

Asthma Nurse Home Visiting Program

'Looking behind the four walls'



Kate Roberts-Thomson
Clinical Practice Consultant – Asthma Nurse
Child Youth Women's Health Service
Women's & Children's Hospital – Adelaide SA

Change Champions Conference – October 28 & 29th 2009

SA Health

Background

- > One of the most widespread chronic health problem in the Australian population
- > Asthma affects over 2 million Australians
- > 1 in 9 children have asthma
- > In SA, asthma is the second most common reason for admission to a hospital bed
- > Asthma is a major cause of school absenteeism and child emergency department attendance
- > Among the 10 most common reasons for GP consultations

Background - Meet LW

- > **PmH:** chronic persistent asthma
3 x PED presentations 2008

- > **Home visit: conducted – April 2008**
 - > Flixotide container empty
 - > Incorrect spacer use
 - > Father smoking a pack a day
 - > 28 soft toys in bed
 - > Living beside a train track

- > **Interventions:**
 - > Asthma Education and support
 - > Follow up
 - > Enrolled school as asthma friendly
 - > Referral to QuitSA

- > **Outcome:** Less interval symptoms
 - > No hospital presentations
 - > **DISCHARGED**

Proposal Accepted

- > Funding provided from SA Health, Chronic Disease Management - March 3rd – June 27th 2009
- > Extension has been granted now until June 2010 with GP Plus funding involvement
- > Evidence based internationally
- > RN3 position funded to run the program
- > Free service to families

