Patient Experience of the Royal Stoke University Hospital Accident and Emergency Department
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EXECUTIVE SUMMARY

Background and Context to the Research

The winter of 2014/15 has been tough for the NHS, and in particular for Accident and Emergency departments which have seen unprecedented demand. Major incidents were called by Trusts across the country, including at the Royal Stoke University Hospital (RSUH). Like many others, RSUH fell significantly short of meeting its 4 hour targets, and even more significantly recorded over half of the country’s 12 hour breaches i.e. those people waiting more than 12 hours for either discharge or admittance. Unsurprisingly, public concerns were expressed about this situation, particularly at a time when services are transferring from the County Hospital in Stafford to RSUH. As a result, Healthwatch Staffordshire in partnership with Healthwatch Stoke-on-Trent undertook this research to find out why people are using A&E in such numbers, what other urgent care options they have explored and if any measures could be taken to ease the pressures on this over-stretched system.

Our previous research in 2013 highlighted that when A&E targets are missed, this is often a result of people attending A&E rather than or as well as accessing alternative services. It is therefore timely that we explore the issues of waiting times and service user decision making to attend A&E in order to ascertain how the system as a whole is working, whether the provision of alternatives to A&E is significantly helping to reduce pressures, and what the patient experience is in navigating their way to find the most appropriate services. Ultimately, this research has developed recommendations that support improvements in the system which all acknowledge are needed to reduce waiting times and the risk of harm.

Methodology

The results in this report are principally based on 460 survey responses over a two week period from the 2nd February to the 15th February 2015 (inclusive). Patients were interviewed in the waiting areas of A&E and therefore the majority of those spoken to were those who arrived by their own means rather by ambulance. Whilst 40% of attendances to RSUH are by ambulance, the focus for this report is on “ambulatory care” or “walking wounded” patients. The survey findings are complemented by field researcher observations and analysis of public sentiments towards Accident and Emergency services in Staffordshire on social media. In addition, the report analyses the data from the weekly NHS England Winter Tracker Data outlining the percentage of patients admitted, treated or discharged under 4 hours at the Royal Stoke University Hospital. The results from the questionnaire were analysed using both descriptive and analytical statistics.

Main Findings

The main findings from the research demonstrate that:

- Overall, 59.8% of those who attended A&E were referred by an organisation or other part of the NHS. Of those who were referred 48.3% were referred by their GP, 17% by NHS 111 and 8.5% by Walk-in Centres with the remaining 26.2% being referred by other hospitals and pharmacies;
• Patient experience of A&E is positive, with 45% of respondents noting that their experience at reception and triage was “very positive” and 97% noted that they had been treated politely and courteously;

• 57.5% of respondents noted that the TV screens showing waiting times were rated as either being “useless” or “extremely useless”, with a further 30.9% suggesting that the TV screens were neither useful nor useless. During the period of data collection, the screens had not updated since 4th February;

• Overall, 97.8% of those who were surveyed indicated that they were registered with a GP yet only 43.3% of those who attended A&E had attempted to contact their GP with two thirds of all patients referred to A&E by their GP;

• The above point was reinforced with 73.3% of patients identifying that even if they had an appointment with their GP today or tomorrow they still would have attended A&E;

• Over a third of patients noted that they did not know whether their GP provided an out of hours service;

• 86.9% of respondents stated that they did not feel that a GP out of hours service would be appropriate to treat the symptoms they had experienced on the day of data collection;

• Attendances to other medical services illustrate that GP practices, NHS 111 and walk-in centres are used more than pharmacies and minor injury units within Staffordshire and Stoke-on-Trent yet they are also more likely to refer to emergency departments;

• Nearly a quarter (24.3%) of patients were attending A&E for at least the second time in the past year, with 89.7% of repeated attendances having previously visited the Royal Stoke University Hospital;

• On average, waiting times within the A&E department to be seen after triage were around 2-3 hours (though this does not include admission and/or discharge);

• Previous experiences of A&E waiting times for triage indicate that overall more people waited longer than an hour (29.4%) compared to those waiting more than an hour on the day of data collection (6.6%), suggesting that experiences during the data collection period are more favourable than previous experiences;

• The number of those waiting for treatment following triage for less than an hour is lower for previous experiences (26.2%) than during the period of data collection (42.5%), yet a similar number waited 1 to 2 hours previously (31.7%) than during the current study (35.7%). However, waiting times longer than 3 hours were significantly higher for previous experiences (42.2%) than the period of data collection (21.8%);

• 65.1% of patients visited A&E previously rated their experience as either “very positive” or “positive”, with a further 18.8% ranking their experience as “neutral” whereas only 16.1% rated their experience as “negative” or “very negative”;

• Patient experiences are predicated on evaluating many different elements of A&E including reception staff attitude, interactions with staff, waiting times, experiences with triage nurse, the physical waiting area, car parking and standard of treatment. Combined, these elements comprise the overall experience of A&E.
Recommendations

1. Stoke-on-Trent and North Staffordshire CCGs together with University Hospitals of North Midlands NHS Trust should consider implementing a GP “fast track referral system” whereby those who have been referred by their GP or Walk-in Centre, including the ability for GPs to book patients in, for patients to bypass triage thereby reducing double handling and improving patient experience. Such a system has been implemented in other Trusts (i.e. Burton Hospitals NHS Foundation Trust) and the impact has been judged to be beneficial.

2. Given the high number of multiple attendances, particularly amongst those with a long term condition or disability (11% of our sample size), UHNM are urged to undertake clinical reviews for all those patients under the care of a specialist consultant and who have attended A&E at least once in the past 6 months to ensure that their treatment pathways are effective.

3. The A&E department at the Royal Stoke University Hospital need to ensure that they indicate waiting times clearly to patients, via verbal communication and through the use of a number of regularly updated Television screens around the waiting area that are appropriately sited through the department.

4. The microphone and audio equipment at the reception of A&E at Royal Stoke University Hospital need to work effectively as talking through the glass panels proved difficult for those hard of hearing.

5. There should be a review of the winter pressures campaign to consider its efficacy in whether attendances to A&E are deterred and if the release of the data on a weekly basis helps the public to choose which service is most appropriate to treating their symptoms, given the approach that each CCG employs are different to one another.

6. There needs to be an improved understanding of what constitutes a medical emergency and whether this should be presented to the emergency department or whether there is a more appropriate service that could address the nature of patient injuries and/or illnesses. This should be done in a number of ways:
   a. Medical services such as GPs and NHS 111, who refer heavily to the emergency department, should reconsider whether particular symptoms require attention at A&E or whether these could be self-treated or presented at MIU or a WIC;
   b. There needs to be an increased understanding of what symptoms should be presented to A&E and what could be treated elsewhere, for example at MIU or WIC;
   c. Referral to the Directory of Services for accident and emergency should present the use of A&E as a last resort and guide GP’s, NHS 111 and the public through to the most appropriate service that provides accessible and non-technical information for ease of understanding (akin to “if you have these symptoms please consult X medical service”).

7. The financial implications of people making attendances to multiple services should drive reconsiderations and a re-evaluation of whether accident and emergency services have been made too complicated and instead consider how it could be simplified to increase capacity at A&E, save costs and reduce confusion and improve accessibility to emergency health care.
1. INTRODUCTION AND BACKGROUND RESEARCH

The NHS faces considerable challenges in providing appropriate medical attention to an ageing population as well as substantial and evolving health issues such as inactivity, obesity, cancer and end of life care. There are significant pressures on the NHS to deliver efficient and safe healthcare whilst ensuring sustainability as the demands of an ageing population, and one with a diverse range of health care needs, rises.

1.1. Accident and Emergency winter pressures

Over the 2014/2015 winter period, there have been substantial concerns about the capacity of hospitals to deal with the number of people attending A&E, particularly at the University Hospitals of North Midlands (UHNM), who along with a number of other NHS Trusts across the country declared “major incidents”. Major incidents have been declared in hospitals that have had particular difficulty in seeing 95% of patients within the four hour waiting time. The four hour target measures the point from when the patient arrives to when they are treated and discharged, admitted to hospital or transferred to another part of the NHS.

The NHS defines a major incident as “any occurrence that presents serious threat to the health of the community, disruption to the service or causes (or is likely to cause) such numbers or types of casualties as to require special arrangements to be implemented by hospitals, ambulance trusts or other acute or community provider organisations”.

A major incident reflects an exceptionally busy period and special measures are required to cope. This can happen in winter when demands are high but also at other times, for example if there has been a major road accident. Measures taken to address major incidents involve postponing routine activities for example non-emergency procedures such as hip or knee operations and bring in more staff (off leave or from other departments) to deal with the influx of patients. As a last resort, and unusually, hospitals may divert ambulances so no emergency patients arrive. This measure known as “black alert” redirects patients to on to other hard pressed hospitals in the region.
The unprecedented demand for A&E treatment arises from the UK’s ageing population and the need for specialist care. Nearly a fifth of patients who go to A&E need to be admitted for more complex care than can be given in emergency departments. However, a significant issue for hospitals surrounds discharging patients, many of whom are elderly and frail patients who when they are ready to be released need support from community services. If this is not in place, they remain in hospital and occupy a bed which is often needed for other patients. Other pressure points on Accident and Emergency departments relate to access to GP appointments, out of hours services and walk-in centres. A recent British Medical Association survey found that doctors caseloads are “unsustainable” and are unable to keep up with demand which leads to patients turning to A&E (BMA, 2014).

The demand for A&E treatment was reinforced by doctors informing the Parliamentary Health Select Committee that the number of people visiting A&E departments in England alone has risen by more than 445,000 – the equivalent to filling an extra nine emergency departments (BBC News, 2014). Yet the doctors giving evidence to the committee noted that the patients were advised to go to A&E by services including NHS 111. The King’s Fund health think tank notes that there are no simple explanations for the extra pressures on A&E, yet the causes were “many, varied and complex” noting that the most important causes were external to hospitals. These related to under-investment in GP services and a lack of community services to support those being discharged from hospital.

1.2. Concerns about UHNM

Concerns about UHNM have arisen in light of the transition of services from County Hospital in Stafford to the Royal Stoke University Hospital, potentially placing extra pressure on capacity at the Stoke site. The services moving from the County Hospital to Royal Stoke are consultant-led maternity; acute and major inpatient surgery; and inpatient paediatric services. Whilst these services are moving
to Royal Stoke, new services at the County Hospital will include orthopaedics, dermatology and eye surgery. Despite most of these services not impacting on Accident and Emergency (for example, maternity is ring-fenced away from other services), the emergency department at the Royal Stoke has failed to meet the 95% target for the last 8 quarters.

A statement from UHNM about the major incident (between 5th and 10th January 2015), on its website (6th January 2015), noted that some operations have been postponed to deal with acute and emergency care such as accidents, medical and surgical emergencies to allow emergency patients waiting in A&E to be admitted to a bed. People living in Staffordshire and Stoke-on-Trent were urged to use other facilities where possible and be aware that if they attend A&E they may be diverted to other services elsewhere. The public were also reminded that many minor injuries and illnesses could be either self-managed or treated elsewhere and are encouraged to consider alternatives which may be more appropriate. UHNM provided a list of other services that could provide medical advice and care to people within Staffordshire and Stoke-on-Trent (Box 1).

**Box 1: Additional medical and health services provided in Staffordshire and Stoke-on-Trent**

**SELF CARE:** This is the best choice to treat very minor illnesses, ailments and injuries. A range of common illnesses and complaints can be treated with a well-stocked medicine cabinet and plenty of rest.

**PHARMACY:** Your pharmacy can provide confidential, expert advice and treatment for a range of common illnesses and complaints, without having to wait for a GP appointment.

**NHS 111:** This service has been introduced to make it easier for you to access local NHS healthcare services in England. NHS 111 is a fast and easy way to get the right help, whatever the time. NHS 111 is available 24 hours a day, 365 days a year. Calls are free.

**YOUR GP:** For medical advice or for illnesses you can’t shake off. You should be able to get an appointment with your surgery within 24 hours, Monday to Friday. If your doctors are closed call your doctor’s surgery and you will be transferred to the GP out of Hours Service

**WALK-IN CENTRES:** Walk-in centres can be used to treat minor injuries and ailments. The nearest walk-in centres are:

- Haywood Walk-In Centre - Open 7am-10pm Monday to Friday & 9am-10pm weekends and bank holidays. Call: 01782 673500. The service has x-ray facilities open during these times.
- Leek Moorlands Hospital – Open between 8am and 8pm daily. Call: 0300 123 1894

**ACCIDENT & EMERGENCY:** A&E and the 999 ambulance service should only be used in a critical or life-threatening situation. The Emergency Centre at the City General is located off Hilton Road and the A34, just south of Newcastle-under-Lyme. Attend A&E for anything classed as an emergency including choking, chest pain, loss of consciousness, severe blood loss, broken bones, difficulty breathing, deep wounds or a suspected stroke.
Despite the major incident being declared at the Royal Stoke University Hospital between the 5\textsuperscript{th} and 10\textsuperscript{th} January 2015, it should be noted that for both Healthwatch Staffordshire and Healthwatch Stoke-on-Trent, this did not lead to an increase in concern from the public about A&E waiting times. Instead, there were some telephone calls to both Healthwatch organisations from people who were concerned that their operations had been cancelled, including from one individual whose cancer operation had been cancelled twice, leading to some increased anxiety.

1.3. Satisfaction with, and growing pressures on, A&E

1.3.1. Satisfaction with the NHS and A&E

The National Centre for Social Research’s British Social Attitudes survey asked the public about their views on, and feelings towards, the NHS and health care issues generally. The latest survey was carried out between August and September 2014. The survey presents a picture of public satisfaction with the way the NHS runs. A further report by NatCen and The King’s Fund to be published in Spring 2015 covers these results and a number of other health and health care questions.

