The role of nurses in the primary care team

A perspective from the UK

Dr Nick Francis, PhD MD PGD BA MRCGP
Canada
- State funded healthcare system
- Free at point of access
- Primary care doctors act as ‘gatekeepers’
- Patients have to be registered with a GP practice
History of primary care nursing in the NHS

1965: Nurses start working in primary care

1990: New GP contract. Increase in primary care nursing

2000: The NHS Plan

2002: ‘Liberating The Talents’

2004: New GMS contract

Types of Primary Care Nurses

Practice based
• Practice nurses
• Healthcare Assistants

Community based
• Community (District) Nurses
• Health visitors
• Midwives

Advanced Nurses
• Nurse Practitioner
• Clinical Nurse Specialist

Other
• NHS Direct
• Out of hours
• Walk-in clinics
# Training / Competencies

<table>
<thead>
<tr>
<th>Level</th>
<th>Title</th>
<th>Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Nurse Partner</td>
<td>Skills in leadership, management, strategy, business, administration, negotiating and influencing, assertiveness. Requires oversight of practice needs for both staff and patients.</td>
</tr>
<tr>
<td>8</td>
<td>Advanced Nurse Practitioner</td>
<td>Masters level skills in: assessment and diagnosis, nurse prescribing, leadership, negotiating and influencing, and teaching. Strategic awareness of practice population needed.</td>
</tr>
<tr>
<td>7</td>
<td>Lead General Practice Nurse - Nurse prescriber or working towards it.</td>
<td>Skills to include: good knowledge of treatments and medication management; high level of interest and awareness in public health; ability to identify needs of practice population; evidence based practice. Likely to specialise in managing at least one long-term condition or first contact care.</td>
</tr>
<tr>
<td>6</td>
<td>Senior General Practice Nurse</td>
<td>Equipped with a variety of clinical skills such as management of long term conditions</td>
</tr>
<tr>
<td>5</td>
<td>General Practice Nurse</td>
<td>Consolidating learning from registration and putting a range of skills into practice. Developing a portfolio of competencies relating to general practice nursing.</td>
</tr>
<tr>
<td>4</td>
<td>Assistant Practitioner</td>
<td>Carries out a wide range of clinical activities and contributes to planning of care and patient education</td>
</tr>
<tr>
<td>3</td>
<td>Senior Health Care Assistant</td>
<td>Skilled in a range of tasks that may include spirometry, flu vaccinations etc</td>
</tr>
<tr>
<td>2</td>
<td>Healthcare Assistant</td>
<td>Skilled in basic tasks such as blood pressure, screening, venepuncture, application of dressings</td>
</tr>
<tr>
<td>1</td>
<td>Domestic</td>
<td>-</td>
</tr>
</tbody>
</table>
Nurse Prescribers

- First nurse prescribers had to have HV or DN qualifications.
- Since 2007, any nurse can become an Independent Nurse Prescriber.
- Regulated by NMC.
- Must have at least 2 years clinical experience.
- Limited community nurse formulary.
- Full formulary.
- 54,000 INP in UK.
Nurse Prescribing Formulary

- Laxatives
- Ear drops for wax
- Catheter solutions
- Imidazole antifungal creams
- Crotamiton cream
- Barrier creams
- Emollients
- Folic acid
- Ibuprofen / paracetamol
- Mebendazole
- Mouthwashes
- Nicotine replacement
- Head lice treatments
- Dressings
- Narcotics and sedatives for palliative care
More Traditional Nursing Tasks
Chronic Disease Management
Health Promotion
Advanced Nurses

- Differences in UK and US
- Confusion about NP role
- No formal recognition by regulatory body
- Defined by characteristics
  - Autonomous
  - Undifferentiated illness
  - Differential Dx
  - Orders investigation
  - Prescribes treatment
  - Can refer for opinion or admission to hospital
Asthma

