



# Acuity Audit of Hospital Bed Occupancy in Devon



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#### 1. Introduction

1.1 This report sets out the methodology, results and conclusions of an audit of hospital and intermediate care beds in Devon on Tuesday 15<sup>th</sup> May 2012. The aim of the audit was to define the care needs of the inpatient population on that date, and to compare this with the results of two previous audits conducted on Tuesday 15<sup>th</sup> June 2010 and Tuesday 17<sup>th</sup> May 2011.

#### 2. Background

#### Reasoning

2.1 During the winter periods over the past few years, there has been considerable pressure on NHS Devon hospital beds, and reports of delays in discharging patients into the most appropriate care setting. An acuity audit was undertaken as part of the "urgent care" work stream within the Devon Health Community Transformation Programme in June 2010. Following lessons learned from this audit, a decision was made to re-audit in 2011 to look at any differences since that 2010 audit, including the impact of services and working practices designed to improve patient flow. A third audit was conducted in 2012 to review embedding of previous progress and to assess whether further progress had been made.

#### Objectives

- 2.2 The objectives of the audit were to:
  - identify the numbers and percentage of patients that do not need to be in their current care setting
  - identify the number and percentage of patients who could be managed at home
  - identify the type of health and social care needs of patients "fit to leave" their current care setting
  - identify barriers preventing patients from being in the most appropriate care setting
  - identify areas where the patient pathway appears to work particularly well
  - evaluate how changes to service provision and pathways since the 2011 audit has affected performance
  - assist in developing recommendations to reduce pressure on beds, delays in the patient pathway, and cost reductions as part of the NHS Quality, Innovation, Productivity and Prevention (QIPP) programme

#### Assumptions

2.3 In analysing and interpreting the results, certain assumptions have been made. These are:

- all patients that are admitted to hospital require admission
- delays to patient discharge or progress through a pathway including into rehabilitation are detrimental to the patient
- caring for a patient in an acute care setting is either more expensive than, or at least as expensive as, caring for a patient in alternative settings, including at home
- that the audit tool is valid, in that results would be the same whoever undertook the audit

#### Audit Comparability

- 2.4 Over the three year period, there have been slight changes to the areas involved in the audit, and the format of the audit tool used. It is important to understand these changes when making year on year comparisons.
- 2.5 In 2010, all areas took part in the audit and used the same audit tool, which was developed in Torbay.
- 2.6 In 2011 NHS Devon used a slightly amended version of the Torbay form for the audits in Exeter and East, Northern Devon and Plymouth (see the "Audit Process" part of Section 3 for details).
- 2.7 Torbay decided to make some slightly more substantial alterations to the tool, which was used only in the Torbay area. Only top level information from the Torbay 2011 audit was comparable to the audit results in other areas.
- 2.8 In 2012, for the audits in Exeter and East, Northern Devon and Plymouth, NHS Devon used the same audit as was used in 2011. Torbay did not conduct an audit in 2012.

	Year	<b>Exeter and East</b>	Northern Devon	Plymouth	Torbay
	2010	Torbay v1	Torbay v1	Torbay v1	Torbay v1
6	2011	Devon v1.1	Devon v1.1	Devon v1.1	Torbay v2
	2012	Devon v1.1	Devon v1.1	Devon v1.1	-

2.9 In 2011, for patients classed as "fit to leave", an additional question was introduced. Auditors were asked to provide information relating to how long the patient had been medically "fit to leave", based on three options: "0 Days (Today)", "1-3 Days" and "4+ Days". Auditors were also asked to provide the reason why the patient was in that bed, selecting from a list of 12 coded options, or a miscellaneous option and then provide a free text description. This was repeated for the 2012 audit.

#### Transforming Community Services

- 2.10 On 1<sup>st</sup> April 2011 as part of the national programme known as "Transforming Community Services", NHS Devon transferred the management of some of the services included in this audit to other NHS providers.
- 2.11 The community hospitals of Ashburton and Buckfastleigh, Bovey Tracey, Dartmouth and Kingswear, Dawlish, Newton Abbot, South Hams, Tavistock, Teignmouth and Totnes were transferred to Torbay Care Trust.

- 2.12 The community hospitals of Axminster, Budleigh Salterton, Crediton, Exmouth, Honiton, Moretonhampstead, Okehampton, Ottery St Mary, Seaton, Sidmouth, Tiverton and Whipton were transferred to Northern Devon Healthcare NHS Trust.
- 2.13 In the 2010 audit those community hospitals that have now transferred to Torbay Care Trust were included within the South Devon audit and were therefore incorporated within the 2011 re-audit.
- 2.14 The community hospitals that have now transferred to Northern Devon were classified as eastern for the 2010 audit and were separated out again for this 2011 acuity audit to enable comparison. For the 2012 acuity audit these have again been classified as eastern.