The results from the British Social Attitudes survey shows that overall public satisfaction with the NHS increased to 65% in 2014, the second highest level since the survey began in 1983, whilst dissatisfaction with the service fell to an all-time low of 15%. GP services remain the most popular service in terms of satisfaction with 71% satisfied in 2014 whilst dentistry continued to have lower satisfaction ratings than other NHS services with just over half of respondents satisfied. Outpatient services experienced an all-time high in satisfaction levels of 69% yet inpatient services showed little change with a rating of 59%.

Social care had far lower satisfaction levels than NHS services. Just one third of respondents reported being satisfied, less than half the level reported for the NHS overall. Yet for Accident and Emergency Departments, satisfaction increased from 53% to 58% between 2013 and 2014 after fluctuating in previous years. This overall increase in satisfaction with the NHS during a year in which the service was under substantial publicised financial pressure and with notable difficulties in A&E waiting times may in part reflect an actual increase in satisfaction, but also a desire amongst the public to show support for the health service.

1.3.2. Growing pressure on A&E departments

Data from the urgent care line, NHS 111, in England shows that there has been a large increase in the number of people being referred to GP surgeries and A&E departments (BBC News, 2015). Leading doctors have argued that the increased referrals mean more pressure on already overstretched GPs and hospital emergency departments, while NHS England says the 111 service is meeting demand. Calls to NHS 111 increased year-on-year and up until November 2014 received and responded to more
than 15.4 million calls, and referrals to A&E increased from 400,000 in 2013 to over a million in 2014. Similarly, referrals to GPs rose from under 3 million to 8 million between 2013 and 2014.

In response to these figures, the British Medical Association’s (BMA) GP lead on NHS 111, Dr Charlotte Jones, is concerned that the NHS 111 service is not delivering appropriate advice for patients and that there is an issue with staff having little or no medical knowledge. The BMA note that it is a waste of patients’ time and medical resources if people are sent to a GP or A&E when they could have had their issue dealt with during a few minutes on the phone. Additionally, the BMA state that non-emergency referrals to A&E departments contribute added pressure to emergency departments when there is no clear medical emergency to be dealt with. However, the statements by the BMA do not indicate that if there was no NHS 111 service, how many of those people would have actually visited their GP, A&E or Walk-in Centre.

Multiple visits to medical services such as using NHS 111; visiting a local GP; attending A&E or Walk-in Centre have cost implications dependent on the numbers of attendances. Therefore, the more services that an individual uses will have a higher cost implication. To establish these financial implications, background research has highlighted the cost of a single use of medical services (on average), for example to A&E, GP Out of Hours, NHS 111 and Walk-in Centre. The average costs of a single visit to medical services are shown in Table 1.

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>COSTS</th>
<th>REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP visit</td>
<td>£27.50 to £45</td>
<td>Murray et al., 2011; ITV, 2014</td>
</tr>
<tr>
<td>Minor Injuries Unit</td>
<td>£58</td>
<td>Canterbury and Coastal CCG, n.d.</td>
</tr>
<tr>
<td>Walk in Centre</td>
<td>£35 (GP led) to £68</td>
<td>BBC News, 2012</td>
</tr>
<tr>
<td>GP out of hours</td>
<td>£7.50 to £29 - £134</td>
<td>GP Online, 2012; Parliament UK, 2014; Pulse Today, 2015</td>
</tr>
</tbody>
</table>

Given that there are no official costings of visits to attending medical services from Public Health England or NHS England, Table 1 illustrates the sources of information where data was collected. In this project, the cost of visits to medical services will be calculated based on the data collected in our survey that outlines what other services they have visited or used prior to attending A&E.
1.4. Moving forward with our concerns

Our 2014 report “The transition of services following the creation of UHN M NHS Trust”, provides direct evidence that hospital departments are struggling to keep up with the number of people visiting, and with specific reference to UHN M there were a number of concerns about capacity raised. Notably, participants in our previous engagement noted that the transition of services from County Hospital to the Royal Stoke would increase the number of people attending the Stoke site, placing extra pressure on parking, beds and staff. This was reinforced by service users who noted that they were concerned about capacity and the secondary consequences that result both “now and in the future”. Participants noted that to address these concerns, there needed to be an increase in the number of beds as well as the quantity and quality of staff at the hospital. Reference was also made in this research to community services not functioning appropriately as a reason why people are, to some extent, forced to attend A&E and remain there.

Due to our concerns about Accident and Emergency departments failing to meet targets on waiting times, Healthwatch Staffordshire (in collaboration with Healthwatch Stoke-on-Trent) have explored the reasons why so many attend A&E. Our previous research in 2013 highlighted that when A&E targets (specifically the number of patients waiting to be seen under 4 hours) are missed, this is often a result of people attending A&E rather that accessing alternative services. It is therefore timely that we explore the issues of waiting times and service user decision making to attend A&E in order to ascertain whether the promotion of alternative services is being achieved or whether there is still confusion about other available services. As a result of these concerns about A&E waiting times, using questionnaire surveys, in this report we have explored service user decisions to attend A&E and whether other services (e.g. GP, Walk in Centre or Pharmacy) were considered, attended or ignored.
2. PLAN AND METHODOLOGY

This section of the report outlines the objectives for the research, the methodological approaches and justification for these approaches alongside the measures taken to ensure quality in the research design and execution.

2.1. Objectives

The objectives of this research are three-fold: (1) to understand how patients are accessing services and whether any actions could be taken to alleviate the pressures on the system; (2) to identify whether any actions could be taken to alleviate the pressures on the system; to identify whether patient experience has suffered as a result of this high demand; and (3) to explore whether there has been any detrimental impact as a result of the transfer of services from Stafford to Stoke.

Healthwatch Staffordshire are working in partnership with Healthwatch Stoke-on-Trent to undertake this project. Both local Healthwatch organisations recruited volunteers to undertake and complete the questionnaire in the A&E department at the Royal Stoke University Hospital.

2.2. Methodological Approach

To explore these objectives, this project utilised face-to-face questionnaire surveys as the main methodological approach to explore the diversity of service users’ perspectives and decision making towards attending A&E department at the Royal Stoke University Hospital. Overall we engaged with 460 service users in A&E at the Royal Stoke over a two week period between the 2nd and 15th February 2015 (inclusive). 82.3% of responses were collected from A&E and the remaining 17.7% from Paediatrics/Children’s A&E during this timeframe.

The rationale and justification for using this methodological approach is provided in the following section. A quantitative approach was chosen as the principle method to highlight the key underpinnings of perspectives towards attending A&E department and what other services have been considered, attended or ignored in favour of visiting Accident and Emergency at the Royal Stoke University Hospital.

2.2.1. Questionnaire surveys

The primary approach of this research employed both paper-based and online questionnaire surveys. These were conducted to provide service users the opportunity to outline their views and experiences about attending A&E at the Royal Stoke University Hospital and whether any other services were considered, attended or ignored in preference to visiting the hospital and the reasons for this. The questionnaire was presented with a structured and systematic approach and utilised both open, closed and Likert scale questions, comprising of four sections: (1) Experience of A&E; (2) Other medical services; (3) Previous experience of A&E; and (4) Demographic characteristics. The survey was carried
out by the Research and Insight and Engagement Teams at Healthwatch Staffordshire, representatives from Healthwatch Stoke-on-Trent and a team of volunteers from both Healthwatch organisations.

2.2.2. Field Researcher Observations

Whilst observation techniques are a justifiable methodological approach, observations were collected from field researchers about any occurrences or issues that were present during collection of the survey responses. Whilst observations are not used as the principal methodological technique in this research project, they are used to support findings from the survey results and complement or contradict figures from the Winter Tracker data providing situated comments. The field researcher comments were provided by trained researchers and Enter and View volunteers who spent considerable time in A&E and their observations were valid representations that were used to substantiate themes arising from the questionnaires. These observational comments are provided throughout the report and identified along with the timings and dates the remarks were noted.

2.2.3. Sentiment Analysis

Alongside the results from the questionnaires and the field researcher observations, another form of gauging public opinion regarding the Royal Stoke University Hospital is through analysing the sentiments of individuals posting their attitudes towards, and experiences of, the hospital and its service on social media. To highlight and analyse the sentiments of the public towards the Royal Stoke University Hospital, Digimind was used as the principal collection of sentiments via online media. The results from the sentiment analysis and their interpretations are included following the results of the survey, noting contrasts and comparisons between the two datasets.

2.2.4. Data Analysis

The findings from the (online) questionnaire surveys were analysed using a variety of analysis techniques. Principally, they were analysed through quantitative measures comprising descriptive and analytical statistics such as frequency analyses and chi-squared analysis (Field, 2009; Bryman, 2012; Dancey et al., 2012; Egbue and Long, 2012). This was done by using Microsoft Excel to carry out statistical analysis. While frequency analyses provided mainly descriptive interpretations about attending A&E, for example the number of people who attempted to gain advice from other medical services, analytical statistics provided more depth to the results allowing for greater interpretation.

Data obtained via open-ended questions as part of the questionnaire were quantified, yet the quotes that respondents provided were analysed using thematic analysis (Braun and Clarke, 2006; Cooper and Endacott, 2007). Thematic analysis has the capacity to capture more qualitative results from surveys at a precise point in time and allow for themes to be extrapolated from this providing justification for reasons why service users choose, or not choose, to consider, attend or ignore other health services rather than solely visit A&E.
2.3. ECS Quality Plan

ECS has a responsibility to ensure that the research it undertakes and creates is of high quality and aligned to best practice across the industry. Research ultimately provides the evidence on which sound decisions should be made, which is why it is important to state up front how quality will be ensured during this project. The Research and Insight Team underpins its research activities by applying the Market Research Society Codes of Conduct (MRS, 2014), which allows us to demonstrate that we are credible, fair and transparent. ECS is a company partner and accredited by the Market Research Society. ECS also adhere to a strict data protection policy to ensure that:

- Everyone handling and managing personal information internally understands they are responsible for good data protection practices;
- There is someone with specific responsibility for data protection in the organisation;
- Staff who handle personal information are appropriately supervised and trained;
- Queries about handling personal information are promptly and courteously dealt with;
- The methods of handling personal information are regularly assessed and evaluated;
- Necessary steps are taken to ensure that personal data is kept secure at all times against unlawful loss or disclosure.

ECS have firm guidelines for data storage, data retrieval, data security and data destruction. There is also a strict process in place should a data breach occur (which includes containment and recovery, assessment of ongoing risk, notification of breach, evaluation and response). To further ensure the quality of the final report, an internal peer review process will be initiated to ensure that the report is fit for purpose before submission. Where data is not robust it will be statistically suppressed to prevent disclosure.
3. FINDINGS AND RESULTS

This section of the report presents results from the Winter Tracker Data and the main findings from the 460 patients and service users that were surveyed by questionnaire at the Royal Stoke University Hospital between the 2nd and 15th February 2015. Here, the socio-demographic profile of respondents are shown along with patient experience of the Royal Stoke University Hospital A&E department, consideration of other medical services and previous experiences of emergency departments. Additionally, the costs of attending multiple medical services as well as attending A&E are calculated and statistically significant relationships between variables are also highlighted.

3.1. Tracking Winter Pressures on A&E

Every week, NHS England releases statistics on weekly A&E Attendances and Emergency Admissions for all types of A&E departments, including Minor Injury Units (MIU) and Walk-in Centres (WICs). As part of this, the statistics show the number of patients discharged, admitted or transferred within four hours of arrival, as well as the number of those waiting over four hours for admission following the decision to admit (NHS England, 2015). To complement the study, data was collected from the release of the NHS England Attendances and Emergency Admissions from week commencing 8th December 2014 until week commencing 9th February 2015. The data collected from NHS England during this timeframe reveals that the Royal Stoke University Hospital is shown to be ranked last below all other NHS Trusts in England for 95% of patients seen within the 4 hour target, as illustrated in Figure 2 below.

![Figure 2: Ranking of Royal Stoke University Hospital out of all NHS Trusts in England for number of patients seen in 4 hours, from 9th February to 15th February 2015](image-url)
These figures highlight the number of patients seen in 4 hours and those waiting longer than 4 hours, as well as the number of emergency admissions, planned operations cancelled, and the numbers of beds blocked. Where possible, data has been gathered that provides a comparator to the national average, for example, patients waiting more than 4 hours, ambulances queuing outside A&E and bed days lost to norovirus. The data collected from 8th December 2014 to 15th February 2015 covers the two week period of time the questionnaire was conducted at the Royal Stoke University Hospital Accident and Emergency Department (from 2nd February to 15th February 2015), allowing for comparisons to be made between this dataset and the findings from our survey.
Figure 3: Patients seen within and beyond 4 hours, attendances and emergency admissions to the Royal Stoke University Hospital A&E Department
The data in Figure 3 shows that the number of patients seen within 4 hours and waiting more than 4 hours demonstrates that these figures constantly fluctuate and there is no clear trend. Towards the Christmas and New Year period, the number of patients seen in 4 hours decreases from 65% to 59.1%. Following UHNM's efforts to reduce attendances to A&E and put measures in place to combat this decrease, the number of patients seen in 4 hours increases to 68.3% in mid-January, yet subsequent periods show that the figure continues to fluctuate and the number of patients seen within the 4 hour target does not stabilise. This data reflects figures noting the number of people who are waiting more than 4 hours to receive treatment, be discharged, admitted or transferred. Overall, the trend of people waiting more than 4 hours decreases following the busy period of Christmas and New Year, which at its peak reached 867 people. After measures seeking to reduce attendances the number of people being seen over 4 hours this figure dropped to 630 people. However, in the last week of collecting the data from NHS England in mid-February, the numbers of those waiting more than 4 hours increased to 824, consistent with figures over the Christmas and New Year period.