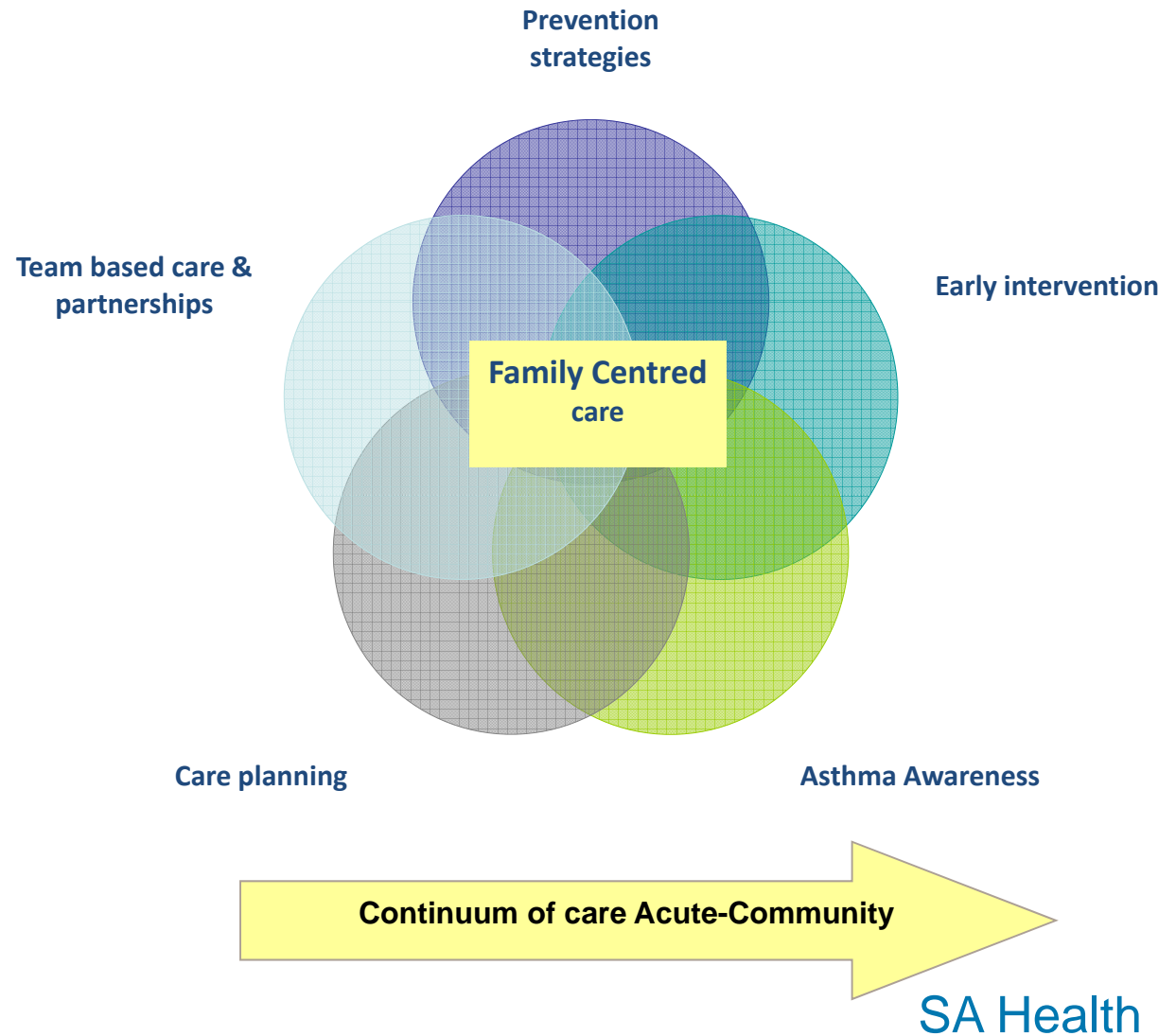
Non Funded Support Team

- > Dr Greg Smith (Paediatric Respiratory Physician)
- > Georgina Paterson (Asthma Statewide Coordinator)
- > Respiratory and Sleep Department Team
- > Ward pharmacists
- > Senior psychologist
- > Data analysts
- > ED Discharge Liaison Nurses- Patient Flow

Currently: Role of Asthma Nurse

- > Conduct the Asthma Home Visiting Program
- > Run the Asthma Nurse Led Asthma Clinics fortnightly based at:
 - > Community sites North and West
 - > Women's and Children's Hospital
- > Case manage ongoing asthma program patients

Asthma Model of Care



Criteria – CYWHS (ages 2-18years)

Criteria for Home Visit

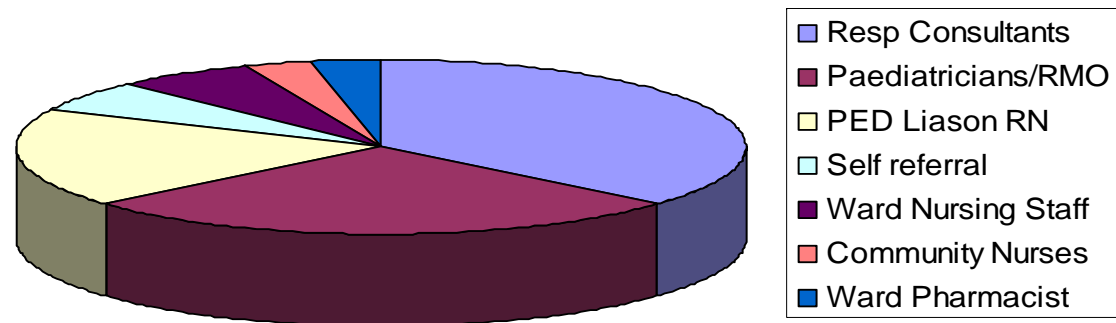
- > chronic asthma with poor control
- > multiple hospital presentations
- > PICU admissions
- > disadvantaged children/ families
- > health professional deems it necessary

Criteria for Clinic Visit

- > non english speaking families/ disadvantaged
- > patient requiring a timely review post admission
- > ‘asthma educationally compromised families’
- > multiple ED presentations

Asthma Program Referral pathway

- Written referrals sent to Asthma Nurse
- 2 week turn-around for home visiting
- Streamlined booking process for clinics
- Majority of referrals come from:



Home Visiting Assessment

- > History and Respiratory Assessment
- > Home assessment of allergens / irritants / ventilation
 - > House dust mites
 - > Animals
 - > Moulds
 - > Smoking
 - > Outside environment

- > Observe medication technique and delivery
- > Provide Asthma education including resource materials
- > Review of asthma action plan
- > Referrals
 - > QuitSA
 - > Asthma SA foundation
 - > Psychology
 - > Dietitian
 - > Appointment follow up
 - > SA Ambulance cover
 - > Asthma Camp attendance 2010