#### 3. Method

#### Audit Tool

- 3.1 To enable year-on-year comparison with the 2011 audit, the same audit tool was used in 2012 to conduct the audit (see Appendix A). The audit tool used by NHS Devon in 2011 also remained largely unchanged from the tool used in 2010.
- 3.2 The audit tool was designed to determine the following for each patient:
  - whether they were "fit to leave" their current care setting
  - their outstanding assessment and intervention needs
- 3.3 Questions were also asked about the patients' care setting, so that the findings of the audit could be analysed to compare differences between:
  - localities defined as (Exeter and East Devon, North Devon, Plymouth and South Devon)
  - type of care (defined as acute or community hospital)
  - type of acute setting (defined as surgical or medical)

#### Audit Process

- 3.4 The audit took place on Tuesday 15<sup>th</sup> May 2012. The audit tool was circulated to senior managers across North Devon, Exeter and Plymouth, who further distributed it to managers within acute and community hospital care settings. Only professionals with access to the staff caring for the patients were used to conduct the audit. This was done to minimise any variation in results between auditors arising due to the subjective nature of the questions.
- 3.5 The audit tools were then digitised and emailed to the NHS Devon Public Health Information Team (PHIT) who collated and validated the data before conducting the analysis.

#### Analysis of Data

### Cross sectional analysis – Proportion of patients "fit to leave their current care setting"

3.6 As one of the primary objectives was to identify potential for providing a more appropriate setting for patients, the proportion of patients who the auditors felt were "medically fit to leave their current care settling" was analysed for each of the localities, cross sectioned by type of hospital (acute, community) and then by the type of acute setting (medical, surgical). This was to help enable the identification of any areas where there may be barriers to patients being in the most appropriate setting.

#### Patient Age

3.7 An analysis of patient age in the 2010 audit suggested that patients who were "fit to leave" were, on average, older than those not fit to leave. As part of the 2011 audit a cross sectional analysis was done on the average age by hospital type and "fit to leave" status, and this has been done again in 2012.

#### **Patient Needs**

- 3.8 In order to try to identify the needs of those patients who were classed as "fit to leave" and could be managed at home, a further analysis was conducted for patients who met these criteria. Patients were excluded if their condition was:
  - liable to significant fluctuation
  - receiving planned end of life care
  - requiring further clinical investigations/treatment
  - awaiting specialist opinion
  - requiring active medical intervention
- 3.9 The remaining patients were then examined to see which of the following services were required:
  - physiotherapy
  - occupational therapy
  - nursing care
  - basic essential care
  - overnight care/support

#### Number of Days Medically Fit

3.10 As an additional question in the 2011 audit, for patients classed as "fit to leave", auditors were asked to provide information relating to how long the patient had been medically "fit to leave", based on three options: "0 Days (Today)", "1-3 Days" and "4+ Days". This data was cross sectioned by Locality and hospital type. This question was also included in the 2012 audit.

#### Reason in Bed

3.11 As an additional question in the 2011 audit, for patients classed as "fit to leave" auditors were asked to provide the reason why the patient was in that bed. They were asked to select one of 12 coded options, or a miscellaneous option and then provide a free text description. For patients classed as "fit to leave", the additional question relating to "reason in bed" was analysed to identify barriers to patients being in the most appropriate care delivery setting. These data were cross sectioned by locality and hospital type. This question was also included in the 2012 audit.

#### **Occupancy Levels**

3.12 As part of the audit, for each ward data were provided for, auditors were requested to provide information relating to how many beds were open overall, and how many that were occupied. These data were used to calculate the occupancy rates by locality and by hospital type.

#### 4. Results

#### **Results Overview**

- 4.1 Data were collected from three acute trusts and 16 community hospitals (Appendix B) generating 1241 records.
- 4.2 The audit recorded 947 individuals within an acute setting and 294 within a community hospital setting.
- 4.3 Figure 1 shows the overall numbers involved in the audits, and an initial summary of "fit to leave" status by hospital type and Locality. All confidence workings in this report have been calculated at the 95% level.

Locality	Hospital Type		Medically fit to leave this care setting?		% Fit to leave	Confidence Range
	Type	Fit	Not Fit	Total	leave	Italige
Exeter	Acute	182	429	611	29.8%	(26.2% - 33.6%)
and East	Community	82	119	201	40.8%	(33.9% - 47.9%)
	Total	264	548	812	32.5%	(29.3% - 35.9%)
North	Acute	60	155	215	27.7%	(22.0% - 34.4%)
Devon	Community	32	61	93	33.9%	(24.9% - 45.0%)
Devon	Total	92	216	308	29.9%	(24.8% - 35.3%)
Blymouth	Acute	22	99	121	18.2%	(11.8% - 26.2%)
Plymouth	Total	22	99	121	18.2%	(11.8% - 26.2%)
Gran	Grand Total		863	1241	30.5%	(27.9% - 33.1%)

Figure 1: Overall patient numbers and patients "fit to leave" by locality and setting type

## Cross Sectional Analysis – Proportion of Patients "Fit To Leave Their Current Care Setting"

4.4 This section shows the results for the analysis of the proportion of patients "fit to leave" their current care setting, cross sectioned by locality, hospital type and type of acute settings.

