to be seen faster:

*"[The pre-existing liaison psychiatry service] from my understanding, was not as well staffed and resourced. It didn't have the different skills and expertise [of the RAID service]" (Nurse)*

*"I think [the previous liaison psychiatry service] was very brief intervention and lots of assessment without a lot of follow-up" (Allied Health Professional)*

*"I would say it has an impact on patient care especially in A&E. More patients can be seen because we have more staff. And because it's the RAID model, when they're tight down there [the RAID staff who work on the wards] could go down and give them a hand" (Nurse)*

*"We certainly see people quickly, we certainly get them reviewed quickly; get them on the right management plan quickly" (Consultant Psychiatrist)*

#### 4.5.2.4 Theme 4: Efficiency

Many of the staff interviewed described the pre-RAID liaison psychiatry services that were in place as made up of several separate teams, each focusing on a different patient group such as older adults or patients in A&E. Many felt that one of the main goals of introducing the RAID model was to bring together clinicians into one, multidisciplinary team with the common goal of providing more holistic care to patients throughout the lifespan. Discussions focused on the idea that integrating these teams had upskilled RAID staff, as they are able to learn from each other:

*"[Before the RAID service] there was so many different services that they were all separate and didn't have the same kind of overarching goals and aims perhaps" (Nurse)*

*"I think the big positive about the RAID model is the idea about, you know, looking at integration, so that we have all been able to learn from one another. And I think everybody, kind of, feels much more able to manage drugs and alcohol problems, you know, cognitive impairment, routine adult problems, compared to before (Consultant Psychiatrist)*

*"It's fantastic for upskilling the team. It's fantastic for, you know, quality of assessments and, you know, kind of holistic assessment that means that we can address all sorts of different things" (Psychiatrist)*

Many RAID staff also identified the increased consultant presence in the RAID model as a factor that had increased the efficiency of the liaison psychiatry teams. They explained that having more consultant level staff in place meant high-level decision making regarding patient care was faster, leading to better quality care:

*"Because of the increased consultant presence I think there are more... senior decisions made and so I think actually that helps the patients and it helps the general work in the hospital a great deal" (Consultant Psychiatrist)*

*"The cases we are seeing are really complex so we absolutely need that consultant support and it's been amazing having them on the team" (Allied Health Professional)*

*However, a few staff members expressed the opinion that there were currently too many consultant level clinicians within the RAID teams, which they felt hindered their ability to perform their roles:*

*"I think there's too many seniors. There's not a clear delineation of responsibility" (Nurse)*

RAID staff identified another way in which efficiency has improved, which is through a better mix of staff skills and expertise in the RAID model. Staff feels that the inclusion of drug and alcohol nurses, and allied health professionals in the RAID teams, such as psychologists and occupational therapists, as well as social workers, had increased the quality of care delivered to patients with mental health and drug and alcohol problems.

*“We’re a strong complement of nurses and doctors, different skills and experience, different, sort of, lengths of service, different backgrounds and, I think, now we’re finally getting to, you know, use that and complement each other, complement each other’s, sort of, skills and using experiences to work as one” (Nurse)*

*“I think there is a good mix of skills. We’ve even got a social worker” (Nurse)*

However, one comments that was consistently raised during interviews was the importance of providing psychological interventions for patients, and many staff felt that the RAID teams were lacking psychology input:

*“We haven’t got psychology and I think that that’s a real huge loss” (Psychiatrist)*

*“I would like to have a psychologist to do some ward work because I think most of the patients see on the wards could do with some psychological input” (Consultant Psychiatrist)*

*“We have no psychologist in the team which I think is a huge gap in the skill-mix in the team and the expertise of the team” (Old Age Consultant Psychiatrist)*

Similarly, some RAID staff felt that more nurses specialising in old age psychiatry were needed in order to accommodate the level of clinical need for this population, and to provide appropriate, high quality care for all:

*“What I would have liked would be more older adult expertise amongst the nursing section” (Psychiatrist)*

*“At least an old age liaison nurse. Put that in capitals” (Old Age Consultant Psychiatrist)*