Attendance to A&E shows that the number of people attending A&E at the Royal Stoke University Hospital slowly decreased following measures put in place by the Trust to reduce pressure on the emergency department. Given that these measures have now been lifted, attendances to A&E have slowly risen at the beginning of February comparable with attendances over the winter period. Similarly, emergency attendances follow the same pattern whereby the figure rose over the winter period, fell following measures put in place by the Trust and then rose again once the measures were lifted.

Figure 4 demonstrates that data is also collected for the number of ambulances queuing outside of A&E; planned operations cancelled; beds blocked; bed days lost to norovirus. Following the Trust putting measures in place to reduce pressure on the Accident and Emergency Department at the Royal Stoke, the number of planned operations cancelled increased in late December and has since been falling until mid-February when it reached the national average of 10 operations cancelled. Following the winter pressures, ambulances queuing outside A&E have also decreased but still remain above the national average. However, the number of beds blocked and bed days lost to norovirus are substantially higher than the national average and indicate that there are specific difficulties with securing care in the community for those who are eligible to leave hospital and also with the norovirus.
Figure 4: Ambulances queuing outside A&E, planned operations cancelled and beds blocked at Royal Stoke University Hospital A&E Department
3.2. Demographics of survey respondents

In total, 82.3% of respondents were surveyed within the main A&E waiting area whilst the remaining 17.7% were surveyed in Paediatrics A&E. With respect to gender, 49.1% of the survey sample were male, 50.7% were female and 0.2% were transgender and 25.3% of respondents indicated they had a disability. Table 2 presents the employment status; age categories; area of residence; and identified disabilities as part of the socio-demographic profile of respondents.

<table>
<thead>
<tr>
<th>Employment Status *</th>
<th>Percentage</th>
<th>Age Category *</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed Full Time</td>
<td>30.2%</td>
<td>Under 18</td>
<td>18.3%</td>
</tr>
<tr>
<td>Employed Part Time</td>
<td>7.7%</td>
<td>18-25</td>
<td>13.3%</td>
</tr>
<tr>
<td>Retired</td>
<td>23.9%</td>
<td>26-35</td>
<td>14.9%</td>
</tr>
<tr>
<td>Student</td>
<td>9.8%</td>
<td>36-45</td>
<td>13.1%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>11.7%</td>
<td>46-55</td>
<td>10.8%</td>
</tr>
<tr>
<td>Other</td>
<td>16.6%</td>
<td>56-65</td>
<td>9.6%</td>
</tr>
</tbody>
</table>

**Disabilities **

| Specific learning disability | Percentage | 66-75   | 7.3% |
| General learning disability | 0.9%       | 76+     | 12.6%|

| Cognitive impairment | 1.7%       | Newcastle-under-Lyme | 24.9%|
| Long standing illness | 44.8%      | Stoke-on-Trent       | 56.2%|
| Mental health condition | 12.1%     | Stafford and Surrounds | 4.5%|
| Physical impairment   | 20.7%      | Staffordshire Moorlands | 8.8%|

| Deaf or hearing impairment | 10.3% | East Staffordshire | 0.2% |
| Blind or visual impairment | 6.9%  | Cannock Chase     | 0.5% |
| Other                      | 18.1% | Other              | 4.8% |

*Based on 100% of respondents equal to 460 **Based on 25.3% of the sample identified as having a disability

With respect to ethnicity, the majority of respondents (89.2%) of the survey sample indicated that they were White British. 2.5% noted that they were White European and 2.1% identified themselves as Asian or Asian British (Indian) and a further 1.8% stated they were Asian or Asian British (Pakistani). Other ethnicities represented in the survey were Mixed White and Black Caribbean (0.9%); Other Ethnic Background (0.7%); Other White Background (0.5%); Black or Black British (Caribbean) (0.5%); Black or Black British (African) (0.5%); Chinese (0.5%); Mixed White and Asian (0.5%); Arab (0.2%); and Other Mixed Background (0.2%). The ethnicity and nationalities comprising this study are broadly representative of the local populations of Newcastle, Stoke-on-Trent, Stafford and Surrounds and Staffordshire Moorlands.
3.3. Attendance and Experience of A&E

In the two week period the survey was undertaken at the Royal Stoke University Hospital A&E department, there were a total of 4359 attendances between 2nd and 15th February according to the NHS England Winter Tracker Data. In the same timeframe, there were 1595 emergency admissions. During the first week of data collection the Winter Tracker data indicates that there were 2085 attendances and 761 emergency admissions, increasing to 2274 attendances and 834 emergency admissions during the second week. The data also shows that during the first week of data collection 70.5% of people were seen in 4 hours with 615 waiting longer than the 4 hour target. This was 3 times higher than the average (205) across England in the same period. Yet in the second week of data collection, only 63.8% were seen in 4 hours with 824 waiting longer. This is around three and half times higher than the national average of 251 for that 7 day period.

Field researcher observations indicated that there were particular times that were busier than others. Comments indicated that during the data collection period, Mondays appeared to be the busiest day for attendances in comparison to other days, yet additional statements from field researchers and respondents indicated that Thursday afternoons saw a spike in activity due to GP surgeries being closed on this day.

3.3.1. Attendance to A&E at Royal Stoke

To explore the reasons why people attend A&E at the Royal Stoke University Hospital, respondents were asked to note which category their symptoms were classified that led them to attend the emergency department on the day of survey. Figure 5 indicates the symptoms that led individuals to attend A&E during the two week period of data collection. Overall, 44.5% of those who were surveyed attended as a result of sustaining an injury, whilst 46% attended because of an illness. Looked at more closely, 25.4% attended A&E because of a one-off illness and 20.6% attended as a result of a recurring illness.

![Figure 5: Symptoms of those attending A&E at Royal Stoke during data collection period](image-url)
Patients provided further details about their symptoms that they were comfortable with disclosing to the researcher. Responses to this question outlined that a substantial number of patients stated that their symptoms were unable to be treated by any other medical service, and these individuals were “referred by GP”. More specifically, some patients stated that they “saw the GP yesterday who advised if bleeding continued to go to A&E”. Frequently mentioned and specific symptoms were outlined as being accidents including trips, falls, fractures and dislocations, and injuries (particularly to head, legs, back and arms); infections; and pains (often to chest and head). Yet some patients did provide specific details regarding their symptoms, for example “vomiting blood”, “found a lump on breast”, “palpitations and irregular heartbeat” and “genetic disease that causes joints to dislocate – idiopathic intracranial hypertension”. Other patients stated that while there may be other services that are more appropriate, they attended A&E because it was more convenient. For example, for one patient A&E was “closer than Haywood [Walk in Centre]” and it was “more convenient than the walk-in centre”.

Respondents were asked whether they had been referred to A&E or whether they had attended on their own consideration. 59.8% of those who attended A&E were referred by an organisation or another part of the NHS, whilst 40.2% attended on their own volition. Overwhelmingly, the majority of patients were referred by their GP (48.3%), NHS 111 (17%) or a Walk-in Centre (8.5%) with the remaining 26.2% being referred by other hospitals such as Leek Moorlands, Stafford and Buxton Hospitals, ambulance paramedics, 999 service or a pharmacy.

Following referrals, survey respondents were asked how they travelled to A&E after the decision to attend A&E was made. Figure 6 indicates the different methods of how people travel to A&E. Principally, 47.3% of respondents were given a lift with a family member or friend and were accompanied by another person while waiting for treatment in A&E, and a further 27% drove themselves to the emergency department. Additionally, 13.4% of respondents attended A&E by Ambulance, 8.6% by taxi and 2.2% by public transport.
3.3.2. Experience of the Royal Stoke A&E

To gauge patients’ experience of A&E at Royal Stoke University Hospital, respondents were asked about their waiting times before and after they were seen at triage and how they rated their experience at reception and at triage. Additionally, survey respondents were also asked whether they had been treated politely and courteously as well as whether they considered the TV screens displaying waiting times to be useful.

93.4% of respondents indicated that largely they were seen in less than an hour, whilst only 6.6% stated that they had to wait longer than an hour. Whilst the survey comprised of closed-ended questions in this section of the questionnaire, field researcher observations and additional comments provided by respondents noted that waiting times for patients waiting to be seen by triage were seen in less than half an hour.

Following the preliminary check of symptoms at triage, respondents were asked how long they had to wait to be treated (Figure 7). Where respondents had not yet been seen following triage, they were asked to note the waiting time they had been informed of when they were seen at triage. Here, 42.5% stated that after triage they waited or were told they would be waiting for less than an hour, whilst 35.7% stated that they had waited for 1 to 2 hours. The remaining 21.8% stated that they had waited for longer than 3 hours.
Figure 7: Waiting times to be seen after triage for treatment

The results collected in this study in comparison with the figures collected from the Winter Tracker A&E data appear to contradict one another. In the data collected as part of this research, patients attending A&E at the Royal Stoke University Hospital indicate that they are waiting under 4 hours to be seen from the point of entry at the emergency department. Yet the Winter Tracker A&E data shows that, at its peak, only 70.8% of patients are seen within 4 hours. This is 25% below the 95% target for all NHS Trusts in England. It should be acknowledged that the overall Winter Tracker Data takes into account ambulance conveyances and that the target is from arrival to discharge/admission, which would account for these differences.

This finding highlights some important questions about the nature of reporting waiting times in A&E and their accuracy. Whilst this result may pose implications for the reporting of waiting times, the survey was undertaken in accessible areas of A&E and Paediatrics A&E, and it is unknown about whether patients who were called through after being seen at triage were subjected to further waiting times that may not have been taken into consideration due to the nature of undertaking data collection within the emergency department.

Whilst the results from this research contradict the findings from the Winter Tracker A&E dataset, in the week following our final week of data collection (w/c 24th February 2015) the Trust behind the A&E at Royal Stoke University Hospital, the University Hospitals of North Midlands NHS Trust, issued a press release warning not to use the emergency department unless it is an emergency (ITV News 2015). The press release notes that a group which analysed patient visits found that those who did not attend because of a serious medical emergency could have used walk-in centres instead.
The Trust notes that there is a significant challenge relating to the number of people turning up at the Accident and Emergency Department who could be attending other facilities for treatment, rather than using the hospital as the first port of call. A statement from Stoke-on-Trent City Council suggested that people should only use A&E for “genuine emergencies”, and where people are unsure about whether their need for care is urgent they should call NHS 111 for advice and be directed to “the most appropriate place to get the right treatment as quickly and effectively as possible” (ITV News, 2015).

The findings from this survey also support the assertion that there are some individuals who could have been treated at a walk-in centre or minor injuries unit. However, it should be acknowledged that the results in this study identified that 59.8% of respondents surveyed were referred to A&E, and that almost three quarters of these referrals were from GPs, NHS 111, walk-in centres and in some cases other hospitals.

Therefore in order to reduce the number of non-emergency attendances at A&E there needs to be an improved understanding by those referring to the Royal Stoke A&E department (e.g. GPs, NHS 111 and walk-in centres) what exactly constitutes a medical emergency that could be treated by a more appropriate service, such as a walk-in centre or minor injuries unit. This issue does not solely apply to those who refer patients to A&E, but is also an implication for the general public. Whilst the use of A&E is open for use by any member of the public, its usage should be clearly defined and perhaps advertised as a “last resort” in order to stem the flow of attendances, particularly those that would could be treated elsewhere and not an emergency. This would help to reduce the pressure on the A&E department at Royal Stoke.

To reduce waiting times for treatment, a re-evaluation of the emergency pathway should be considered whereby if a patient is referred from another service e.g. a GP or Walk-in Centre to fast track these patients to be treated. Essentially, this service would mean that those who are referred bypass triage having already been assessed by their GP or Walk-in Centre. This would eliminate waiting times for triage given that these patients have already had a preliminary check of symptoms and were deemed necessary to attend the emergency department. If such a scheme were implemented, this would also help to reduce the pressures on the A&E department particularly in the context of minimising waiting times.

In addition to waiting times, respondents also provided their thoughts towards their experience of particular elements of attending A&E, particularly around their engagement with reception and triage staff and whether they considered they had been treated politely and courteously. Figures 8 and 9 illustrate that patients considered their experiences at reception and at triage to be positive.
Figure 8: Patient experience at reception

87.5% of respondents indicated that they had a “very positive” or “positive” experience at reception, with 82.7% feeling similarly about their experience at triage. 9.4% of respondents indicated neutral experiences about reception while 7.7% had neutral experiences at triage. As such, only 3.1% had any negative experiences at reception and with 6% feeling similarly about their experience at triage.

Figure 9: Patient experience at Triage

Whilst experience at triage was considered positive by the majority of patients, a small minority noted that when attending triage they were seemingly disappointed by the level of service. In this respect, these individuals noted that triage at A&E simply asked questions about their symptoms and did not
begin to treat the patient, despite the level of pain experienced or blood lost. With respect to the specific patient involved in one example, this instilled a sense of anxiety and frustration as they felt that they were not being treated with sufficient urgency and that they felt the receptionists did not ask sufficient questions to identify that their condition was urgent and serious.

In addition to understand the patient experience at A&E, patients were also asked whether they thought they were treated politely, respectfully and courteously. Figure 11 shows unanimously that 97.1% of respondents considered that they were treated “very politely” or “politely”, while only 2.2% felt that hospital staff treated were impolite.

These findings demonstrate that overall patient experience at A&E is positive, with nearly around 45% of patients describing their experience as very positive and that 97% of respondents considered that staff had treated them politely and courteously.