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	Fit to	Not Fit to	No. Of	Proportion	Confidence
Locality	Leave	Leave	Patients	Fit to Leave	Range
Exeter	182	429	611	29.8%	(26.2% - 33.6%)
North Devon	60	155	215	27.9%	(22.0% - 34.4%)
Plymouth	22	99	121	18.2%	(11.8% - 26.2%)
Total	264	683	947	27.9%	(25.0% - 30.9%)

#### Figure 3: Patients in community wards by locality

Locality	Fit to Leave	Not Fit to Leave	No. Of Patients	Proportion Fit to Leave	Confidence Range
Eastern	82	119	201	40.8%	(33.9% - 47.9%)
North Devon	32	61	93	34.4%	(24.9% - 45.0%)
Total	114	180	294	38.8%	(34.0% - 45.9%)

#### Figure 4: Patients in acute wards by ward type

Locality	Fit to Leave	Not Fit to Leave	No. Of Patients	Proportion Fit to Leave	Confidence Range
Surgical	118	287	405	29.1%	(24.9% - 34.0%)
Medical	146	396	542	26.9%	(23.0% - 30.5%)
Total	264	683	947	27.9%	(25.0% - 30.8%)

#### Figure 5: Patients in acute surgical wards by locality

Locality	Fit to Leave	Not Fit to Leave	No. Of Patients	Proportion Fit to Leave	Confidence Range
Exeter	80	163	243	32.9%	(27.0% - 39.2%)
North Devon	26	66	92	28.3%	(19.4% - 38.6%)
Plymouth	12	58	70	17.1%	(9.2% - 28.0%)
Total	118	287	405	29.1%	(24.6% - 33.8%)

#### Figure 6: Patients in acute medical wards by locality

Locality	Fit to Leave	Not Fit to Leave	No. Of Patients	Proportion Fit to Leave	Confidence Range
Exeter	102	266	368	27.7%	(23.2% - 32.6%)
North Devon	34	89	123	27.6%	(20.0% - 36.4%)
Plymouth	10	41	51	19.6%	(9.8% - 33.1%)
Total	146	396	542	26.9%	(23.2% - 30.9%)

#### Patient Age

4.5 This section shows the results of a statistical t-test of average age, cross sectioned by hospital type and "fit to leave" status.

#### Figure 7: Patient age by hospital type and "fit to leave" status

Hospital Type	Fit to Leave	Mean Age	St.Dev.	No. of Individuals	Confidence Range
	Not Fit	71.8	17.0	683	(70.5 to 73.0)
	Fit	72.9	20.2	264	(70.5 to 75.4)
Acute	All	72.1	18.0	947	(70.9 to 73.2)
	Not Fit	83.3	9.5	180	(81.9 to 84.7)
	Fit	84.6	8.6	114	(83.1 to 86.2)
Community	All	83.8	9.2	294	(82.7 to 84.8)
	Not Fit	74.2	16.4	863	(73.1 to 75.3)
Acute and	Fit	76.5	18.3	378	(74.6 to 78.3)
Community	All	74.9	17.1	1241	(73.9 to 75.8)

#### **Patient Needs**

4.6 Number of patients "fit to leave": 378 Number of patients in patients needs analysis: 143

Figure 8: Analysis of "fit to leave" patients with further needs (including
2010 and 2011 audit comparator)

Need	2012	Audit	2011 (%)	2010 (%)
Need	Number	%	2011 (76)	2010 (76)
Basic essential care	73	51.0%	51.1%	70.9%
Further occupational therapy	42	29.4%	34.7%	53.4%
Further physiotherapy	39	27.3%	33.5%	46.6%
Active nursing care	37	25.9%	26.7%	36.9%
Overnight care/support	35	24.5%	25.6%	32.0%

Number of Days Medically Fit

4.7 Figure 9: Number of days medically fit – number of patients (excluding eight unspecified)

	/	A001001001001				
		A – 0		C –	Not	
Hospital		Days	B – 1-3	4+	Medically	Grand
Туре	Locality	(Today)	Days	Days	Fit	Total
Acute	Exeter	95	51	36	429	611
	North Devon	19	21	18	155	213
	Plymouth	14	6	2	99	824
Acute Total		128	78	56	683	945
Community	Eastern	8	29	45	119	201
_	North Devon	7	5	14	61	87
Community Total		15	34	59	180	288
Grand Total		143	112	115	863	1233

#### **Reason in Bed**

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Hospital Type	Locality	A- Awaiting Equipment	B- Awaiting Package of care	C- Awaiting Specialist Opinion/ further assessment	D- Awaiting social care/ social services input	E- Awaiting funding approval/ panel	F- Funding approved awaiting move to placement	G- Family involvement/ choice	H- HNA/CHC decision support	l- Housing	J- Safeguarding issues	K- Transport issues	L- Awaiting community hospital placement	M- Other (Specify)	Not fit to leave	Total
	Exeter	2	9	21	14	3	2	4	1	0	0	1	37	88	429	611
	N. Devon	2	2	15	9	0	2	5	0	0	0	1	8	16	155	215
	Plymouth	0	2	1	2	0	1	1	0	0	0	1	2	12	99	121
Acute	Total	4	13	37	25	3	5	10	1	0	0	3	47	116	683	947
	Eastern	4	10	18	8	4	4	3	1	1	1	0	0	28	119	201
	N. Devon	1	9	4	5	2	3	2	1	0	0	0	0	5	61	93
Community	Total	5	19	22	13	6	7	5	2	1	1	0	0	33	180	294
Grand	Total	9	32	59	38	9	12	15	3	1	1	3	47	149	863	1241

# 4.8 Figure 10: Analysis of the "reason in bed" patients, conducted on patients classed as "fit to leave" (12 patients excluded as had incomplete data).

