Abstract S7 Figure 1 Number of adult asthma admissions at Whipps Cross Hospital.

attendances were stable for children ranging from 442 in 2003/4 to 455 in 2008/9, but rose sharply to 652 in 2009/10. Adult emergency attendances decreased from 666 in 2003/4 to 512 in 2008/9, but also rose sharply in 2009/10 to 790. Emergency adult reattendances for 0–28 days, 0–90 days and 0–365 days fell from 85, 128 and 227, respectively in 2003/4 to 38, 64 and 142 in 2008/9. From 2001/2 to 2009/10, there were 3707 (2341 adult, 1366 children) hospital asthma admissions. Out of 1599 adult patients over this period, 1225 had just one admission. Admissions rose from 98 to 191 for children and 153 to 322 for adults from 2001/2 to 2009/10. Hospital adult readmissions have varied, ranging from 5 (2001/2) to 16 (2008/9) for 0–28 days, 14 (2003/4) to 35 (2005/6) for 0–90 days and 35 (2002/3) to 68 (2005/6) for 0–365 days. Mean length of stay fell from 5.80 days in 2001/2 to 3.88 days in 2009/10.

Conclusions Large numbers of patients attend our emergency department for acute asthma. Admissions for acute asthma have risen markedly, more than doubling over 9 years. Numbers of readmissions within 28 days are relatively small, but the readmission rate within one year is relatively high at 22.70% (2008/9). These figures have important implications for resource allocation and training across the primary/secondary care divide.

S8 THE NATIONAL COPD RESOURCES AND OUTCOMES PROJECT (NCROP): ACTION PLAN ACHIEVEMENT SINCE 2007

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Introduction and Objectives In 2007, 100 acute respiratory units participated in the NCROP, a randomised controlled study to assess whether reciprocal peer review could facilitate service improvement. We identified themes in desired improvements and evaluated success in meeting action plan aims.

Methods Units were paired and randomised into intervention or control arms (54:46). Intervention teams undertook reciprocal peer review in 2007 and documented action plans for service improvement. In 2010, intervention units self-assessed their progress in achieving action plans. Qualitative responses were analysed using a grouped themes approach to derive action plan themes.

Results Data were received from 41 of 54 intervention units (76%). The Abstract S8 Table 1 shows the distribution of themes and action plan outcomes.

Abstract S8 Table 1

Action Plan theme	Number n	Met in full n (%)	Partially met n (%)	Not met n (%)	Not recorded n (%)
Multi-disciplinary team development	41	13 (32)	21 (51)	6 (15)	1 (2)
Non Invasive Ventilation	32	11 (34)	13 (41)	7 (22)	1 (3)
Pulmonary Rehabilitation	26	10 (38)	10 (38)	5 (19)	1 (4)
Domiciliary oxygen	24	12 (50)	7 (29)	4 (17)	1 (4)
Early Discharge	21	7 (33.3)	9 (43)	4 (19)	1 (5)
Palliative care	12	2 (17)	8 (66.6)	1 (8)	1 (8)
Clinical Audit	7	1 (14)	3 (43)	1 (14)	2 (29)
Respiratory Ward	4	2 (50)	0	2 (50)	0
Guideline implementation	3	1 (33.3)	1 (33.3)	0	1 (33.3)
IT database	2	0	1 (50)	1 (50)	0
Patient Education	1	0	0	1 (100)	0

Conclusions Action plan themes related predominantly to development of multi-disciplinary teams across primary and secondary care and to specialist service provision. Most aims were fully achieved in a third of units and partially achieved in a similar number. Palliative care plans were less prevalent although at least partially successful in two thirds. Overall change was greater than in the 1 year assessment of the NCROP audit 2008.¹

REFERENCE

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S9 FEASIBILITY OF ESTABLISHING A REGIONAL WEANING UNIT IN SCOTLAND: MODELLING RESOURCE IMPLICATIONS AND COSTS

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Introduction Intensive care (ICU) admission is usually mandatory for patients requiring mechanical ventilation (MV). A proportion of patients require prolonged MV (PMV). In other countries, specialised weaning units allow stable PMV patients to be discharged from the ICU. These units offer cost savings because of lower staff-to-patient ratios. A recent report of UK ICU services recommended that hospitals review the need for specialised weaning centres locally.

Aims To assess the feasibility of establishing a weaning unit in a Scottish health board region and to model the potential impact on ICU services.

Methods All admissions to the three adult ICUs in our health board requiring PMV (≥ 21 days MV) during a 2-year period (2005–2006) were extracted from the Scottish Intensive Care Audit Group database. Four hypothetical weaning units were modelled using different admission criteria, ranging from Unit-A, which required a prolonged period of stability prior to transfer from ICU to the weaning unit (7 days free of both cardiovascular support (CVS) and renal replacement therapy), to Unit-D (2 days free of CVS only). The date of eligibility for each PMV patient for each unit was determined. We used remaining length of stay (LOS) in ICU after eligibility to calculate occupancy rate, refusal rate and net cost saving, varying unit capacity from 1 to 8 beds.

Results During 2005–2006, 126 patients required PMV. Of these, the number eligible for transfer to a weaning unit varied from 101 (Unit-A) to 117 (Unit-D). Mean ICU LOS after reaching eligibility varied from 14.9 to 15.3 days. Occupancy rates for Unit-A ranged from 90.8% to 25.5% (1-bed to 8-bed unit) and for Unit-D from 93.3% to 30.5%. Refusal rates for Unit-A ranged from 88.1% to 0%, and for Unit-D 92.3% to 0%. The greatest cost saving was for Unit-D with 3 beds (£344 025) (Abstract S9 Figure 1).