At the request of the Matron in charge at the A&E department, a question was included in the survey regarding whether patients considered the TV screen(s) in A&E illustrating waiting times were useful or not (Figure 10). Overwhelmingly, 57.5% of respondents noted that the TV screens were rated as either being “useless” or “extremely useless”, with a further 30.9% suggesting that the TV screens were neither useful nor useless.

![Usefulness of waiting time TV screens in A&E](image)

**Figure 10:** Ratings on the usefulness of TV screens displaying waiting times

During the data collection, survey respondents stated that they observed that there was only one TV screen when entering the department, and this was not in a central and noticeable location. Moreover, respondents noted that the TV screen had not been working or had been updated after the 4th February. This remained the case until data collection had been completed on 15th February.
Plate 1 exemplifies the non-functioning TV screen in A&E department taken on 12th February and identifies an error message, despite advertising that the monitor would update every 5 minutes.

Plate 1: Observation of TV screens displaying wait times in A&E

During the data collection, a field researcher informed a member of reception staff about the non-functioning screen however the receptionist responded with “what screen?”, suggesting they were unaware of the monitor less than 3 metres in front of them. This point is important. If staff are not informed or aware about the existence of the monitor, patients will certainly not be aware of it.

An operational and functioning display of waiting times was identified by respondents as a vital source of information, to reduce feelings of angst and anxiety whilst waiting to be seen. Comments were also raised that the TV monitor was in located in “the wrong place” and would be more ideally suited in a central and noticeable location on entry to the A&E department and also where patients are seated after they are seen by triage (between Bay B and C). In addition to a working TV screen, survey respondents also suggested that there should be another monitor with television programmes in order to provide a “distraction”. On multiple occasions, observations were made concerning the atmosphere of the department, particularly those who were waiting to be seen after triage. Specifically, field researcher observations noted how some patients and relatives appeared frustrated with not knowing how long they would have to wait to be seen and not having something to keep them occupied during this time. Numerous respondents suggested that this led to “boredom” and “easy frustration” with waiting for treatment.
With respect to patient experience at A&E, this element of poorly advertised waiting times significantly reduced levels of positivity, and led to negative feelings of “boredom” and “frustration”. To counter this, respondents noted that having a waiting time monitor in the waiting area after triage would be beneficial and another screen showing Television programmes would “distract” patients and take their mind off waiting. The idea of preoccupying patients in this way is a ‘quick-fix’ solution and would support patient experience.

3.4. Consideration of other medical services

Survey respondents were asked about their knowledge and use of other medical services, particularly prior to attending A&E on the day of data collection. This data was collected to explore whether patients consider, and use, other medical services (particularly GPs) or attend A&E without being directed or referred by other services e.g. GP or NHS 111. Our previous research in 2013 indicated that when A&E targets are missed, this was partially a result of people attending A&E rather than accessing alternative services. Consequently, exploring patient knowledge, consideration and use of other medical services, particularly GP services, are of particular value to inform whether the promotion of alternative services is being achieved or whether there is still confusion about other available services.

3.4.1. Knowledge, consideration and use of GP services

Overall, 97.8% of those who were surveyed indicated that they were registered with a GP. To ascertain whether patients considered contacting and using their GP prior to attending A&E, and whether they were given an appointment, respondents were asked a series of open and closed ended questions relating to their understanding of what their GP practice offers and whether they believed that their GP service would be able to treat their symptoms.

Prior to attending A&E on the day of data collection, survey respondents were asked whether they had tried to see or contact their GP before attending the emergency department at the Royal Stoke University Hospital. Figure 1 indicates that only 43.3% of those who attended A&E had attempted to contact their GP, whilst 56.7% had not.
With reference to those who were referred to A&E by a medical service (59.8%, \( n=275 \)), 48.3% of these (\( n=133 \)) were referred by their GP yet 43.3% (\( n=199 \)) of all respondents contacted their GP. This demonstrates that 67% of those who contacted their GP were referred to A&E, which was calculated by dividing the number of those who had been referred by their GP (\( n=133 \)) by the number of those who had contacted their GP (\( n=199 \)). Whilst this suggests that under half of all patients do contact their GP, this finding also illustrates that two thirds of all patients are referred to A&E by their GP. This high referral rate may suggest that GPs may not be able to treat the symptoms of patients and that A&E is better suited to address the injuries and illnesses of patients.

Those who noted that they had contacted their GP were also asked whether they were able to secure a GP appointment. Figure 12 illustrates that 56.7% of those who did contact their GP were able to get an appointment, either booked in advance or on the day. Overall, this figure demonstrates that 24.6% of all respondents who did contact their GP and were able to secure an appointment were referred to A&E afterwards.
Those patients who contacted their GP also provided detail about how long they had to wait for an appointment. In the majority of circumstances, patients indicated that they could arrange an appointment on the “same day”. Some patients stated that in some cases their GP would see them in a matter of hours e.g. 2 to 3 hours. One patient noted that they had “tried to call for 3 days but kept being told to call back”. This patient claimed that because they could not get a GP appointment they had no other choice but to use A&E. Only a small minority of patients claimed that they had to wait until the next day or even longer (2 to 3 days) for an appointment to be seen for their symptoms.

Those who stated that they were registered with a doctor, were also asked whether they were able to make on the day appointments with their GP. Overall, 67.2% of patients noted that they could make on the day appointments. While 43.3% contacted their GP prior to attending A&E, this suggests that not all who are able to make on the day appointments consider that their GP was best suited to address their symptoms, may have used another service or indeed attended A&E first. This interpretation is reinforced by 73.3% of patients identifying that even if they had an appointment with their GP today or tomorrow they still would have attended A&E.

3.4.2. Understanding and feelings towards GP out of hours services

To complement understandings around patient knowledge and use of their GP services, survey respondents were asked whether they knew about the out of hours service operated by their doctors’ surgeries and how to contact them. Figure 13 illustrates that 65.3% of those who are registered with a GP are aware of the out of hours service and also how to contact them, whilst 34.7% indicated that they did not know whether their GP provided an out of hours service and if so, were not aware of how to contact them or what they would be able to offer.
Despite two-thirds of individuals being aware of the out of hours service operated by their GP, a substantial number of patients are unaware. This finding demonstrates that there are patients that have substantive gaps in their level of understanding about what services their doctor offers, the ways in which it can be accessed as well as what types of symptoms patients should use this service for. Addressing this knowledge gap would support patient understanding about health provision in Staffordshire and Stoke-on-Trent, leading to informed decisions being made and what services can best address symptoms without increasing pressure on A&E services.

While 65% of those registered with a GP were aware of the out of hours service operated by their GP, overwhelmingly 86.9% of respondents stated that they did not feel that a GP out of hours service would be appropriate to treat the symptoms they had experienced on the day of data collection. While no specific reasons were clearly identified to explain this result, this finding could stem from the opinion that an out of hours service may have limited capacity to address serious issues and that other medical services may be better placed to attend to injuries and illnesses. Whilst this may indicate that patients believe that the out of hours services may only be suitable in certain cases where non-emergency support is required, it does not suggest that the service is irrelevant or inappropriate.

3.4.3. Awareness of services

To ascertain patient understanding of other medical services alongside GP practices, survey respondents were asked what other services they were aware of generally, as well as what other services they had used prior to attending A&E. This data was collected to identify whether patients attending A&E used one single service or multiple services as well as whether there were any clear preferences of which medical services patients used most. The data collected from the survey in this section makes it possible to provide an indicative measure of the financial implications of multiple uses of medical services.
Prior to asking patients about the services they had used for their symptoms, survey respondents were asked about what other medical services they were aware of. Figure 14 illustrates patient awareness of other medical services that are available, and indicates that NHS 111 (37.6%) and Walk-in Centres (29.6%) are medical services that patients principally consider. It is surprising that only 12.4% stated that they were aware of accessing their GP given that 97% of survey respondents were registered with a GP and 43.3% had attempted to contact their doctor. This could suggest that patients do not see their doctor as a medical service with the ability to effectively treat symptoms as opposed to a Walk-in Centre. It should be acknowledged that this finding may be the result of the structure of the questionnaire or ‘operator bias’ (Parfitt, 2005) whereby the responses to questions are constrained where people do not avail themselves of all the tick boxes.

![Figure 14: Patient awareness of medical services](image)

In addition to the medical services that patients are aware of, the survey sought to identify what other medical services patients had used prior to attending A&E. Figure 15 illustrates that the majority of patients have attended a number of other medical services, and have primarily contacted their GP, NHS 111 and walk-in centres prior to attending A&E. Whilst Figure 15 indicates the diversity of medical services that patients use, it also demonstrates the services that have been used by patients yet have not had their symptoms addressed and have consequently attended A&E. In this context, not only are GP practices, NHS 111 and walk-in centres used more than pharmacies and minor injury units within Staffordshire and Stoke-on-Trent but they are also more likely to refer to emergency departments as they are unable to treat patients.

This could also be explained by the geography of health services across Staffordshire, including A&E departments, GP Practices, community hospitals and Minor Injuries Units. With respect to the Royal Stoke University Hospital, GP Practices are widespread in the surrounding areas of Newcastle-under-
Lyme, Stoke-on-Trent, and the Staffordshire Moorlands, yet there are only 2 community hospitals located in Cheadle and Leek Moorlands. Walk-in Centres are located in Newcastle-under-Lyme (Midway) and in Burslem, Stoke-on-Trent. Therefore, the results in Figure 15 demonstrate that the coverage of GP practices and walk-in centres serve a larger percentage of the population and as a result attendance at these services are higher than others.

There are a number of interesting comparisons between awareness of medical services (Figure 15) and those medical services that were accessed prior to attending A&E (Figure 16) on the day of data collection. For example, while 37.6% of patients were aware of NHS 111 only 31.8% used the service. Similarly, 29.6% were aware of walk-in centres yet 24.8% of patients used the service. This suggests that in some contexts, certain medical services may not be appropriate for the symptoms they are experiencing and other services such as attending their GP practice and/or A&E may be better placed to provide advice and treatment. When asked if patients would use these services again for similar symptoms, 91.4% of respondents stated that they would. Patients offered a diverse range of reasons for why they would use these services in similar circumstances, including trust, convenience and familiarity with the medical services used. This could indicate that, to some extent, the use of A&E to receive treatment is largely habitual irrespective if other services exist that could provide appropriate treatment and reduce pressure on hospital emergency departments.

3.4.4. Financial implications of medical service usage

As well as exploring public perspectives towards, and experiences of, A&E at the Royal Stoke University Hospital, the study also sought to ascertain the cost implications of using multiple services alongside A&E. Predicated on conservative values from Table 1 identifying the range of costs of using medical
services, this research provides an indicative cost of those surveyed in the two weeks data was collected and the financial impact on health services in Staffordshire and Stoke-on-Trent.

Overall 71.2% of patients attended other medical services before visiting the Royal Stoke A&E department. Based on the cost of a single visit to A&E being estimated at £114, the total cost of the 460 patients surveyed as part of this research equals £52,440. Given that over two-thirds of patients used other services prior, this additional cost implication is equal to £12,838 (equal to 24.48%). Therefore, the overall total financial implications for health care in Staffordshire and Stoke-on-Trent based on 460 individuals, using a range of services indicative for the geographic area, over two calendar weeks equals £65,278. This means that, on average, each patient in this study cost the NHS £141.91 to be treated.

These figures raise questions relating to the value of other medical services if there are large proportions of referrals in Staffordshire and Stoke-on-Trent. From an economic perspective, for this study, over £12,800 could have been saved if patients had simply attended A&E department. For patients, attending one medical service and then having to be referred to Accident and Emergency adds substantial time to the patient journey to treatment and addressing the symptoms of the individual. Should these issues in Staffordshire persist, a re-evaluation of the provision of medical services to treat emergency and non-emergency symptoms should be considered whereby only severe medical emergencies are sent to the emergency department. In this context, less severe accidents and symptoms resulting in injury should be treated elsewhere, at a facility similar to a minor injuries unit that has wider provision of services and treatments to reduce the pressure and attendances at A&E.

The Winter Tracker Data shows that over the two weeks that data was collected (2nd to 15th February 2015), attendance (including emergency admissions as these are also included in our survey) at the Royal Stoke A&E equated to 5,854. If the financial cost figure of £141.91 was applied to all attendances at A&E, overall the total cost implications would total £830,741.14. If 24.48% of this cost is applied to those using multiple services, by presenting at A&E only would save the local health economy £203,365.43. This figure does not include visits to any other ward at the Royal Stoke University Hospital but yet is an indicative speculative financial implication for those seeking medical support in Staffordshire and Stoke-on-Trent that eventually presented to A&E.

The Royal Stoke University Hospital notes that there were 119,690 attendances to the emergency department for 2013/14 (UHNM, 2014). If these financial measures were applied for this yearly total the overall total cost to the local health economy would be £16,985,207.90. Similarly, if 24.48% of this cost is a result of multiple attendances to other medical services than this additional cost is equal to £4,157,978.90.
3.5. Previous experience of A&E

To gauge the volume of those who frequently use Accident and Emergency Services and the quality of their experiences, survey respondents were asked how many times they had been to A&E and also asked to comment on the waiting times of previous visits, whether these were acceptable and their overall experience. Figure 16 shows that 65.6% of patients stated that on the day of data collection, this was their only visit to A&E in the last year, 34.4% indicated that they had attended the emergency department in addition to the day of data collection, with 24.3% of patients attending 2 to 3 times. A small minority (10.1%) of respondents stated that they had attended more than 4 times in the last year. Additional comments by some patients claimed that for severe illnesses and injuries they had attended well over 10 to 15 times in the past year, yet the number of these cases were minimal.