#### **Occupancy Levels**

### 4.9 Figure 11: Analysis of occupancy levels in Exeter and East and North Localities

Locality	Hospital Type	Occupied Beds	Total number of beds	Proportion	Confidence Range
	Acute	614	655	93.7%	(91.6% - 94.4%)
Exeter and	Community	216	245	88.2%	(83.4% - 90.0%)
East	Total	830	900	92.2%	(90.3% - 92.9%)
	Acute	201	232	86.6%	(81.6% - 88.7%)
	Community	93	96	96.9%	(91.1% - 97.7%)
North Devon	Total	294	328	89.6%	(85.8% - 91.0%)
То	tal	1124	1228	91.5%	(89.8% - 92.1%)

#### **Discharge Date Set**

Hospital Type	Fit To Leave	Discharge Date Not Set	Discharge Date Set	Grand Total
	Not Fit	466	217	683
	Fit	102	162	264
Acute	Total	586	379	965
	Not Fit	110	70	180
	Fit	45	69	114
Community	Total	155	139	294
Grand Total		723	518	1241

#### 4.10 Figure 12: Analysis of discharge dates set by hospital type

#### 5. Discussion

#### Patients "Fit To Leave" Their Current Care Setting

- 5.1 Overall, the percentage of patients in the 2012 audit who were "fit to leave" was 30.5%. This is a reduction of 1.6% since the 2011 audit, where 32.1 % of patients in a comparable setting were classed as "fit to leave" and a reduction of 8.1% since the 2010 audit, where 38.6% of patients in a comparable setting were classed as "fit to leave".
- 5.2 As part of the 2011 audit, a chi-squared test showed that since the 2010 audit there had been a significant reduction in the number of patients who were "fit to leave" their care setting (at 99% significance). Between 2011 and 2012 there was not a statistical difference between the percentage of patients "fit to leave", though there is a statistically significant difference between the 2010 and 2012 percentages (at 99% significance), showing that the improvements made since 2010 have been maintained.

Locality	Fit to Leave	Not Fit to Leave	No. Of Patients	Proportion Fit to Leave	Confidence Range
2010	422	642	1064	39.7%	(36.7% - 42.7%)
2011	629	1177	1806	34.8%	(32.6% - 37.1%)
2012	378	863	1241	30.5%	(27.9% - 33.1%)

#### Figure 13: Percentage of patients fit to leave in 2010, 2011 and 2012

### Figure 13a: Percentage of patients fit to leave in 2010, 2011 and 2012 (within a comparable setting)

Locality	Fit to Leave	Not Fit to Leave	No. Of Patients	Proportion Fit to Leave	Confidence Range
2010	384	611	995	38.6%	(35.6% - 41.7%)
2011	415	878	1293	32.1%	(29.6% - 34.7%)
2012	378	863	1241	30.5%	(27.9% - 33.1%)

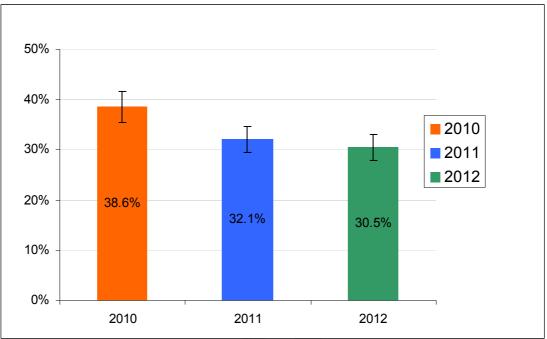
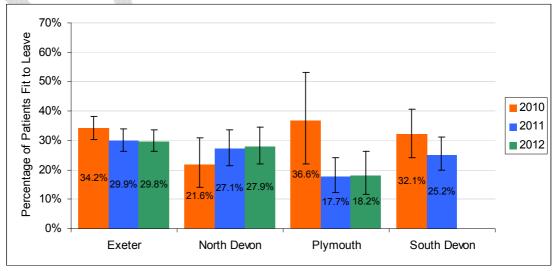


Figure 14: Graph showing percentage of patients fit to leave in 2010, 2011 and 2012 (within a comparable setting)

#### Acute Patients by Locality

- 5.3 Within an acute setting, the overall percentage of patients "fit to leave" was 27.9% (264 patients). There were no statistically significant differences between the proportion of patients "fit to leave" for any of the Localities. (Figures 2 and 15).
- 5.4 The percentage of patients "fit to leave" for each of the Localities has varied very little compared to the percentages seen in the 2011, with Plymouth retaining the lowest rate. Observer bias may explain the variance in the North Devon and Plymouth 2010 figures

Figure 15: Patients in acute wards defined as "fit to leave" by Locality – 2010, 2011 and 2012



#### **Community Patients by Locality**

- 5.5 Within a community setting, the overall percentage of patients "fit to leave" was 38.8% (114 patients). A cross sectional analysis of community hospital patients by locality showed that there was no statistically significant difference in the percentage of patients categorised as "fit to leave" their care setting between any of the locality areas (Figures 3 and 16).
- 5.6 When comparing the percentage of community patients "fit to leave" for each of the localities with the same data taken last year, it can be seen that there has been further reductions in the percentage of patients classified as "fit to leave", though none of these changes were significant.
- 5.7 The proportion of patients "fit to leave" a community setting (38.8%) is statistically significantly higher than an acute setting (27.9%).