Finally, some staff members felt that there should be more senior nursing staff in order to provide a better quality of care to patients during out-of-hours:

*“I think it probably would be good to have more senior nurses because out of hours, which is, like, 75% or more of the time is just run by nurses out of hours, and to have people with, like, good experience, and, I don’t know, high-quality nurses out of hours is important to provide a good service out of hours” (Nurse)*

When describing the impact of the RAID model on the delivery and quality of patient care, the RAID staff provided positive feedback:

*“I remember [before RAID] because of the staffing issue you [didn’t have enough] time to spend with the patient. You want to do it quick and just go but now, you can really relate to what you’re doing very well, because there’s time to do whatever you want to do with the patient and give a good care” (Nurse)*

*“Most of our patients almost all will have a consultant review fairly early on in their [time in hospital], you know, and probably more than one. So, from that point of view I think that we are delivering a high quality of care to the patients and I’m happy with that” (Consultant Psychiatrist)*

*“I think [RAID service means we have] the time to be able to accurately assess and identify these mental health needs within the patients and we have that expertise and skills base to be able to put in appropriate management plans to keep patients safe and appropriately treated but also making sure that they receive the right care once they leave hospital as well, using the resources and the links we already have with community mental health services” (Nurse)*

#### 4.5.2.5 Theme 5: Staff Knowledge

RAID staff frequently expressed concern in the interviews about the stigma attached to mental health and drug and alcohol issues within acute hospitals, which effects the level of care that these patients receive. Many described the main aim of training acute hospital staff as increasing their awareness of these issues, and thereby reducing stigmatisation:

*“You know the attitudes are there in general hospitals and I think people often want our patients off the wards. They want us to take them away to psychiatric units so they don't bother them anymore, take them out the A&E department” (Psychiatrist)*

*“Stigma, I think, remains one of the largest barriers. A lack of... a general lack of understanding of the needs of the patients presenting with mental health needs or drug and alcohol needs, you know, that is one of the largest barriers, really” (Nurse)*

*“I think in a lot of ways having liaison service reduces the stigma of mental health problems” (Old Age Consultant Psychiatrist)*

Most RAID staff described positive experiences of establishing and providing formal and informal training to acute hospital staff. They felt that training for acute staff would lead to a better quality of care for patients:

*“We've managed to get the mental health awareness as part of, now, the [acute trust] statutory mandatory training, so everyone who joins the trust has to have that” (Psychiatrist)*

*“Becoming established into the role, getting a regular face, has helped me insert ourselves into training and education programmes, although not as much as we'd like, and the familiarity has helped with being able to provide informal training and education, so maybe it's not in a lecture situation but actually on the ward, somebody says, okay, what's going on here, and you've got that opportunity to talk about the illness, management of that and how that manifests” (Nurse)*

*“Their improved awareness and understanding of these patients will improve the care on the wards and improve recognition of problems” (Psychiatrist)*

*“[We have] more time to think about the impact we can have hospital-wide rather than focussing on that one patient. If we can improve the general staff, their knowledge, their skills, their confidence, then that's going to have a bigger impact on future patients rather than just that one challenging patient” (Allied Health Professional)*

However, all of the staff acknowledged that more training was needed, and in particular that the focus should now move toward training acute nurses in the recognition and management of mental health and drug and alcohol issues:

*“There has been [training] for the doctors, but, to be fair, a lot of the nurses haven't had a lot of training about mental health, and it's probably something we definitely need to look at” (Nurse)*

*“So nurses are now going to become our focus because that's the group that's been harder to capture, and I think the ones that we now need to focus on because that's the biggest group of clinicians in the hospital” (Psychiatrist)*

With regard to RAID staff member's own knowledge and training, many staff members felt that there have been increased opportunities to develop their own learning through supervision, reflective practice and case discussion, and by learning from other clinicians as part of a multidisciplinary team:

*“We have weekly case discussions groups between all three teams to what everyone is thinking and talking and presenting difficult cases between yourselves” (Consultant Psychiatrist)*