To complement the number of previous visits to A&E, respondents were asked which emergency department they had previously used, with 89.7% of having previously attending the Royal Stoke University Hospital. Other hospitals were also mentioned, such as Stafford (4.41%); Macclesfield (1.5%); Leighton Hospital (0.8%) and Bangor (0.8%). Whilst this demonstrates that those who have used A&E services in the last year consistently use the Royal Stoke University Hospital, it also demonstrates that a minority (10.3%) have attended other departments, the majority of which are within Staffordshire and Cheshire.

Figure 17 illustrates that previous experience of waiting times to be seen at triage follow a similar trend with the majority (70.6%) of those being seen in under an hour. However, comparisons of previous waiting times with wait times for triage on the day of data collection reveal some intriguing results. Previous experiences of A&E waiting times indicate that overall more people waited longer than an hour (29.4%) compared to those waiting more than an hour on the day of data collection.
(6.6%). This result would seemingly indicate that waiting times at A&E at the Royal Stoke University Hospital have improved in the past year with respect to triage.

![Previous waiting times for triage]

**Figure 17**: Waiting times for previous visits to A&E

Previous experiences of waiting times after triage did not follow a similar pattern to results collected on the day of data collection. In comparison to Figure 7, Figure 18 indicates that the number of those waiting less than an hour is lower (26.2%) than during the period of data collection (42.5%), yet a similar number waited 1 to 2 hours previously (31.7%) than during the current study (35.7%). However, waiting times longer than 3 hours were significantly higher for previous experiences (42.2%) than the period of data collection (21.8%), as demonstrated in Figure 8. These results show that for the participating survey respondents who have had previous experiences of A&E, waiting times are currently shorter than in the previous year. This finding would appear to be at odds with the Winter Tracker data indicating that a substantial number of patients wait longer than 4 hours. Despite this finding from the NHS England Winter Tracker Data, our survey indicates that during data collection only 4.6% and 12.5% were waiting longer than 4 hour during the period of data collection and in previous experiences respectively.
Respondents were asked whether they considered their previous waiting times for treatment after triage to be “acceptable” or “unacceptable”. Overall, respondents stated that waiting for triage and treatment following triage (81.2% and 60.9% respectively) was considered “very acceptable” or “acceptable”. Yet previous experience of waiting times indicates a surprising result. While the number of those waiting longer than 3 hours for treatment following triage was higher for previous experiences (42.2%) than on the day of data collection (21.8%), patients noted that they “understood that A&E was busy and had to accept long waiting times to be medically seen to”. Despite this, 31.1% indicated that these waiting times were either “unacceptable” or “completely unacceptable”. Interestingly, the survey data indicates that those who have had previous experience of attending A&E suggest that the number of people waiting 3 hours or longer for treatment after triage has decreased by 51.7%.

Overall, positive experience of A&E was rated highly. 65.1% of patients visited A&E previously rated their experience as either “very positive” or “positive”, with a further 18.8% ranking their experience as “neutral” whereas only 16.1% rated their experience as “negative” or “very negative”. Patients justified their rating with additional comments, with those noting positive experiences stating that it was “quick to be seen [and] relatively happy with the service”; “heart problem - absolutely brilliant. Treated very quickly” and “very pleased with service, seen very quickly, [and] staff all polite and helpful”. The comments exemplified indicate that patients’ positive experiences are predicated on a variety of different elements, particularly staff attitudes, helpfulness and the time in which they are treated.

Neutral comments often indicated a combination of both broadly positive and negative experiences, such as “[the] wait for doctor was too long but once seen outcome was quite quick” and “Ok but parking is difficult [at the Royal Stoke University Hospital]”. There were a number of additional comments from survey respondents which reinforced field researcher observations that parking at
the hospital site was challenging, despite the construction of the new multi-storey car park. Negative experiences often noted periods of long waiting times yet indicated that they understood that staff were trying their upmost to provide care to all, for example: “A&E here so busy - had to wait, but staff doing the best they could”. However, others noted that there were some elements of A&E that they found to be negative: “triage nurse overrode what the GP report/letter said. Had to have tests carried out again - very dissatisfied with triage”.

The comments justifying overall experience of A&E at the Royal Stoke University Hospital demonstrate that patient experiences are predicated on evaluating many different elements of A&E including reception staff attitude, interactions with staff, waiting times, experiences with triage nurse, the physical waiting area, car parking and standard of treatment. Combined, these elements comprise the overall experience of A&E. Should one of these dimensions not be at the same standard as others, patients view their time at A&E negatively. To address this, where the hospital is aware of negative elements indicated by the majority of patients e.g. waiting times, the waiting area and treatment, these areas should be improved if overall experience sentiment is to increase.

3.6. Further Insight

Further analysis of the results reveals some intriguing findings from the survey data. This additional analysis applied a statistical approach which looks for “significance”. This is to say whether there a relationship or correlation between two variables (e.g. referral to A&E and whether an individual has a disability) is not down to chance but is an observable trend and occurs as suggested. More detailed information on the analytical procedures used in this project can be found in Appendix 5.

3.6.1. Demographic Correlations

From the analysis, there were significant findings related to use of medical services and experiences of A&E with respect to those with disabilities (please see Table 2 for definitions of disabilities and LTCs included in this study); gender differences; employment; and age. Please see Appendix 6 for an example. These are outlined as follows:

1. Disabilities
   - With respect to the symptoms identified during the period of data collection, there were less than expected numbers of those who stated they had a disability attending A&E for an injury or one-off illness but more than expected for those attending for treatment for recurring illnesses.
   - There were higher than expected counts of those who were referred to A&E and have disabilities.
   - There were higher than expected values of those with disabilities contacting their GP out of hours service (66.4%), yet overall 71.9% of those who did contact their GP out of hours service indicated they had no disability. This may indicate that overall the GP out of hours service is not used primarily by patients with disabilities or long term conditions.
There were higher than expected counts of those with disabilities rating their overall experience of A&E as “positive”, yet the majority of respondents irrespective of (dis)ability indicated their experience of the emergency department was “very positive” or “positive”.

2. Gender

- Experience at A&E was significantly related to gender. With respect to their experience at reception, males were more likely to identify that they had a “very positive” or “positive” experience, yet females were more likely to indicate they had a “neutral” or “very negative” experience.
- There were higher than expected counts of the number of males indicating they received a “very positive” experience and similarly there were higher than expected values of the number of females noting they had a “neutral” experience of reception.
- Cross-tabulations between experience of triage and gender followed a similar pattern to experiences of reception. For example, males were more likely to rate their experience of triage as “very positive” whilst females were more likely than males to rate their experience of triage as “negative”.
- The analysis also demonstrates that the males and females attend A&E for different symptoms. During the period of data collection, it was observed that there were higher than expected counts of males attending A&E for an injury and less than expected numbers attending for a one-off illness.
- Conversely, females were more likely to attend A&E for an injury yet there were higher than expected counts of women attending A&E for a one-off illness. This may suggest that for one-off illnesses, females may be more cautious and seek to get these symptoms checked over if they feel they present an emergency situation.
- Gender differences with respect to referrals were also highlighted. Cross-tabulations indicate that females were more likely to be referred than males (56% and 44% respectively). Of all females that attended A&E, 64.6% were referred as opposed to 52.3% of males. With respect to earlier findings, this may be a result of females attending an additional service prior to visiting A&E.
- Patients contacting their local GP surgery and out of hours services were correlated to gender. Females were more likely to contact their GP before attending A&E than males. This was found to be statistically significant at the 99.9% level.
- Similarly, females were more likely to contact their GP out of hours service than males, and there were more than expected numbers of females using the service.
- Gender differences were also observable with respect to overall experience. Overall, there were higher than expected counts of males noting their experience was “very positive” whilst conversely females were significantly less likely to rate their experience of A&E as “very positive”. Here, males were more likely to be “very positive” with females more likely to be “positive” yet more “negative” indicating that females have more diverse experiences which take into account their experiences at reception and triage.
3. **Employment**
- Cross-tabulations indicate that there were higher than expected numbers of patients who were employed full time attending A&E as a result of an injury yet less than expected for a recurring illness. This may be a result of a work related injury.
- However, those who were retired were more likely to attend A&E as a result of a recurring illness or injury, with less than expected counts attending for a one-off illness.

4. **Age**
- Referrals were also significantly related to age. Younger age groups (under 18 and 18-25) were less likely to be referred (around 53%) as opposed to older age groups (56 years and above) who were likely to be referred (around 75%). Unsurprisingly, this demonstrates that for older generations who may be more susceptible to long term conditions may require more advanced care than their local GP practice can provide.

3.6.2. **Patient Experience Correlations**

Further analysis correlated the days and times people attended A&E with their experience and waiting times. Table 3 provides an overview of the numbers of those attending during the period of data collection.

<table>
<thead>
<tr>
<th>Day</th>
<th>Count</th>
<th>Time</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>71</td>
<td>8:00am to 12:00pm</td>
<td>197</td>
</tr>
<tr>
<td>Tuesday</td>
<td>92</td>
<td>12:01pm to 16:00pm</td>
<td>168</td>
</tr>
<tr>
<td>Wednesday</td>
<td>72</td>
<td>16:01pm to 20:00pm</td>
<td>59</td>
</tr>
<tr>
<td>Thursday</td>
<td>54</td>
<td>20:01pm to 00:00am</td>
<td>36</td>
</tr>
<tr>
<td>Friday</td>
<td>47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>460</td>
<td><strong>Total</strong></td>
<td>460</td>
</tr>
</tbody>
</table>

Cross-tabulations demonstrate that with respect to symptoms, those with injuries are more likely to attend on Wednesdays whilst those with recurring illnesses and one off illnesses more likely to attend A&E on Tuesdays. Similarly, referrals were also more likely to have occurred on Tuesdays correlating with those who attended A&E for recurring and one-off illnesses. Experience of reception and triage were cross-tabulated with specific days during the period of data collection. Chi-squared analysis indicates that patients were less likely to rate their experience at reception and triage as “very positive” on Tuesdays, yet were more likely to extend this level of positive sentiment on Wednesdays and Saturdays, whilst Thursdays were less likely to rate their experience as “very positive”.

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With respect to the use of other medical services, patients were more likely to use NHS 111 on a Monday, Saturday and Sunday than any other day, but less likely on a Wednesday and Thursday. Additionally, patients were more likely to use the GP practice on a Monday and Tuesday than Saturday and Sunday. This may reflect the availability of preferred services such as GP opening hours.

Referrals were also cross-tabulated with time. Principally, there were higher than expected counts of those referred during the time periods 12:01pm to 16:00pm and 16:01pm to 20:00pm. Whilst waiting times for triage were generally less than one hour for the period of data collection, cross-tabulation between time and waiting time for triage indicated that there were higher than expected counts for those waiting 1 to 2 hours between 12:01pm to 16:00pm. Moreover, waiting times for treatment after triage were also cross referenced with time indicating that waiting times less than an hour were higher than expected between 8:00am and 12:00pm, whilst there were significant increases in waiting more than an hour between 12:01pm to 16:00pm.

3.6.3. Regular use of A&E

In addition to cross-tabulations against demographic variables and the patient experience, further analysis explored whether those with disabilities and long term conditions (LTCs) were regular users of A&E. The results of this association are highlighted in Table 4.

<table>
<thead>
<tr>
<th>Previous Use of A&amp;E</th>
<th></th>
<th></th>
<th>Disabilities</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>This is the only time</td>
<td>Count</td>
<td></td>
<td>226</td>
<td>60</td>
<td>286</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>215.7</td>
<td>70.3</td>
<td>286.0</td>
</tr>
<tr>
<td>% within PreviousUseAE</td>
<td></td>
<td></td>
<td>79.0%</td>
<td>21.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Disabilities</td>
<td></td>
<td></td>
<td>65.1%</td>
<td>53.1%</td>
<td>62.2%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td></td>
<td>49.1%</td>
<td>13.0%</td>
<td>62.2%</td>
</tr>
<tr>
<td>2-3 times</td>
<td>Count</td>
<td></td>
<td>76</td>
<td>30</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>80.0</td>
<td>26.0</td>
<td>106.0</td>
</tr>
<tr>
<td>% within PreviousUseAE</td>
<td></td>
<td></td>
<td>71.7%</td>
<td>28.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Disabilities</td>
<td></td>
<td></td>
<td>21.9%</td>
<td>26.5%</td>
<td>23.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td></td>
<td>16.5%</td>
<td>6.5%</td>
<td>23.0%</td>
</tr>
<tr>
<td>4-5 times</td>
<td>Count</td>
<td></td>
<td>16</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>18.9</td>
<td>6.1</td>
<td>25.0</td>
</tr>
<tr>
<td>% within PreviousUseAE</td>
<td></td>
<td></td>
<td>64.0%</td>
<td>36.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Disabilities</td>
<td></td>
<td></td>
<td>4.6%</td>
<td>8.0%</td>
<td>5.4%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td></td>
<td>3.5%</td>
<td>2.0%</td>
<td>5.4%</td>
</tr>
<tr>
<td>6+ times</td>
<td>Count</td>
<td></td>
<td>7</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>14.3</td>
<td>4.7</td>
<td>19.0</td>
</tr>
<tr>
<td>% within PreviousUseAE</td>
<td></td>
<td></td>
<td>36.8%</td>
<td>63.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Disabilities</td>
<td></td>
<td></td>
<td>2.0%</td>
<td>10.6%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>
Table 4 highlights that, proportionately, those with disabilities (see highlighted rows) are more likely to be regular users of A&E than those without disabilities and LTCs. This is illustrated in those using A&E 4 to 5 times in the past year being twice as likely to suffer from a disability or LTC. Yet those attending A&E 6 times or more within the past year 5 times more likely to have a disability or LTC. Therefore, to prevent multiple repeated attendances to A&E by those with disabilities measures need to be put in place to increase support for these individuals.