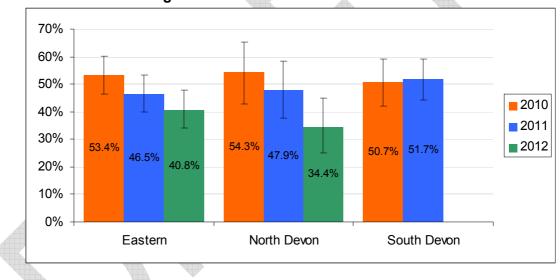
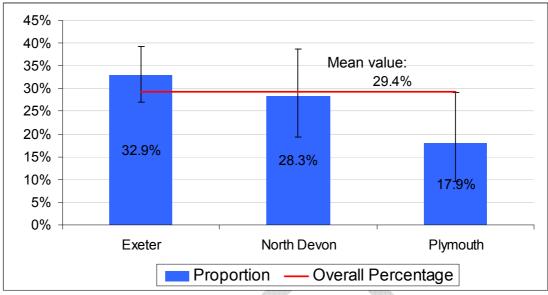


Figure 16: Graph of patients occupying community hospital beds that are fit to leave setting

#### Acute Patients by Ward Type

- 5.8 The acute care settings were segmented into acute medical and acute surgical wards (Figure 4) and then an analysis of "fit to leave" patients was done by locality.
- 5.9 In acute surgical wards, the proportion of patients "fit to leave" the acute setting was 29.4% (118 patients), compared to 27.0% in 2011. The proportion for Exeter (32.9%) was almost twice that of Plymouth (17.9%). This was however not a statistically significant difference (Figures 5 and 17).



## Figure 17: Graph of patients occupying acute surgical hospital beds that are fit to leave setting

- 5.10 In acute medical wards, the percentage of patients "fit to leave" was 26.7% (146 patients), compared to 27.6% in 2011. As with the acute surgical setting, Plymouth had the lowest proportion "fit to leave", though this was not statistically significantly different to any of the other localities (Figures 6 and 18).
- 5.11 The proportion of patients "fit to leave" an acute medical setting (26.7%) is statistically similar to an acute surgical setting (29.4%).

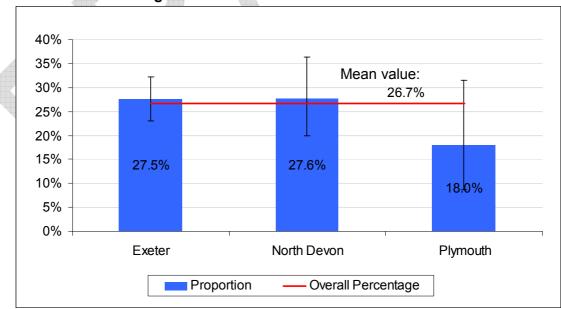


Figure 18: Graph of patients occupying acute medical hospital beds that are fit to leave setting

#### Patient Age

- 5.12 Results of the statistical t-test showed that there was not a statistically significant difference (95% confidence limits) between the average age of patients in an acute setting who are "fit to leave" (72.9 years) compared to those 'not fit to leave' (71.8 years). This is in contrast to the 2011 audit, where the average age of patients in an acute setting who were "fit to leave" was statistically higher than those who were not fit to leave (75.4 and 70.0 respectively).
- 5.13 There was also not a statistically significant difference between the average age of patients in a community setting who are "fit to leave" (84.6 years) compared to those 'not fit to leave' (83.3 years) (Figures 7 and 19).

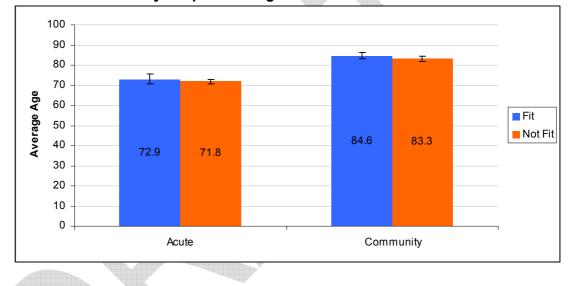


Figure 19: Analysis of age of patients who are 'fit' and 'not fit' to leave acute and community hospital settings

- 5.14 Year on year there has been no statistically significant change in the average age of patients fit or not fit to leave either a community or acute setting.
- 5.15 Every year patients in a community setting have been statistically significantly older than patients in an acute setting. This supports the idea that younger patients are more likely to be discharged home, whereas older patients are more likely to be discharged to a community hospital setting.

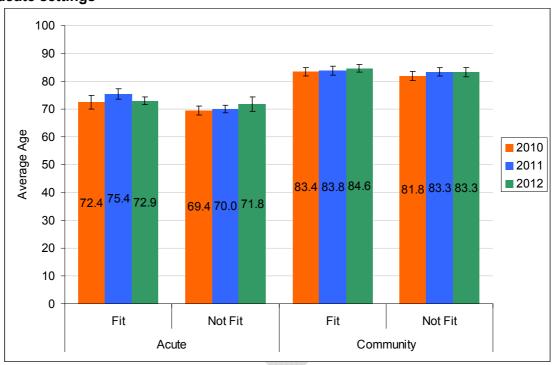
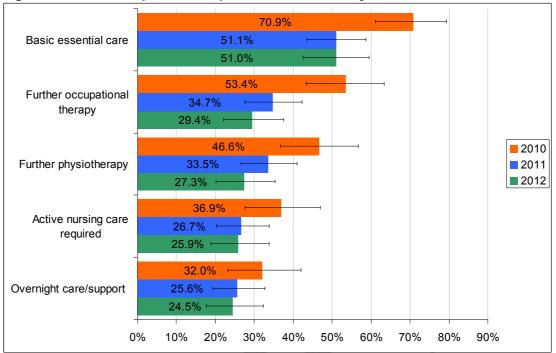