- 04/06/2008 Peak exp. flow rate: PEFR/PFR = 420 L/min Previous Best Ever = 450.0, Predicted = . Dr Alison Hill
- 28/04/2008 Peak exp. flow rate: PEFR/PFR = 415 L/min Previous Best Ever = 450.0, Predicted = . Dr Alison Hill
- 28/04/2008 TSH · thyroid stim. hormone = 5 MicroU/L Dr Alison Hill
- 28/03/2008 PFR · peak flow rate = 415 L/min Previous Best Ever = 450.0, Predicted = . Dr Alison Hill
- 28/03/2008 PFR · peak flow rate = 415 L/min Previous Best Ever = 450.0, Predicted = . Dr Alison Hill
- 28/03/2008 C/O · cough cough getting worse, symptoms for 7 weeks etc Dr Alison Hill
- 29/02/2008 Peak exp. flow rate: PEFR/PFR = 400 L/min Previous Best Ever = , Predicted = . Dr Alison Hill
- 30/11/2007 PFR · peak flow rate = 300 L/min Previous Best Ever = , Predicted = . Dr Alison Hill
- 19/10/2005 Asthma Dr John Mcallister

Diabetes mellitus

Hypertension

Upper respiratory tract infection NOS

Left inguinal hernia

Prolapsed intervertebral disc without myelopathy

New Problem
Evidence

Horrocks et al. 2002
• Systematic review
• 11 trials and 23 observational studies
• Nurses had longer consultations (3.67 minutes), requested more investigations (OR 1.22, 1.02 to 1.46)
• No differences in prescriptions, repeat consultations or referrals.
Studies reporting continuous data on patient satisfaction.

<table>
<thead>
<tr>
<th>Study</th>
<th>No of patients in nurse practitioner group</th>
<th>Mean (SD)</th>
<th>No of patients in doctor group</th>
<th>Mean (SD)</th>
<th>Weight (%)</th>
<th>Standardised mean difference (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinnersley et al 2000</td>
<td>334</td>
<td>68.6 (8.8)</td>
<td>403</td>
<td>65.9 (10.8)</td>
<td>22.7</td>
<td>0.27 (0.13 to 0.42)</td>
</tr>
<tr>
<td>Mundinger et al 2000</td>
<td>644</td>
<td>4.45 (0.83)</td>
<td>389</td>
<td>4.46 (0.83)</td>
<td>23.4</td>
<td>-0.01 (-0.14 to 0.11)</td>
</tr>
<tr>
<td>Shum et al 2000</td>
<td>635</td>
<td>78.6 (16.0)</td>
<td>657</td>
<td>76.4 (17.8)</td>
<td>24.0</td>
<td>0.13 (0.02 to 0.24)</td>
</tr>
<tr>
<td>Venning et al 2000</td>
<td>388</td>
<td>4.4 (0.46)</td>
<td>390</td>
<td>4.24 (0.52)</td>
<td>22.8</td>
<td>0.33 (0.18 to 0.47)</td>
</tr>
<tr>
<td>Winter 1981</td>
<td>25</td>
<td>94.78 (9.0)</td>
<td>25</td>
<td>74.03 (17.0)</td>
<td>7.1</td>
<td>1.50 (0.87 to 2.14)</td>
</tr>
<tr>
<td>Total (95% CI)</td>
<td>2026</td>
<td>1864</td>
<td></td>
<td></td>
<td>100.0</td>
<td>0.27 (0.07 to 0.47)</td>
</tr>
</tbody>
</table>

Test for heterogeneity $\chi^2$=32.01, df=4, P<0.00001
Test for overall effect $z$=2.67, P=0.008

Horrocks S et al. BMJ 2002;324:819-823
Substitution of doctors by nurses in primary care (Review)

• 7 studies of nurse responsible for first contact and ongoing care for all patients
  • No appreciable differences in health outcomes, process of care, resource utilisation or cost.

• 5 studies of nurse responsible for first contact of urgent consultations
  • Health outcomes similar but greater satisfaction with nurse care. Nurse consultations longer, give more information, and recall more frequently. Impact on cost and doctor workload variable.

• 4 studies of ongoing management of chronic conditions
  • Mixed, but no appreciable difference in health outcomes, process of care, resource utilisation or cost.
Costs

• Economic modeling that includes costs of education and training:
• After allowing for length of consultation
• GP consultation nearly 60% higher than NP consultation.