*“I have more supervision than before, before RAID came in. There's more supervision, more reflective practice, they give us... And also we have more away-days. So things have changed” (Nurse)*

However, one staff member commented that in order to improve on the skills and knowledge within the RAID team, in-house training conducted for the team by different RAID clinicians would be useful:

*“The thing I think that we would benefit more from is sharing the knowledge that we have within our team. So, there's so many very knowledgeable people but we don't do in-house training” (Allied Health Professional)*

#### 4.5.2.6 Theme 6: Patient and Staff Outcomes

With regard to patient flow outcomes such as length of stay, discharge, re-attendance and readmissions, some of the RAID staff gave positive feedback about the impact of the RAID model:

*“People who are coming into acute hospital with things that are really directly related to their mental health so things like taking overdoses and having drug and alcohol problems, I think those are the patients we are getting out and turning around more quickly because before, you know, you might to take an overdose and you might wait two or three days to see a psychiatrist and you couldn't go until you've been seen by one” (Psychiatrist)*

*“You know, I think we probably are reducing length of stay there. But you know lengths of stay are going up overall in patients that are, you know, sick and socially compromised. I think what would be striking is if you took us away” (Psychiatrist)*

However, many commented that the factors that affect patient flow and bed usage, such as social care arrangements, are largely outside of the influence of RAID. They described how any potential economic benefits that may results from the introduction of RAID are particularly unlikely given the current economic context, in which social care budgets have been severely cut. Indeed, some staff members felt that focusing too narrowly on bed usage outcomes that may have economic benefits does not fully capture the value of the RAID services to patients, acute staff and to acute hospitals as a whole:

*“So I do agree a well resourced team can, theoretically, impact on those factors but there are a lot of factors out of the control of a liaison team” (Nurse)*

*“You know, the vast majority [of patients on wards are] waiting for package of care, waiting for a nursing home placement, you know, these are the big things which actually we've got almost no influence over other than doing our assessment quickly and timely and what not (Psychiatrist)*

*“I don't think [economic savings are] something that we're very likely to achieve particularly in light of such decimated social care” (Consultant Psychiatrist)*

*“I think also, unfortunately, that lots of CCGs are included were very bewitched by the RAID economic evaluation and attached a, frankly, unrealistic expectation of what could be achieved in terms of cost savings” (Consultant Psychiatrist)*

*“Would it prove that we save money? Well... what we want to do is to measure the value of what we're doing [which] cannot be measured with figures alone” (Consultant Psychiatrist)*

With regard to outcomes for hospital staff, many of the RAID staff commented that the introduction of the RAID model had strengthened working relationships between acute staff and liaison psychiatry staff. They felt that the increased focus on joint working has led to improvements in the quality of patient care, and has benefitted the hospital as a whole:

*“Yesterday, for example, I was with a doctor when we saw a patient together. I was helping him to communicate, really, with this person. I worked with a physiotherapist yesterday who was trying to get somebody to get out of bed and he wouldn't get out” (Old Age Consultant Psychiatrist)*

*“Since RAID has come in, [mental health issues are] recognised, we get respect, we get the... we have more relationship with the medical staff and everybody's just happy that we are around” (Nurse)*

*"I think the majority of staff have responded quite positively and knowing that they have that resource there for helping patients across the hospital, a lot of people are saying, you know, it is invaluable" (Nurse)*

## 4.6 Conclusions

Taken together, the results of the surveys and interviews suggest that the introduction of RAID services in the four hospital sites has been considered highly valuable. Surveys and interviews conducted with acute hospital staff and RAID staff suggest that the introduction of this model has had a noticeable impact on the quality of patient care being delivered, many believe it to have improved access to appropriate treatment for patients with mental health and drug and alcohol issues, and it has somewhat increased the knowledge, skills and confidence of acute hospital staff, while strengthening working relationships.

Feedback from patients and carers suggests that overall, most were satisfied with the care they received from the RAID clinicians, with many feeling reassured and supported during their time in hospital. However, there is a need for RAID to provide greater clarity about their roles and responsibilities, and about what patients and carers can expect in their treatment, as recommended by NICE guidance. Many patients and carers felt written information would be most useful for this purpose.