### 3.7. Analysis of public sentiments

Public sentiments towards A&E at the Royal Stoke University Hospital were analysed using Digimind for the period 1\textsuperscript{st} December 2014 to 6\textsuperscript{th} March 2015, which includes the period whereby a number of hospitals in Staffordshire including the Royal Stoke University Hospital and County Hospital declared major incidents as they were unable to address the “unprecedented demand” for A&E treatment.

#### 3.7.1. Public Sentiment towards A&E at Royal Stoke University Hospital

During the period of collating public sentiments towards A&E at the Royal Stoke University Hospital through Digimind, a number of patterns are highlighted in the key concepts that were discussed (Figure 20). Principally, public perspectives on social media centred on the major incident declared at the Royal Stoke and the pressures that the A&E department were facing. These comments were largely negative with the public noting the “overload of A&E” at the hospital whilst other comments related the major incident to the services being transitioned to the Royal Stoke from the County Hospital, as well as the number of people from Stafford having to travel to the Royal Stoke for emergency medical care. Additional comments also focused on the fact that the waiting times at A&E for the Royal Stoke University Hospital were the worst in the country in comparison to other hospitals and NHS Trusts.
Other themes such as “Stafford Hospital Campaigners”, “Consultant-led Maternity” and “OccupySSH” are directly related to the Support Stafford Hospital campaign and their protest against transitioning services from the County Hospital in Stafford to the Royal Stoke University Hospital as part of the creation of the new University Hospitals of North Midlands NHS Trust. More information about these sentiments can be found in our 2014 report “The transition of services following the creation of UHNM NHS Trust”.

Figure 21 illustrates the media breakdown of where public perspectives have been posted. Overall, the majority (53%) of stories and posts about A&E have been posted via Twitter with a further 26% were posted through news websites including local radio stations such as Radio Stoke and Signal One and local press such as The Sentinel and the Express and Star. Additionally, a further 18% of public sentiments were shared through Facebook and other websites including the MP for Stafford’s, Jeremy Lefroy, website and the UHNM Trust website.
Overall, public sentiment about A&E at the Royal Stoke University Hospital between 1st December 2014 to 6th March 2015 (Figure 22) was found to be largely negative. Whilst 70% of individuals discussed negative stories about A&E, 21% provided positive comments about the emergency department with a further 9% outlining neutral comments. Whilst negative comments related to waiting times around the major incidents, positive comments related to receiving good care, particularly for older people. Exemplifying this, one individual commented that “without the NHS my father would not be able to receive treatment or chemotherapy he needs”. Further positive comments also reflected the value of the health care that was provided to patients and their families.

3.7.2. Public Sentiment towards A&E at hospitals Staffordshire residents may attend

Public perspectives were also analysed in comparison to other hospitals in Staffordshire (Figure 23), the Royal Stoke University Hospital overall had a negative sentiment of -5. Whilst this sentiment was not the lowest out of all hospitals in Staffordshire, the Royal Stoke University Hospital received more
mentions than Walsall and Wolverhampton (14 and 7 respectively) and were more diverse. Therefore, the Royal Stoke University Hospital has a more representative public sentiment inclusive of both positive and neutral comments. County Hospital in Stafford had more mentions than the Royal Stoke University Hospital yet these comments specifically related to the campaign protesting against transitioning medical services and advocate opening the A&E department 24 hours a day, following its reduced opening times in late 2011.

Figure 23: Overall sentiment of A&E across hospitals in Staffordshire (01/12/14 – 06/03/15)

With respect to the timeline of the main themes being discussed on social media, the Digimind analysis shows that over January (specifically the 6th January) saw a spike in discussion and posts related to Accident and Emergency online (Figure 24). This spike corresponded to breaking news about major hospitals and NHS Trusts declaring major incidents. The level of activity begins to decrease after mid-January yet discussion of A&E at all hospitals in Staffordshire remains higher than it was prior to the news being released about the winter pressures and the ability of the emergency departments to cope.
Figure 24: Timeline of discussion towards A&E in all hospitals in Staffordshire (01/12/14 – 06/03/15)
4. CONCLUSIONS

The findings from this engagement and study demonstrate the multiple issues people consider when visiting the Accident and Emergency department at the Royal Stoke University Hospital and whether any other medical services were consulted prior to attending A&E. The main themes arising from the findings and results demonstrate a number of implications for those requiring emergency care and attending A&E.

4.1. Attendances to, and experiences of, A&E

During the period of data collection (2nd February to 15th February 2015), field researchers engaged with 460 patients at the accident and emergency department at the Royal Stoke University Hospital. Overall, 44.5% of those who were surveyed attended as a result of sustaining an injury, whilst 46% attended because of an illness. Looked at more closely, 25.4% attended A&E because of a one-off illness and 20.6% attended as a result of a recurring illness. Frequently mentioned and specific symptoms were outlined as being accidents including trips, falls, fractures and dislocations, and injuries (particularly to head, legs, back and arms); infections; and pains (often to chest and head). 59.8% of those who attended A&E were referred by an organisation or other individual, whilst 40.2% attended on their own volition. Overwhelmingly, the majority of patients were referred by their GP (48.3%), NHS 111 (17%) or a Walk-in Centre (8.5%) with the remaining 26.2% being referred by other hospitals such as Leek Moorlands, Stafford and Buxton Hospitals, ambulance paramedics, 999 service or a pharmacy.

On average, the majority of individuals were seen by triage in less than an hour and waiting times within the A&E department to be seen after triage were around 2-3 hours (though this does not include admission and/or discharge). Patient experience of A&E was found to be positive overall, with 45% of respondents noting that their experience at reception and triage was “very positive” and 97% noted that they had been treated politely and courteously. However, one negative aspect of A&E was found to be centred around presenting information to patients about waiting times. In this context, 57.5% of respondents noted that the TV screens showing waiting times were rated as either being “useless” or “extremely useless”, with a further 30.9% suggesting that the TV screens were neither useful nor useless. During the period of data collection, the screens had not updated since 4th February.

4.2. Consideration of other medical services

Overall, 97.8% of those who were surveyed indicated that they were registered with a GP yet only 43.3% of those who attended A&E had attempted to contact their GP with two thirds of all patients referred to A&E by their GP. This point was reinforced with 73.3% of patients identifying that even if they had an appointment with their GP today or tomorrow they still would have attended A&E. In the majority of circumstances, patients indicated that they could arrange an appointment on the “same day”. Yet whilst 43.3% of the sample had contacted their GP, 67% were referred to A&E following this.
This was reinforced by 73.3% of patients identifying that even if they had an appointment with their GP today or tomorrow they still would have attended A&E.

Overall, 65.3% of those who are registered with a GP were aware of the out of hours service and also how to contact them, whilst the remainder indicated that they did not know whether their GP provided an out of hours service. Overwhelmingly, 86.9% of respondents stated that they did not feel that a GP out of hours service would be appropriate to treat the symptoms they had experienced on the day of data collection. Attendances to other medical services illustrate that GP practices, NHS 111 and walk-in centres are used more than pharmacies and minor injury units within Staffordshire and Stoke-on-Trent yet they are also more likely to refer to emergency departments.

4.3. Previous experiences of A&E

Overall, 34.4% indicated that they had attended the emergency department (in the past year) in addition to the day of data collection, with 24.3% of patients attending 2 to 3 times, with 89.7% of having previously attending the Royal Stoke University Hospital. Previous experiences of A&E waiting times for triage indicate that overall more people waited longer than an hour (29.4%) compared to those waiting more than an hour on the day of data collection (6.6%), suggesting that experiences during the data collection period are more favourable than previous experiences. The number of those waiting for treatment following triage for less than an hour is lower for previous experiences (26.2%) than during the period of data collection (42.5%), yet a similar number waited 1 to 2 hours previously (31.7%) than during the current study (35.7%). However, waiting times longer than 3 hours were significantly higher for previous experiences (42.2%) than the period of data collection (21.8%).

In total, 65.1% of patients who visited A&E previously rated their experience as either “very positive” or “positive”, with a further 18.8% ranking their experience as “neutral” whereas only 16.1% rated their experience as “negative” or “very negative”. In this research, patient experiences are predicated on evaluating many different elements of A&E including reception staff attitude, interactions with staff, waiting times, experiences with triage nurse, the physical waiting area, car parking and standard of treatment. Combined, these elements comprise the overall experience of A&E. This demonstrates that the patient experiences can be influenced by issues that are able to be changed by the Royal Stoke University Hospital.

4.4. Public sentiments and further insights

Further analysis of the data revealed that those with disabilities were more likely to attend A&E for a recurring illness related to their LTC than an injury or one-off illness. Additionally, those with disabilities were more likely to rate their overall experience of A&E as “positive”. Gender differences were prevalent with respect to symptoms and patient experience. With respect to the symptoms different genders attend A&E for, it was observed that there were higher than expected counts of males attending A&E for an injury and less than expected numbers attending for a one-off illness whilst females were more likely to attend A&E for a one-off illness. Males were more likely than
females to rate their experience at A&E as “very positive” or “positive” with females more likely to state their experience was “neutral” or “very negative”, for both reception and triage.

Gender differences were also observable with respect to overall experience. Overall, there were higher than expected counts of males noting their experience was “very positive” whilst conversely females were significantly less likely to rate their experience of A&E as “very positive”. Here, males were more likely to be “very positive” with females more likely to be “positive” yet more “negative” indicating that females have more diverse experiences which take into account their experiences at reception and triage.

Further analysis demonstrated that with respect to symptoms, those with injuries are more likely to attend on Wednesdays whilst those with recurring illnesses and one off illnesses more likely to attend A&E on Tuesdays. Similarly, referrals were also more likely to have occurred on Tuesdays correlating with those who attended A&E for recurring and one-off illnesses. Experience of reception and triage highlighted that patients were less likely to rate their experience at reception and triage as “very positive” on Tuesdays, yet were more likely to extend this level of positive sentiment on Wednesdays and Saturdays, whilst Thursdays were less likely to rate their experience as “very positive”.

Referrals were cross-tabulated with time. There were higher than expected numbers of those referred during the time periods 12:01pm to 16:00pm and 16:01pm to 20:00pm. Whilst waiting times for triage were generally less than one hour for the period of data collection, analysis showed that there were higher than expected counts for those waiting 1 to 2 hours between 12:01pm to 16:00pm. Additionally it was illustrated that waiting times for treatment less than an hour were higher than expected between 8:00am and 12:00pm, whilst there were significant increases in waiting more than an hour between 12:01pm to 16:00pm.

It was shown that those with disabilities were more likely to be regular users of A&E than those without disabilities and LTCs. This was illustrated in those using A&E 4 to 5 times in the past year being twice as likely to suffer from a disability or LTC, yet those attending A&E 6 times or more within the past year 5 times more likely to have a disability or LTC.

Overall public sentiments from Digimind illustrated that there were substantial discussions of A&E at the Royal Stoke University Hospital on social media focusing on the major incidents but also the Support Stafford Hospital campaign and the transition of services from County Hospital to the Royal Stoke site. In total, the public sentiment towards the Royal Stoke University Hospital emergency department was deemed to be negative, with 70% of social media posts indicating such thoughts.
5. **RECOMMENDATIONS**

The following recommendations provided suggest issues for consideration for the A&E department at the Royal Stoke University Hospital and the wider health economy:

### 5.1. **Practical Recommendations for the Royal Stoke University Hospital A&E department**

1. Stoke-on-Trent and North Staffordshire CCGs together with University Hospitals of North Midlands NHS Trust should consider implementing a GP “fast track referral system” whereby those who have been referred by their GP or Walk-in Centre, including the ability for GPs to book patients in, for patients to bypass triage thereby reducing double handling and improving patient experience. Such a system has been implemented in other Trusts (i.e. Burton Hospitals NHS Foundation Trust) and the impact has been judged to be beneficial.

2. Given the high number of multiple attendances, particularly amongst those with a long term condition or disability (11% of our sample size), UHNM are urged to undertake clinical reviews for all those patients under the care of a specialist consultant and who have attended A&E at least once in the past 6 months to ensure that their treatment pathways are effective.

3. The A&E department at the Royal Stoke University Hospital need to ensure that they indicate waiting times clearly to patients, via verbal communication and through the use of a number of regularly updated Television screens around the waiting area that are appropriately sited through the department.

4. The microphone and audio equipment at the reception of A&E at Royal Stoke University Hospital need to work effectively as talking through the glass panels proved difficult for those hard of hearing.

### 5.2. **Recommendations for the wider health economy**

5. There should be a review of the winter pressures campaign to consider its efficacy in whether attendances to A&E are deterred and if the release of the data on a weekly basis helps the public to choose which service is most appropriate to treating their symptoms, given the approach that each CCG employs are different to one another.

6. There needs to be an improved understanding of what constitutes a medical emergency and whether this should be presented to the emergency department or whether there is a more appropriate service that could address the nature of patient injuries and/or illnesses. This should be done in a number of ways:
   a. Medical services such as GPs and NHS 111, who refer heavily to the emergency department, should reconsider whether particular symptoms require attention at A&E or whether these could be self-treated or presented at MIU or a WIC;
   b. There needs to be an increased understanding of what symptoms should be presented to A&E and what could be treated elsewhere, for example at MIU or WIC;
   c. Referral to the Directory of Services for accident and emergency should present the use of A&E as a last resort and guide GP’s, NHS 111 and the public through to the most appropriate
service that provides accessible and non-technical information for ease of understanding (akin to “if you have these symptoms please consult X medical service”).