Home allergen exposures



After the initial home visit

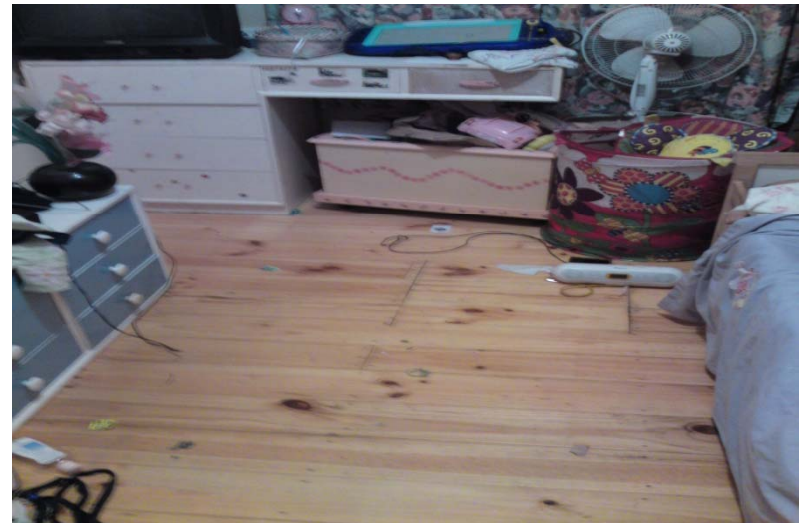
- > Report to referring medical team, copy sent to GP and any other supporting teams
- > Record kept on data base
- > Discuss the need for further involvement?
 - > asthma clinic attendance
 - > further home visit
 - > discharge off program

Working with the families

> 1st Home visit →



> 2nd Home visit →



SA Health

SCENARIO: 15 year old male - JB

History:

- > 'problematic asthmatic' and anaphylaxis
- > Multiple days spent off school sick with asthma
- > **Hospital costs estimated \$100,000!!**

Referral to Asthma In- Home Program April 2009

Home Visit Assessment:

- > 5 dogs (dogs SPT +ve)
- > parental smoking
- > Medication misuse
- > Multiple GPs - miscommunication
- > Parents separated

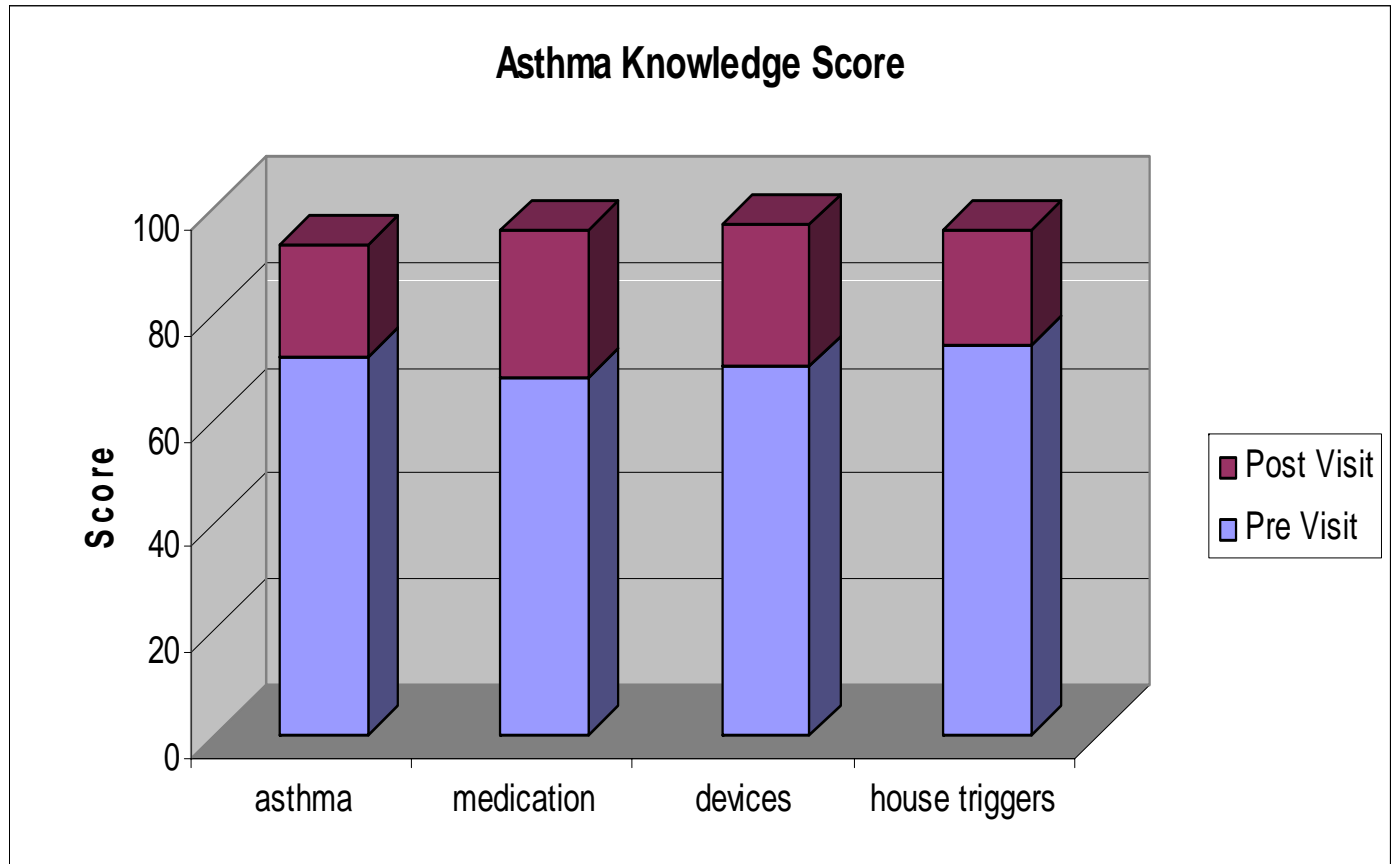
Action:

- > Education
- > Follow up
- > Clear action plan organised
- > Communication with GP practice
- > Improved medication consistency
- > Quit Referral
- > Psychologist referral

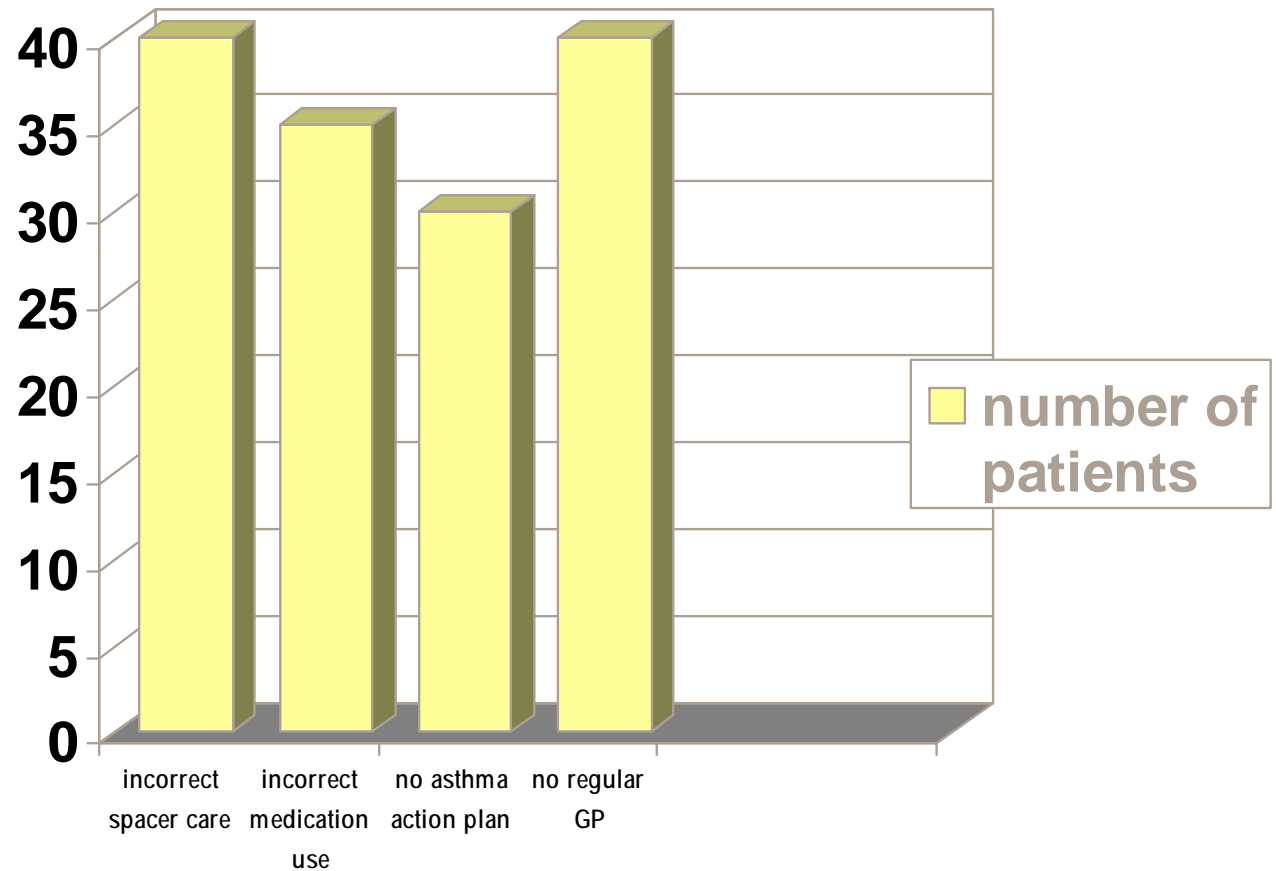
Outcome:

- > Less sick days from school, improved school reports
- > 2 admissions since - LOS reduced

Results - Knowledge



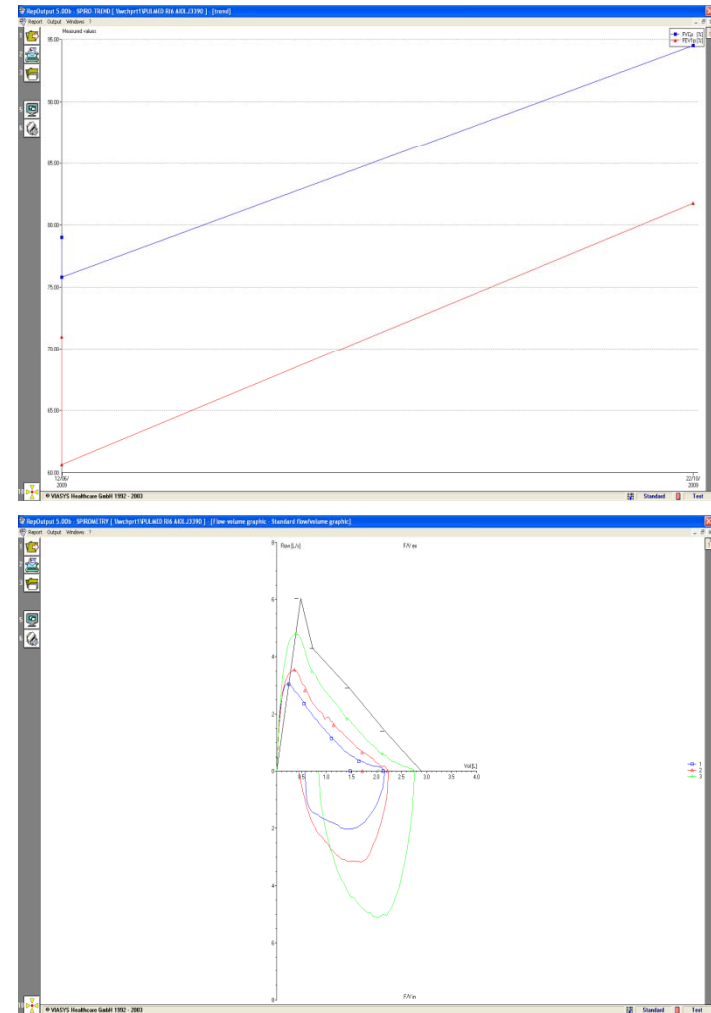
100 Asthma patients randomly selected.....



RESULTS – using spirometry

- > PRE Enrolment to HVP 12/6/09
 - FEV1: 60%
 - Post BD – 10% improvement
- > Home Visit Issues:
 - Poor GP attendance, compliance, incorrect use of preventer, no asthma action plan
- > 4 months post enrolment 22/10/09
 - FEV1: 82% (normal)
 - FeNO – 20 (normal)

Significant improvement of 22% in baseline spirometry and lung function



How do we evaluate the program?

- > Expenditure versus potential occupied bed days
- > Quality of Life surveys
- > Partnership in Health Scale (Flinders SA University)
- > Patient knowledge evaluation comparison pre and post Asthma program
- > Contingency Valuation
- > Lung function spirometry trends
- > Needs analysis of role (data collection)
- > Parents perceptions of their self management and asthma control

Future Proposals?



Questions???

'Asthma education, together with self monitoring, appropriate medications, regular check ups and an up to date action plan will reduce morbidity and mortality' NAC Asthma Management Handbook 2006

> Email: kate.roberts-thomson@health.sa.gov.au