

NRTC Published Training Studies 1991-2005



Statistically significant improvement in clinical practice, asthma knowledge base, professional skills, and confidence in abilities found post course in 87 Asthma Course Graduates from North Carolina, 2002-2004.

Yeatts K, Lester M, Walker S, *et al* (2005). National respiratory training center asthma course evaluation, *European Respiratory Journal* **26**, P1186.

Allergy training of health professionals resulted in improvements in quality of life in patients with perennial rhinitis.

Sheikh A *et al* (2005). Structured allergy training for health professionals improves quality of life in patients with perennial rhinitis: a randomised controlled trial. Abstract presented at AAAAI March 2005.

Post NRTC Asthma Course improvements in practice of 202 Nurse Practitioners

Hoskins G, Smith B, Neville RG, Loveridge T, Barnes G, Dempster J (2001). Specialist Asthma Education for Nurse Practitioners in the USA. Results presented at the annual American Thoracic Society meeting in May 2001, Abstract E42.

Post-course analysis showed significant ($p=.01$, $p=.001$) increases in structured patient management, monitoring procedures, identifying poor control, history taking, lung function measurements, diagnostic testing.

NRTC nurse-run asthma clinic: Improves patient outcomes

Hoskins G, Neville RG, Smith B, Clark RA (1999). The link between practice nurse training and asthma outcomes. *British Journal of Community Nursing* **4**, 222-8.

Study of 954 asthma patients in 32 primary care practices. Positive patient outcomes found in eleven practices with clinics run by NRTC-trained asthma nurse, compared with nurse-run clinics where the nurse did not have this training. Positive outcomes included decreased frequency of symptoms, decreased number of acute attacks, fewer work/school days lost.

NRTC asthma training affects prescribing patterns

Barnes, G. (1998) Involvement in asthma care of specially trained nurses. Abstract P2246. *European Respiratory Journal* 344S.

1030 nurses completed Diploma in Asthma Care [Asthma Course] in 1995. A 1997 survey of those nurses showed that among the 457 who were aware of prescribing changes,

- 52% reported decreased use of short-acting bronchodilators
- 95% reported increased use of inhaled corticosteroids over previous two years
- 88% prepared prescriptions for MD approval (no nurse prescribing in UK)

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NRTC nurse-run asthma clinic: Improves prescribing

Dickinson J, Hutton S, Atkin A (1998). Implementing the British Thoracic Society's guidelines: the effect of a nurse-run asthma clinic on prescribed treatment in an English general practice. *Respiratory Medicine* **92**, 264-7.

- Study compared use of inhaled therapy in 100 patients with chronic disease during 12 months prior to attending nurse-run asthma clinic with corresponding medication use after attending clinic.
- Number of patients on inhaled corticosteroids and salmeterol increased; number using regular B2 agonist decreased, and the dosage of inhaled corticosteroid rose in line with BTS Guidelines.

NRTC nurse-run asthma clinic: Increases patient knowledge and skill; reduces morbidity

Dickinson J, Hutton S, Atkin A, Jones K (1997). Reducing asthma morbidity in the community: the effect of a targeted nurse-run asthma clinic in an English general practice. *Respiratory Medicine* **91**, 634-40.

- Study looked at 173 patients in a general practice. Results showed improved skill in inhaler technique, better asthma knowledge, better use of peak flow meters. Number of patients on inhaled corticosteroids and salmeterol also increased.
- The patients assessed using the Jones Morbidity Index. Number of patients with high morbidity scores fell from 71% to 14% at 12 month review.

Structure of care associated with favorable clinical outcomes

Neville RG, Hoskins G, Smith B, Clark RA (1996). Observations on the structure, process and clinical outcomes of asthma care in general practice. *British Journal of General Practitioners* **46**, 583-7.

- 225 UK practices, 6732 patients. Data collected on GP and nurse consultations, asthma attacks, symptom control, emergency treatment, hospital attendance over 12 months. Results showed an association between practice structure and clinical outcomes.
- "Practices that employed a nurse with an asthma diploma, or had completed an audit on asthma care, showed a series of associations with favorable clinical outcomes."

NRTC nurse-run asthma clinic: Reduces MD utilization, improves patient outcomes

Charlton I, Charlton G, Broomfield J, Mullee MA (1991). Audit of the effect of a nurse run asthma clinic on workload and patient morbidity in a general practice. *British Journal of General Practitioners* **41**, 227-31.

"The nurse run asthma clinic represents one way of dealing with asthma patients in general practice. The results show that a nurse...using organized care and self-management plans, can effectively manage asthma and help reduce the number of general practitioner consultations for asthma, the need for oral steroids, acute salbutamol [albuterol] nebulizations, and time lost from work or school."

The National Respiratory Training Center (NRTC) is an independent, 501(c)3 nonprofit educational organization committed to improving the health of patients with respiratory and allergic disease by enhancing the knowledge and skills of the health professionals who care for them.