7. The financial implications of people making attendances to multiple services should drive reconsiderations and a re-evaluation of whether accident and emergency services have been made too complicated and instead consider how it could be simplified to increase capacity at A&E, save costs and reduce confusion and improve accessibility to emergency health care.
REFERENCES


Canterbury and Coastal Clinical Commissioning Group (n.d.) FOI Request of Cost of Faversham MIU, [https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCEQFjAA&url=http%3A%2F%2Fwww.canterburycoastalccg.nhs.uk%2FEasySiteWeb%2Fgetresource.axd%3FAssetID%3D352327%26type%3Dfull%26servicetype%3DAttachment&ei=-sMGVe-pG4mS7Aa3koHYDQ&usg=AFQjCNH1ZxntpW4a-rzN1zVG5_-vlerRYQ&sig2=IzaHEslt3i0w0J3hwCu4cg&bvm=bv.88198703,d.ZWU], accessed 16/03/15.


Appendix 1: Methodological Approach

This appendix provides a more detailed outline of the methodological approach and analytical techniques used for this research project.

*Questionnaire surveys*

The primary approach of this research employed both paper-based and online questionnaire surveys. These were conducted to provide service users the opportunity to outline their views and experiences about attending A&E at the Royal Stoke University Hospital and whether any other services were considered, attended or ignored in preference to visiting the hospital and the reasons for this. The questionnaire comprised a multitude of open and closed ended questions regarding their choices to attend A&E and decisions over accessing other health services (Parfitt, 2005; Lietz, 2010). Additionally, Likert scales were utilised in the questionnaire to gauge respondents’ attitudes towards specific elements of their experience. Likert scales are frequently employed to ascertain public attitudes and respondents are asked to indicate the extent to which they ‘agree’ or ‘disagree’ with a statement or question using a scale with five positions (Mclafferty, 2007; Bryman, 2012).

The questionnaire was presented with a structured and systematic approach and utilised both open, closed and Likert scale questions, comprising of four sections: (1) Experience of A&E; (2) Other medical services; (3) Previous experience of A&E; and (4) Demographic characteristics. Social surveys are particularly useful for eliciting public attitudes and perspectives towards complex health and social issues, and valuable for exploring complex behaviours and previous experiences (Parfitt, 2005; Mclafferty, 2007; Bryman, 2012; Dell-Kuster *et al.*, 2014). Therefore social surveys are well placed to explore the reasons underpinning service user choices, decisions and experiences towards attending A&E and other health services.

*Field Researcher Observations*

Whilst observation techniques are a justifiable methodological approach, observations were collected from field researchers about any occurrences or issues that were present during collection of the survey responses. Whilst observations are not used as a methodological technique in this research project, they are used to support findings from the survey results and complement or contradict figures from the Winter Tracker data providing situated comments. The observations collected touched upon a variety of themes from the atmosphere in the A&E department; cleanliness of the waiting area; operation of the Television showing waiting times; number of people waiting to be seen after triage; and any additional comments made by respondents. These observational comments are provided throughout the report and identified along with the timings and date the remarks were noted.
**Sentiment Analysis**

Alongside the results from the questionnaires and the field researcher observations, another form of gauging public opinion regarding the Royal Stoke University Hospital is through analysing the sentiments of individuals posting their attitudes towards, and experiences of, the hospital and its service on social media. To highlight and analyse the sentiments of the public towards the Royal Stoke University Hospital, Digimind was used as the principal collection of sentiments via online media. Using RSS feeds and Twitter and Facebook Hose’s, Digimind indexes and references links on a range of issues and is able to note the source, sentiment, date and time of the post. This method of gaining sentiments towards the Royal Stoke University Hospital allows for a comparison of the attitudes towards the A&E department with the hospital overall. In addition, Digimind also allows for comparisons between other NHS Trusts and hospitals. The results from the sentiment analysis and their interpretations are included following the results of the survey, noting contrasts and comparisons between the two datasets.

**Data Analysis**

The findings from the (online) questionnaire surveys were analysed using a variety of analysis techniques. Principally, they were analysed through quantitative measures comprising descriptive and analytical statistics such as frequency analyses, Spearman’s rho/Pearson’s r and chi-squared analysis (Field, 2009; Bryman, 2012; Dancey et al., 2012; Egbue and Long, 2012). This was done by using Microsoft Excel to carry out statistical analysis. While frequency analyses provided mainly descriptive interpretations about attending A&E, for example the number of people who attempted to gain advice from other medical services, analytical statistics provided more depth to the results allowing for greater interpretation. These methods of analysis are often referred to as Bivariate analysis, and seek to uncover whether two variables (questions or statements) are related (Bryman, 2012).

Spearman’s rho/Pearson’ r was used to ascertain whether there were positive or negative, strong or weak relationships between two variables. Chi-squared is an analytical test that works by calculating the expected frequency of a variable hat would occur on the basis of chance, and the chi-squared analysis is calculated by the differences between the actual and expected values, highlighting where there is significant variation (Field, 2009; Egbue and Long, 2012). The analysis is combined with a level of statistical significance, which provides a measure of confidence to what extent the variation between the observed and expected frequencies have not occurred due to chance (Bryman, 2012).

Data obtained via open-ended questions as part of the questionnaire were quantified, yet the quotes that respondents provided were analysed using thematic analysis (Braun and Clarke, 2006; Cooper and Endacott, 2007). Thematic analysis has the capacity to capture more qualitative results from surveys at a precise point in time and allow for themes to be extrapolated from this providing justification for reasons why service users choose, or not choose, to consider, attend or ignore other health services rather than solely visit A&E.
Appendix 2: Questionnaire

UHNM A&E QUESTIONNAIRE

Healthwatch Staffordshire and Healthwatch Stoke-on-Trent are conducting this survey to understand why people come to A&E at the Royal Stoke University Hospital. Taking part in this study will not interfere in any way in the time you’re seen or the treatment you receive. Taking part is anonymous and will be used for research purposes only. You may withdraw from the survey at any time.

Date: _______________  Time: _______________  A&E  □  Paediatrics  □

SECTION 1: EXPERIENCE OF A&E

Q1: What are the symptoms that have led you to come to A&E today?
Injury  □  One off illness  □  Recurring illness  □  Other: ________________

Q2: Why did you need to come to A&E?
______________________________________________________________________________
______________________________________________________________________________

Q3: Were you referred to A&E?  Yes  □  No  □

Q4: If yes to Q3, who/which organisation referred you? ________________________________

Q5: How did you get here?
Drive yourself  □  Ambulance  □  Public transport  □  Lift  □  Taxi  □
Other, please specify: __________________________________________________________________

Q6: What time did you arrive at A&E today? ___________________________________________

Q7: How long were you waiting before you were seen at triage?
Less than an hour  □  1-2 hours  □  3-4 hours  □  5-6 hours  □  7+ hours  □

Q8: If you were seen by someone after triage for treatment, how long did you have to wait?
Less than an hour  □  1-2 hours  □  3-4 hours  □  5-6 hours  □  7+ hours  □

Q9: How would you rate your experience at reception?
Very positive  □  Positive  □  Neutral  □  Negative  □  Very negative  □

Q10: How would you rate your experience at triage (preliminary check of symptoms)?
Very positive  □  Positive  □  Neutral  □  Negative  □  Very negative  □  N/A  □
Q11: Have hospital staff treated you politely and courteously?
Very positive ☐  Positive ☐  Neutral ☐  Negative ☐  Very negative ☐  N/A ☐

Q12: Do you find the TV screens in A&E showing waiting times useful?
Extremely useful ☐  Useful ☐  Neutral ☐  Useless ☐  Extremely useless ☐

SECTION 2: OTHER MEDICAL SERVICES
Q13: Are you registered with a GP? Yes ☐  No ☐

Q14: If yes to Q13, what is the name of your GP practice? ______________________________

Q15: Did you try to see or contact your GP before coming to A&E today? Yes ☐  No ☐

Q16: If yes to Q15, did you get an appointment? Yes ☐  No ☐

Q17: If yes to Q16, how long a wait were you given to see your GP? _______________________

Q18: Are you able to make on the day appointments with your GP? Yes ☐  No ☐

Q19: If you had a GP appointment today or tomorrow, would you still have attended A&E? Yes ☐  No ☐

Q20: Do you know what your GP Out of Hours Service is and how to contact them? Yes ☐  No ☐

Q21: Do you feel that your GP or out of hours service would have been able to offer you adequate treatment for the symptoms that you are experiencing today? Yes ☐  No ☐

Q22: What services are you aware of that you could have got advice/treatment from for the symptoms you are experiencing rather than coming to A&E?
____________________________________________________________________________
____________________________________________________________________________

Q23: Did you try to get advice from or present to anywhere else before coming to A&E today? NHS 111 ☐  Minor Injuries Unit ☐  Walk in Centre ☐  GP ☐
Pharmacy ☐  GP Out of Hours ☐  Other, please specify: ____________________________

Q24: If you have used these services, would you use them again? Yes ☐  No ☐

Q25: Please give reasons why for your answer?
SECTION 3: PREVIOUS EXPERIENCE OF A&E

Q26: How many times have you visited A&E, as a patient, in the last year?
This is the only time □ 2-3 times □ 4-5 times □ 6+ times □

Q27: If you have visited A&E in the past year, which hospital did you attend?
____________________________________________________

Q28: On your last visit to A&E how long were you waiting before you were seen at triage?
Less than an hour □ 1-2 hours □ 3-4 hours □ 5-6 hours □
7 or more hours □

Q29: Was this waiting time to be seen at triage acceptable?
Very acceptable □ Acceptable □ Neutral □ Unacceptable □
Completely unacceptable □

Q30: If you were seen by someone after triage, how long did you have to wait?
Less than an hour □ 1-2 hours □ 3-4 hours □ 5-6 hours □
7 or more hours □

Q31: Was this waiting time to be seen by someone after triage acceptable?
Very acceptable □ Acceptable □ Neutral □ Unacceptable □
Completely unacceptable □

Q32: How would you rate your overall experience at A&E?
Very positive □ Positive □ Neutral □ Negative □ Very negative □

Q33: Please tell us why your overall experience was positive or negative?
______________________________________________________________________________

Q34: How could your experience of A&E be improved?
______________________________________________________________________________

SECTION 4: DEMOGRAPHIC CHARACTERISTICS

Q35: Where have you travelled from?
Newcastle-under-Lyme □ Stoke-on-Trent □ Cannock Chase □
Staffordshire Moorlands □ East Staffordshire □ Stafford □
Q36: Do you have any disabilities?  Yes ☐ No ☐ If yes, please tick all that apply
Specific learning disability (e.g. dyslexia, dyspraxia) ☐
General learning disability (e.g. Down’s Syndrome) ☐
Cognitive impairment (e.g. Autistic spectrum disorder) ☐
Long standing illness or health condition (e.g. cancer, HIV, diabetes or epilepsy) ☐
Mental health condition (e.g. depression or schizophrenia) ☐
Physical impairment or mobility issues (e.g. use of wheelchair or crutches) ☐
Deaf or serious hearing impairment ☐
Blind or serious visual impairment ☐
Other, please specify: ____________________________________________________

Q37: What is your employment status?
Employed FT ☐ Employed PT ☐ Retired ☐ Student ☐
Unemployed ☐ Other, please specify: ______________________________________

Q38: What is your ethnicity?

<table>
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<th>Asian or Asian British – Indian</th>
<th>Mixed – White and Asian</th>
</tr>
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<td>Other Black background</td>
<td>Mixed – White and Black Caribbean</td>
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<tr>
<td>Gypsy or traveller</td>
<td>Asian or Asian British – Pakistani</td>
<td>Mixed – White and Black African</td>
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<td>Other White background</td>
<td>Asian or Asian British – Bangladeshi</td>
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<tr>
<td>Black or Black British – Caribbean</td>
<td>Other Asian background</td>
<td>Other Mixed background</td>
</tr>
<tr>
<td>Black or Black British – African</td>
<td>Chinese</td>
<td>Other Ethnic background</td>
</tr>
</tbody>
</table>

Q39: What is your nationality? Please specify: __________________________________________

Q40: Please note your gender?
Male ☐ Female ☐ Transgender ☐ Other ☐

Q41: What is your age category?
Under 18 ☐ 18-25 ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66-75 ☐ 76+ ☐
Appendix 3: Field Researcher Observations and Additional Comments

Observations, additional comments and statements were collected from Field Researchers during their time at A&E. Their comments are provided below:

**Monday 2nd February (5pm–8pm)**
- Very busy session but a very orderly atmosphere and sense of quiet professionalism
- 11 surveys carried out 10 of them were referred by their GP’s which seemed a high number. There is anecdotal evidence from NHSE that Monday afternoons do produce a high level of GP referrals but it is not known why this is so
- Three of the patients I interviewed were on cancer pathways already but were still referred by their GP to A&E and there is a question around whether they should have ever attended A&E or whether they could have been treated more appropriately via the support system that already operates around them? If there is any evidence from other surveys completed could this be considered please?
- These same three patients had all been told that their GP was “faxing” details of their symptoms and history to the hospital. None were able to report that they had been received by the hospital (or more accurately been received in the A&E dept) and one relative of a very poorly patient reported that the Triage team were completely unaware that his mother had cancer until about 10 minutes into the Triage when he realised that their questioning suggested that they were looking for other causes.
- The TV screen did not work during the whole of the visit, and had not been noticed by many of the patients anyway. Position and usefulness need to be questioned, particularly as it was still not working on my second session on 11 Feb over a week later and the screen info message said it had been out of order since 4th Feb.
- Patients were overwhelmingly supportive of the A&E staff, clinical and administrative and very philosophical about their need to wait if they wanted to be seen.
- One patient had been to see his GP with heavy nose bleeds 3 times in the previous few days, and yet he was referred to A&E in an ambulance in the late afternoon on a weekday. Would it not be more appropriate to refer to an ENT clinic as an urgent planned referral.