Figure 20: Year on year comparison of patient age in community and acute settings

#### **Patient Needs**

- 5.16 The 143 patients that met the criteria for the patient needs assessment represented 37.8% of those "fit to leave" and 11.5% of the total patient population audited. In 2011 this sample represented 39.7% of those "fit to leave" and 13.1% of the total patient population.
- 5.17 The needs assessment showed that patients often needed more than one service. In total of the 143 patients, 39 (27.3%) required physiotherapy, 73 (51.0%) required basic essential care, 35 (24.5%) required overnight care, 42 (29.4%) requiring occupational therapy and 37 (25.9%) requiring nursing care. For 61 (34.7%) of the patients, none of the above services was required (Figures 8 and 21).
- 5.18 Whilst small numbers have meant there have been few statistically significant changes in the percentage of patients' needs, it is notable that the hierarchy of need has remained constant in all three audits, with 'basic essential care' being the most common, down to 'overnight care/ support' being the least common. It should also be noted that for every one of the needs, the percentage of patients requiring each has gone down consistently every year. Between 2010 and 2012 there has been a statistically significant reduction in the percentage of patients who could be managed at home requiring 'basic essential care', 'further occupational therapy' and 'further physiotherapy'. Despite a reduction in the proportion of patients fit to leave hospital, and an improvement in provision of support services in Figure 21, there is still a proportion of this group remaining in a hospital bed requiring non-medical needs to be met.



#### Figure 21: Needs of patients in patients' needs analysis

5.19 The continued reduction in patient's requiring services may be a result of improved provision of these services in other care settings and investment of 256 monies.

#### Number of Days Medically Fit to Leave

- 5.20 In an acute setting, almost half of all patients classed as "fit to leave" had become so on the day of the audit. In contrast, over half of community hospital patients classed as "fit to leave" had been so for at least four days (Figure 22).
- 5.21 Alongside a higher percentage of overall patients that were "fit to leave", this suggests that blockages to patients being in the most appropriate care setting are greater in community settings compared to acute settings. Despite this, over the two years since the first audit, the greatest improvements have been seen in the community setting.

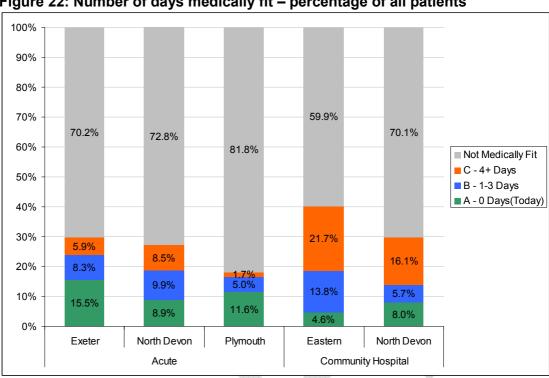
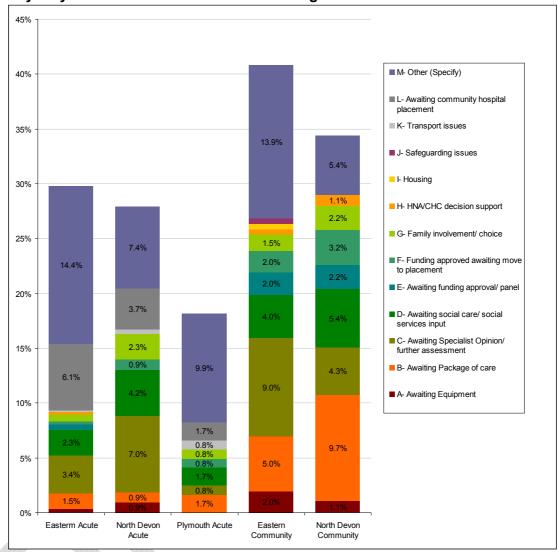


Figure 22: Number of days medically fit - percentage of all patients

#### **Reason in Bed**

- 5.22 The analysis on "reasons in bed" for those patients that were classed as "fit to leave" showed that there was a broad range of reasons which varied both by hospital type and locality (Figures 10 and 23).
- 5.23 Excluding the "Other" field, the most common reasons for a patient being in an acute setting were "awaiting specialist opinion/further treatment" and "awaiting community hospital placement". Between 2011 and 2012 the percentage of overall patients awaiting a community hospital bed decreased from 6.8% to 5.0%, though this is not a statistically significant difference.
- 5.24 Excluding the "Other" field, the most common reasons for a patient being in a community hospital setting were "awaiting package of care" and "awaiting specialist opinion/further treatment".