Feedback from acute staff suggests that overall, most are satisfied with the input and advice provided by RAID services. However, a consistent theme that emerged in this analysis was that the advice and training provided by RAID was relatively limited to medical professionals, with little formal training available for nursing staff. Indeed, nursing staff were overall less satisfied with the service provided by RAID than their medical colleagues. RAID services will therefore need to increase their efforts to reach nursing staff and allied health professionals in the future, as this will likely have a significant impact on the quality of care that nursing staff are able to deliver to patients with mental health or drug and alcohol issues.

Interviews with acute staff suggest that the introduction of the RAID model has led to a noticeable difference in working relationships with liaison colleagues, and many felt that the increased visibility of RAID clinicians, alongside greater consultant presence within the services, had led to better access for patients with mental health and drug and alcohol issues, as well as a higher standard of care being delivered.

Finally, feedback from RAID staff suggests that while there have been noticeable improvements in terms of access, efficiency and outcomes, there are a number of areas in which RAID services could improve. For instance, while many felt that the increase in staffing was an improvement on the pre-RAID liaison psychiatry services, only 60.8% of RAID staff surveyed felt that the team currently had enough staff to perform its core functions safely. Feedback given in the interviews suggest that one of the main issues in staffing levels is poor out of hours cover, especially in A&E, which could potentially be addressed by increasing the number of senior nursing staff during evenings and weekends.

Similarly, while RAID staff members felt the mix of skills and expertise introduced through the RAID model has led to improvements in patient care, most felt that higher quality care and better patient outcomes could be achieved in the future with the provision of more psychology input for the teams, as well as provision for dedicated social workers.

Many of the RAID clinicians also felt that there should be a higher level of older adult psychiatry expertise within the teams, and indeed, very few of the RAID staff surveyed who worked with older adults felt they had received sufficient training or education in order to perform core aspects of their role. This should be a focus for future developments within the RAID teams, as it is likely that any potential for economic savings would come from decreasing length of stay for this particular group of patients. In fact, in the original Birmingham evaluation of RAID, almost all of the cost savings made were attributed to bed days saved in older adult wards (Tadros et al, 2013).

## 5. Discussion

Taken together, findings from each of the three reports suggest that the implementation of the RAID model of liaison psychiatry in east London has been highly valued, and may have led to some improvement in outcomes for patients with mental health and drug and alcohol issues.

As we have noted, the introduction of 'RAID-style' enhanced liaison services has been varied across each of the four hospital sites, and there are significant differences in the staffing levels of each team. Due to limited data available at the hospital site level, our analyses focused on the overall impact of the RAID model across the four hospital sites, and it is therefore not possible to identify any one service model as superior to any other. However, there are a number of factors common to all the services which, drawing on both the quantitative and qualitative data, may be associated with improved effectiveness. These include:

- Increased levels of staffing in order to provide a 24/7 service. The findings suggest that the RAID services were able to see patients referred to them faster, in almost all cases meeting the target times for rapid assessment developed by the original RAID service in Birmingham
- Broader range of skills and expertise within each team. The findings suggest that expertise in older adult psychiatry, drug and alcohol related issues, as well as social and psychological issues may have led to a higher quality of patient care being delivered, with services able to provide NICE recommended brief interventions, and in some cases, outpatient follow up appointments
- Increased consultant presence within each team. The findings suggest that having more consultant-level staff within the liaison psychiatry team has led to faster high-level decision making, which is highly valued by acute staff.
- Better integration with acute hospital staff. The findings suggest that RAID staff are better integrated with acute hospital staff, which enables them to provide informal advice and supervision, as well as more formal training on issues relating to mental health and drug and alcohol problems.

Overall, these findings suggest that the implementation of the RAID model of liaison psychiatry has improved access to appropriate care for patients with mental health and substance misuse problems and may have improved the quality of care they receive. The services also appear to be highly valued by acute staff, and may have had some positive impact on the skills, knowledge and confidence of acute staff to manage patients with mental health problems.