**Tuesday 3rd February (5pm-8pm)**
- Started off with minimal numbers of patients in A&E
- 2 reception staff on duty and 2 staff operating triage
- Only 1 Ambulance outside at spot check around 6pm
- Busier towards 7pm with more patients coming in via ambulance
- One vending machine not working

**Wednesday 4th February (11am-2pm)**
- Unusually, 6 people did not want to complete questionnaires
- The department was kept clean at all times with cleaners making regular visits
- Vending machines all working
- Paediatrics was very busy
- Car parking was mentioned by a number of patients as a “real problem” with people searching for a car parking space for over 20 minutes

**Wednesday 4th February (11am-2pm)**
- Car parking very difficult with searching for 20 minutes or more
- Some patients who were referred by their GP noted that they were advised to take lunch/sandwiches and evening medication if visiting A&E
- Only 1 emergency ambulance observed at 3 spot checks during visit between 2pm and 5pm
- Information screens not working showing wait times
- Reception area was very cold and draughty
- General trends were that people were being referred to A&E by their GP that were not accidents or emergencies. The majority of patients attending did not need to visit A&E

**Friday 6th February (8am-11am)**
- The TV screen with waiting times was “frozen” and stopped working and was therefore not up to date and no use to patients
- Would be helpful to have a second screen in the waiting area outside Bay C – along with another TV that showed programmes so that patients and relatives would not get frustrated easily and having something to take their mind off their wait
- Health and safety issue where the cable of the hoover was wrapped around chairs and crossing people’s legs in waiting area and could have caused a potential trip hazard. Cleaner had no idea that this caused a health and safety issue

**Saturday 7th February (11am-2pm)**
- Receptionist was on her own and there was often a queue to be seen
- Generally, people were seen to quite quickly
- Children’s A&E was quite quiet most of the time
- Reception area fairly dirty with pieces of dropped food and paper etc
- Coffee machine not working
- Children’s A&E quite tidy and seen as a good area as there are things for kids to do
- Food trolley was viewed positively by people waiting when it came through around 1pm
- Informed by one patient that doctor for minor injuries doesn’t start until 8am and anyone presenting before then has to wait
- There were people in waiting room who had been brought in by ambulance after they had dialled 999 but they didn’t need urgent treatment
- Receptionist was “brisk” in approach
- People who had been seen but then had to make a follow-up appointment had to queue again at reception
• There were relatively few people in waiting room at about 1:45pm and these had only just arrived
• Felt as though receptionists were annoyed at our presence and felt like a nuisance

Saturday 7th February (2pm-5pm)
• Kingsbridge Medical Centre – difficult to get appointments for the same day
• Screen in A&E showing waiting times not working showing an “internet explorer is not working” box
• The speakers/amplifiers at reception do not work. It is difficult for both patients and receptionists to hear each other and makes it really difficult to conceal private issues and confidential information

Sunday 8th February (8am-11am)
• Very few people in waiting area (main, minor injuries and paediatrics) when arrived. Got busier from 9.30am
• The TV screen with waiting times was still not working – still frozen on 4th February and people often missed seeing it as they entered
• Leaflet racks in main A&E reception were empty and very little for public to look at/read while waiting yet leaflet rack in Paeds is well stocked

Sunday 8th February (11am-2pm)
• TV appointment screen broken in Adult A&E – pointed out to reception staff who were unaware it has not worked since 4th February at 9:04am
• Comments were raised from a number of patients that car parking was dreadful

Wednesday 11th February (11am-2pm)
• Parking mentioned as a real problem again
• Costa coffee machine out of order
• No rubbish – cleaning was taking place throughout the time
• Waiting time screen in wrong place – people seen after triage could not see the screen (which was out of date) to see how long they would have to wait

Wednesday 11th February (5pm–8pm)
• Generally a much quieter session, at one point there was absolutely no one in the front waiting room waiting for triage and it remained that way for over 15 minutes.
• TV Screen did not work at all during the session but equally was not noticed by many of the patients interviewed which would lead to a question around its merit in keeping informed.
• Much wider variety of patients with some self referrals from sports injuries, and home based accidents certainly not all via GP referral
• Patients were again very complimentary of the medical staff on this visit but there were a couple of patients who expressed significant dissatisfaction from previous visits which was recorded.
Thursday 12th February (10pm-Midnight)

- Very busy in A&E with a high number of people stating they have waited a fair time without any clear information on waiting times
- Atmosphere in the department was clearly one of disappointment and unease with patients talking to each other about level of discomfort and waiting times
- Ambulance outside of A&E looked like it was on fire with smoke coming out of the back of the Ambulance.

One field researcher provided their observations as a complete list across the three days they were involved in surveying patients and noted trends and observations during their time at A&E:

**General Observations**: There weren’t very many patients who appeared to have come to A and E inappropriately. Only one patient that I saw said she had not tried the GP because it is difficult to get through on the phone and came to A and E instead, where contacting her GP may have been sufficient. The odd patient that could have gone to a Walk-In Centre chose not to because Royal Stoke was nearer. The fact that the Haywood Hospital has X-Ray facilities till 6 pm was not widely known. The 111 service seemed to be reasonably well known, with mixed experiences. A few people were aware of the Walk-in Centres but weren’t inclined to use them in case they couldn’t help or because they had had bad experiences before eg waiting a long time and then being referred to A and E anyway and then still having to wait a long time. A couple of patients thought they would be seen straightaway after being referred from a walk-in centre, but this is not the case. Also the vast majority of patients and relatives were very understanding about the waiting times. (Bearing in mind the most were being processed through within 3 hrs).

The Television Waiting-Time Screen was not working all the time we there, showing the wrong date, and most patients had not noticed it, as the location is poor. The graphics were not very clear either. As the triage wait was usually very short, the waiting time information would be more useful at the second waiting area in a more prominent position – perhaps where the framed thankyou letters are on the wall (which no-one appeared to take any notice of)

Also the survey boxes could be improved eg

1. **Triage waiting times** were always under an hour – so 15 min slots may be better.
2. **Waiting Times after Triage** left gaps. For instance. There was nowhere to record anything between 2 and 3 hrs, or between 4 and 5 hrs etc.
3. **Ages** Same problem with ages. Could the choices be 46-55, 55-65 etc?

Another problem for some patients was that they could not hear the receptionist very well, so had to talk very loudly, which compromised confidentiality and led to small hold ups when busy. Not good if patients are very frail or in a lot of discomfort, and struggle to stand in a queue for a while. A loud speaker integrated into the window may help.
Some patients weren’t told by triage to move from the initial waiting area to the follow-up waiting area. This meant they could not hear their name when called out for the second consultation and meant delays whilst the staff try to locate the patient. Then if that patient has very poor mobility it takes them a long time to reach the second consultation place, causing more delay. A few patients with poor mobility were not happy with the low seats. The one bigger seat with arms was often occupied by a patient escorted by the police!

Car-Parking / Dropping off: Is fraught for those patients with poor mobility who need escorting, who cannot walk far, so need to be dropped at the door but can’t necessarily take themselves into the A and E waiting area. Wheelchairs are in short supply and there are no friendly faces to assist or greet you and advise you what to do with your frail relatives in these circumstances, when it then takes the driver a long time to find a parking space. A few relatives risked leaving the patient in the car whilst running in to ask the receptionist what to do, and then the receptionist could call for assistance. Other relatives may be scared of doing this and there were no instructions anywhere to help people with this problem.

Car Parking Prices: A number of visitors complained about the cost and the lack of change facilities. eg multi storey car park where you can’t use a card and where you potentially have to go walk a long way to find change, if you can’t find a passer-by to help. This is very stressful when trying to sort out an emergency issue with your relative. Also the instructions aren’t easy to read in the dark area of the cash machine in that car park.

No-one “walking the walk” in A and E: There was no medically-trained person keeping an eye on the waiting patients, to monitor those in acute discomfort. I saw a male nurse once who said that was his job but I only saw him once in 3 hrs and no-one the other 6 hrs. There was one very distressed patient in extreme pain kneeling down with his head bent over the seat of his wheelchair, who had been crying out in pain when positioned in his wheelchair, and chose to slide into a kneeling position instead. This was distressing for him and very undignifying. Eventually a (non A and E) nurse who happened to be passing through A and E came to his rescue and was finally able to get him moved onto a trolley, after about 10 minutes, as she had to wait for a trolley to become available. Well done her!
Appendix 4: Calculating the financial costs of attending medical services

The financial implications of attending A&E were calculated using the values of attendances to health services in Table 1. In Section 3.4.4, the financial implications were calculated for: 1) the respondents in the questionnaire survey (n=460); 2) the total number of people attending A&E during the data collection period as indicated by the Winter Tracker Data (n=5,854); and 3) the total financial implication on the health economy for the year (n=116,690: based on annual attendance in 2013/14 from UHNM, 2014).

1) Financial implication for survey respondents

A single visit to A&E was estimated at £114. This was multiplied by the total number of respondents surveyed (=460). Therefore, £114 x 460 = £52,440. Given that over two-thirds of patients used other services prior, this additional cost implication was calculated as equaling £12,838 (24.48% of the total cost). This means that adding the overall cost of A&E attendances with the costs of using other services provides the total cost of multiple presentations to health services. Therefore £52,440 + £12,838 = £65,278. This total cost was divided by the number of respondents in the survey to illustrate the average cost of using health services per person. Therefore £65,278 / 460 = £141.91.

2) Financial implication for all attendances during period of data collection

The Winter Tracker Data shows that over the two weeks that data was collected (2nd to 15th February 2015), attendance (including emergency admissions as these are also included in our survey) at the Royal Stoke A&E equated to 5,854. If the average cost of using health services highlighted for our survey respondents is applied to this number of attendances, this provides the overall cost implication for the period of data collection. Therefore, 5,854 x £141.91 = £830,741.14. Demonstrating the additional cost of multiple attendances, £830,741.14 was multiplied by 0.2448 (24.48%) which indicated that £203,365.43 were additional costs of multiple presentations.

3) Financial implication for annual use of A&E

The Royal Stoke University Hospital notes that there were 119,690 attendances to the emergency department for 2013/14 (UHNM, 2014). If these financial measures were applied for this yearly total the overall total cost to the local health economy were as follows: £141.91 x 119,690 = £16,985,207.90. Similarly, if 24.48% of this cost is a result of multiple attendances to other medical services than this additional cost is equal to £4,157,978.90 (£16,985,207.90 x 0.2448 [24.48%]).
Appendix 5: Statistical Analysis Approach - Chi-Squared Analysis

Further statistical analysis of the results reveals some intriguing findings from the survey data. Generally, statistical analyses look for “significance”. This is to say that any correlation or relationship between two variables (e.g. referral to A&E and whether an individual has a disability) is not down to chance but is an observable trend and occurs as suggested. As such, some statistical tests such as chi-squared analysis provide a confidence level of 95% or above. Chi-squared is an analytical test that works by calculating the expected frequency of a variable that would occur on the basis of chance, and the chi-squared analysis is calculated by the differences between the actual and expected values, highlighting where there is significant variation (Field, 2009; Egbue and Long, 2012). The analysis is combined with a level of statistical significance, which provides a measure of confidence to what extent the variation between the observed and expected frequencies have not occurred due to chance (Bryman, 2012). These are reported as follows: $x^2=35.419$, df=10, $p<0.005$, where “$x^2$” is the chi-squared value, “df” refers to the degrees of freedom and the “$p$” value is the significance. Of particular importance is the “$p$” value demonstrating the significance level where 0.05 is equivalent to 95% and 0.005 equals 99.5% confidence. Whilst chi-squared analyses were applied to the coded data in this study, a number of these outputs were “significant” but do not meet the basic standards or parameters of the analytical procedure. Yet despite this, the cross tabulations do indicate interesting relationships between variables.
Appendix 6: Illustrating Cross-tabulations for statistical analysis

Table A5.1 illustrates the cross-tabulation that arises from the chi-squared statistical analysis. In this example, there are clear differences between the Observed Count and the Expected Count. In this example of the chi-squared analytical test the output was $x^2=7.275$, df=3, p<0.064. Although just shy of the 95% statistical significance level, the cross-tabulation demonstrates interesting results as discussed in Section 3.7.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Disabilities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Injury</td>
<td>Observed Count</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>154.6</td>
</tr>
<tr>
<td></td>
<td>% within Symptoms</td>
<td>78.5%</td>
</tr>
<tr>
<td></td>
<td>% within Disabilities</td>
<td>46.4%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>35.0%</td>
</tr>
<tr>
<td>One off illness</td>
<td>Observed Count</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>89.0</td>
</tr>
<tr>
<td></td>
<td>% within Symptoms</td>
<td>79.7%</td>
</tr>
<tr>
<td></td>
<td>% within Disabilities</td>
<td>27.1%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>20.4%</td>
</tr>
<tr>
<td>Recurring illness</td>
<td>Observed Count</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>70.9</td>
</tr>
<tr>
<td></td>
<td>% within Symptoms</td>
<td>67.0%</td>
</tr>
<tr>
<td></td>
<td>% within Disabilities</td>
<td>18.2%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>13.7%</td>
</tr>
<tr>
<td>Other</td>
<td>Observed Count</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>32.4</td>
</tr>
<tr>
<td></td>
<td>% within Symptoms</td>
<td>67.4%</td>
</tr>
<tr>
<td></td>
<td>% within Disabilities</td>
<td>8.4%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>6.3%</td>
</tr>
<tr>
<td>Total</td>
<td>Observed Count</td>
<td>347</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>347.0</td>
</tr>
<tr>
<td></td>
<td>% within Symptoms</td>
<td>75.4%</td>
</tr>
<tr>
<td></td>
<td>% within Disabilities</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>75.4%</td>
</tr>
</tbody>
</table>