### Figure 23: Percentage of patients classed as "fit to leave" by category of why they are still in their current care setting\*

\* The percentage is of all patients in each group – values less than 0.8% have not been labelled

#### **Occupancy Levels**

5.25 Occupancy levels across the healthcare system on the day of the audit had a mean value of 91.9%, a slight reduction since the 2011 audit where 92.4% of beds were occupied. As Plymouth only provided data for NHS Devon-registered patients, it was not possible to calculate an occupancy rate for this locality.

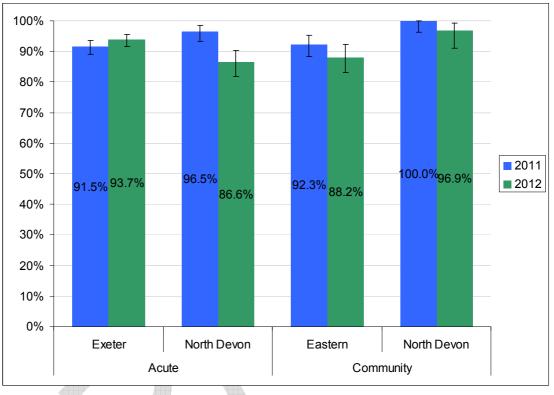


Figure 24: Occupancy rates by hospital type

#### Discharge Date Set

- 5.26 An analysis of patients with a discharge date set for them showed that patients who were "fit to leave" were more likely to have a date set in both acute and community settings. In an acute setting the percentage of patients classed as "fit to leave" with a discharge date was 61.4%, compared to 31.8% of those that were not fit to leave (Figure 25).
- 5.27 In an acute setting, between 2011 and 2012 there was a statistically significant reduction in the percentage of patients classed as "fit to leave" an acute setting who had a discharge date set (75.0% and 61.4% respectively).

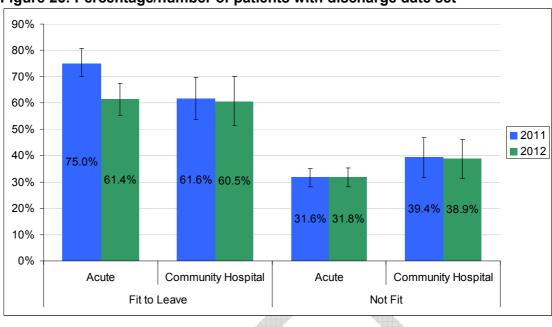


Figure 25: Percentage/number of patients with discharge date set

#### 6. Summary of Findings

#### Fit to Leave

- 6.1 Overall, between 2010 and 2012, the percentage of patients who were "fit to leave" their care setting reduced by 9.7%, a statistically significant change.
- 6.2 The proportion of patients "fit to leave" a community setting (38.8%) is statistically significantly higher than those in an acute setting (27.9%). This demonstrates an improvement in ensuring support services in the community do not act as a constraint to discharge.

#### **Patient Age**

- 6.3 Over the past three years, there has been no statistically significant change in the average age of patients in either an acute or community setting.
- 6.4 Over the past three years the average age of patients in a community setting has been consistently statistically significantly higher than the average age of patients in an acute setting.

#### **Patient Needs**

6.5 The percentage of patients who could be managed at home requiring all types of service has decreased consistently since the 2010 audit. The hierarchy of need has remained consistent for all three years, with 'basic essential care' remaining the most commonly-needed service.

#### Number of Days Medically Fit to Leave

- 6.6 Within the acute hospitals, 21.3% of patients who were "fit to leave" had been fit for four or more days. It is estimated that for the 945 acute patients in the sample, a minimum of 302 bed days were used for patients who were "fit to leave" their care setting (though the actual number is likely to be higher).
- 6.7 Within the community hospitals, 54.6% of patients who were "fit to leave" had been fit for four or more days. It is estimated that for the 288 community patients in the sample, a minimum of 270 bed days were used for patients that were "fit to leave" their care setting (though the actual number is likely to be higher).

#### Reason for Remaining in a Bed

6.8 Compared to 2011, in 2012 a lower percentage of acute patients were awaiting a community hospital bed, suggesting better throughput between acute hospital and community hospital as the defined discharge setting.

#### **Occupancy Levels**

6.9 Overall, occupancy rates across acute and community settings have reduced since 2011, but still remain above 90%.

#### Discharge Date

6.10 In all types of care setting, a significantly higher percentage of patients who were "fit to leave" had been set a discharge date compared to those that were not fit to leave. This suggests that discharge dates were not being set at the time of admission, or prioritised for inpatients, which was one of the most important recommendations from the Winter Pressures Report for 2009-10.

#### 7. Conclusions

#### Numbers and Percentage of Patients That Do Not Need To Be Cared For In Their Current Care Setting

7.1 The percentage of patients "fit to leave" a community setting was higher than for the acute setting. Overall, the percentage of patients "fit to leave" their care setting has decreased slightly since 2011 and a statistically lower percentage of patients "fit to leave" has been maintained since the 2010 audit. More priority needs to be given to preventing patients remaining in beds beyond the time that they are "fit to leave", which could create extra capacity in the system at times of intense pressure on the NHS and/or help deliver the NHS Quality, Innovation, Productivity and Prevention (QIPP) programme.

#### Number and Percentage of Patients Who Could Be Managed At Home

7.2 The 2012 audit demonstrates that around one in ten (11.5%) of all NHS Devon patients occupying beds on the day of the audit, in the opinion of the auditors, did not need to be in their current hospital bed. Of these patients, more than one third could have returned home without requiring any further support.