However, while there is some evidence that the introduction of the RAID model has led to decreased length of stay for patients with mental health and drug and alcohol problems, these savings are not in line with savings seen in the original Birmingham RAID evaluation (Tadros et al, 2013). Contrary to expectations, the introduction of RAID did not appear to reduce readmission rates, as seen in the original evaluation. In fact, readmission rates appear to have increased in the period after the introduction of RAID.

There are several potential reasons for this. Firstly, the data presented in the cohort study suggest that a large proportion of RAID clinician time and resources are spent with patients with serious mental illness, substance abuse issues or vulnerable patients who have self-harmed or overdosed. While the data shows that RAID clinicians provide onward referrals to appropriate services for many of these patients, many of these patients are already known to community services and still regularly attend A&E, suggesting that it is unlikely that RAID intervention would have much of an impact on re-attendance rates.

Similarly, the data suggests that a significant proportion of RAID resources on inpatient wards is spent assessing and treating patients with dementia and delirium who are acutely unwell. The patients with dementia and delirium seen by RAID had longer lengths of stay in hospital than the average patient

with dementia (see figure 1) and were much more likely to be readmitted. It is therefore unsurprising that focusing on these very unwell patients is unlikely to result in changes to bed usage outcomes (although it may well have improve the quality of care delivered).

Rather, it is likely that any impact on bed usage may have been an indirect effect of up-skilling general hospital staff, through providing advice, supervision and training. In fact, in the Birmingham evaluation, the introduction of the RAID team led to a greater reduction in length of stay for those in the RAID-influence group, who were not directly seen, than for those who were seen by the team (Tadros et al., 2013).

Findings from the qualitative analysis show that the training and advice currently provided by RAID staff was valued by acute staff, and appears to have had a moderate impact on the skills and confidence of acute staff to manage patients with mental health or drug and alcohol issues. However, the findings also suggest that many staff- especially nursing staff- are not satisfied with the amount of training provided, and feel that formal training is often limited to medical staff. Interviews with RAID clinicians clearly show that while providing training is a key priority for the teams, the current levels of staffing do not afford enough time to increase the scope of training at present. While some hospital sites, particularly those in Barts Health NHS Trust, have made excellent progress in ensuring mental health awareness training is part of the hospital wide induction program, there is clearly scope to improve the training provided in some sites.

If outcomes for the RAID services are to be improved, there will need to be a focus on increasing the amount and scope of training provided, both to medical and nursing staff. In order to achieve this, some services may need to rethink their current staffing levels and structure. For instance, the provision of more senior nursing staff within the teams may equip services with the time, resources and expertise needed to train acute nursing staff. Similarly, the addition of more allied health professionals such as clinical psychologists may enable the RAID teams to focus on increasing the scope of training provided and may help them think about the impact they can have on the acute hospital at a systemic level.

These suggestions are in line with those outlined by Mental Health Partnerships (2014), who developed minimum staffing criteria recommended for the effective delivery of different models of liaison psychiatry services (see Appendix 1). Though each individual service should be commissioned based on the needs of the local population, a comparison of the current staffing levels at each site (see Table 1) with these criteria is important, given that each model is recommended as a minimum requirement needed to achieve the expected cost-saving benefits of the RAID model (Parsonage & Fossey, 2011).

Finally, it is important to note that the current economic climate has resulted in significant cuts to social care services in east London. Without appropriate community and residential services in place, it is unrealistic to expect RAID services to significantly impact on outcomes such as length of stay and re-attendances and readmissions. It cannot be understated that the effectiveness of the RAID services, or any liaison psychiatry service, is largely dependent on the availability and quality of services within the wider health and social care system. Ultimately, in order for the RAID services in east London to impact on bed usage (above and beyond their potential to improve the quality and availability of appropriate care), they need to be commissioned as part of a larger strategy of commissioning acute and mental health services in ways that reflect the core value of parity of esteem for patients with mental and physical health problems. (Department of Health, 2014).

## 6. References

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