### Type Of Health and Social Care Needs of Patients "fit to leave" Their Current Care Setting

7.3 Between 2010 and 2012 there has been a statistically significant reduction in the percentage of patients who could be managed at home requiring 'basic essential care', 'further occupational therapy' and 'further physiotherapy'. This is evidence that patient needs are being more appropriately met by commissioned services.

### Barriers Preventing Patients from Being In The Most Appropriate Care Setting

7.4 The audit indicates that there were a range of services which could have helped patients move through the system quicker, had a discharge date been assigned. The 2009-10 winter pressures report specifically recommended improvements in assigning discharge dates to patients on admission so that staff have a goal to focus on and can put the necessary services in place in good time. Of all patients, 227 were fit to leave their current setting on the day of the audit and had apparently been in that bed for at least one day longer than they needed to be. Commissioners should review whether this "inactive capacity" is in the best interests of patients or of the NHS, and consider whether having a discharge date set and a target for length of stay could be used as a quality marker.

#### Recommendations

7.5 This report recommends that commissioners and providers use these findings to reduce pressure on NHS beds, remove delays in the patient pathway, improve patient care and achieve cost reductions as part of the NHS Quality, Innovation, Productivity and Prevention (QIPP) programme.

Dr Virginia Pearson JOINT EXECUTIVE DIRECTOR OF PUBLIC HEALTH NHS DEVON/DEVON COUNTY COUNCIL

Tracey Polak CONSULTANT/ ASSISTANT DIRECTOR OF PUBLIC HEALTH

Matt Edmunds PUBLIC HEALTH INFORMATION ANALYST

### **APPENDIX A – AUDIT TOOL**

<b>N</b> <del>-</del> <del>f</del>	lis Ier"										٦
Devon PHI Public Health Intelligence Team	Why are they in this bed today? Description if *Other*										
Inter P	Why are they in this bed today? (*See options at top of page - Use Letter only)										
	Has a discharge date been set? (Y/N)										panel
	Further physiotherapy required? (Y/N)										approval/ secify)
	Further occupational therapy required? (Y/N)										funding a Other (Sp
	Further social care assessment required? (Y/N)										Awaiting
of	Active nursing care required? (Y/N)										s input E- oital place
	Active medical intervention required? (Y/N)										   services unity hos
et	Basic essential care required? (Y/N)										are/ socia ng comm
Sheet	ls ovemight care/support required? (Y/N)										g social c L- Awaiti
	Could they be managed at home with support? (۲/۷)										- Awaitinç rt issues
	Awaiting specialist opinion? (V/Y)										Ssment D
	Further clinical investigations/ treatment required or awaiting results to inform treatment plan? (Y/N)										B- Awaiting Package of care C- Awaiting Specialist Opinion further assessment D- Awaiting social care' social services input E- Awaiting funding approval/ panel tice H-HNA/CHC decision support I- Housing J- Safeguarding issues K- Transport issues L- Awaiting community hospital placement M- Other (Specify)
spe	Receiving planned end of life care? (Y/N)										cialist Op <b>J-</b> Safeg
eted By nber pen Beds rccupied Be	Patient's medical condition liable to significant fluctuation? (Y/N)										Awaiting Spe ort I- Housing
Form Completed By Contact Number Number of Open Beds Number of Occupied Beds	If medically fit, how many days has this been for? (A- 0 Days (Today), B- 1-3 Days, C- 4+ Days)										ackage of care C. HC decision supp
	Medically fit to leave this care setting? (Y/V)										vaiting Pa
2012	DOB										
Audit May	NHS Number										oose from: A-Awaitin teement G-Family inv
NHS Devon Acuity Audit May 2012 Hospital Name Ward Type (Medical/ Surgical) Ward Specialty	Name										Why are they in this bed today? List to choose from: A-Awaiting Equipment B-Awaiting Package of care C-Awaiting Specialist Opinion' further assessment D-Awaiting social care' social services input E-Awaiting funding approve F-Funding approved awaiting move to placement G-Family involvement? Howing U-Bacegion support I-Housing U-Bacegion support I-

### **APPENDIX B – AUDIT LOCATIONS**

	Devon audit	South Devon audit
Acute Trusts	Royal Devon & Exeter	South Devon Healthcare NHS
	NHS Foundation Trust	Foundation Trust
	North Devon Healthcare	
	NHS Trust	
	Plymouth Hospitals,	
	NHS Trust	
Community Hospitals	Axminster	Ashburton
	Bideford	Bovey Tracey
	Budleigh Salterton	Brixham
	Crediton	Dawlish
	Exmouth	Dartmouth
	Holsworthy	Kingsbridge
	Honiton	Newton Abbot
	Moretonhampstead	Paignton
		Tavistock
	Okehampton	
	Ottery St Mary Seaton	Teignmouth Totnes
		Totnes
	Sidmouth	1
	South Molton	
	Tiverton	
	Torrington	2
	Tyrell (llfracombe)	
	Whipton	
Intermediate Care settings	Alphin House	St Edmunds
	Bodley	St Kildas
	Butterpark Residential	Crisis Intermediate care beds
	Home	
	Charlton Lodge	
	Exebank	
	Green Close	
	Oakwell	
	Wardhayes	
	1	1