Curtis et al. 2007
Randomised controlled trial of nurse practitioner versus general practitioner care for patients requesting "same day" consultations in primary care

Paul Kinnersley, Elizabeth Anderson, Kate Parry, John Clement, Luke Archard, Pat Turton, Andrew Stainthorpe, Aileen Fraser, Chris C Butler and Chris Rogers

BMJ 2000;320;1043-1048
doi:10.1136/bmj.320.7241.1043
Kinnersley et al. 2000

- 1368 patients requesting ‘same day’ appointments
- 10 general practices in Wales and England
- Patients randomly allocated to GP or NP

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction – Adults (Median)</th>
<th>Satisfaction – Children (Mean)</th>
<th>Resolution of symptoms</th>
<th>Resolution of concerns</th>
<th>Length of consultation (Mean (IQR))</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP</td>
<td>77</td>
<td>80.4</td>
<td></td>
<td></td>
<td>10 (7-14)</td>
</tr>
<tr>
<td>GP</td>
<td>74</td>
<td>75.6</td>
<td></td>
<td></td>
<td>6 (4-8)</td>
</tr>
<tr>
<td>Difference (95% CI)</td>
<td>n/s</td>
<td>-4.8 (-6.8 to -2.8)</td>
<td>OR 1.23 (0.87 to 1.73)</td>
<td>OR 1.03 (0.80 to 1.33)</td>
<td></td>
</tr>
</tbody>
</table>

- Patients consulting with NP reported being given significantly more information
Nurse management of patients with minor illnesses in general practice: multicentre, randomised controlled trial
Chau Shum, Ann Humphreys, David Wheeler, Mary-Ann Cochrane, See Skoda, Sarah Clement

Abstract

Objective To assess the acceptability and safety of a minor illness service led by practice nurses in general practice.
Design Multicentre, randomised controlled trial.
Setting 5 general practices in south east London and Kent representing semi-rural, suburban, and urban settings.
Participants 1815 patients requesting and offered same day appointments by receptionists.

have expanded into those of nurse specialists (who are usually trained to carry out specific roles in the assessment and management of patients with specific conditions such as diabetes or asthma), nurse practitioners (who are usually trained to manage more diverse conditions), and those who are managing the care of patients with chronic diseases. Recently, there has been discussion of nurses managing patients with undifferentiated minor medical problems. Not only is this likely to be important in the NHS in the future but it might also be welcomed by nurses keen to develop new skills
- 1815 patients requesting same day appt.
- Randomised to trained nurse or GP consultation
- Consultation satisfaction questionnaire

- 73% of nurses consultations had no input from doctors

<table>
<thead>
<tr>
<th></th>
<th>Mean satisfaction score</th>
<th>Mean consultation length (min)</th>
<th>Proportion of consultations with prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td>78.6</td>
<td>10.2</td>
<td>65.4%</td>
</tr>
<tr>
<td>Doctors</td>
<td>76.4</td>
<td>8.3</td>
<td>63.5%</td>
</tr>
<tr>
<td>Difference (95% CI)</td>
<td>-2.2 (-4.07 to -0.38)</td>
<td>-1.9 (-2.4 to -1.3)</td>
<td>n/s</td>
</tr>
</tbody>
</table>
GP Workload

- 21 local groups of doctors (48 GPs in 34 general practices) randomly assigned experienced nurse practitioner or not for 18 months
- No significant difference in GP’s subjective or objective workload
- Tasks and outcomes restricted to limited scope
  - COPD, asthma, cancer and dementia
- High drop-out rate (12/48 GPs)
- ? New unmet need, creating new need

Laurant et al. BMJ, 2004
Safety and effectiveness of nurse telephone consultation in out of hours primary care: randomised controlled trial

Val Lattimer, Steve George, Felicity Thompson, Eileen Thomas, Mark Mullee, Joanne Turnbull, Helen Smith, Michael Moore, Hugh Bond, Alan Glasper (the South Wiltshire Out of Hours Project (SWOP) Group)

Abstract

Objective To determine the safety and effectiveness of nurse telephone consultation in out of hours primary care by investigating adverse events and the management of calls.

Design Block randomised controlled trial over a year of 156 matched pairs of days and weekends in 26 blocks. One of each matched pair was randomised to advice from a general practitioner, together with a 38% reduction in patient attendance at primary care centres and a 23% reduction in home visits was observed during intervention periods. Statistical equivalence was observed in the number of deaths within seven days, in the number of emergency hospital admissions, and in the number of attendances at accident and emergency departments.

Conclusions Nurse telephone consultation produced
Out of hours

- Nurses managed 49.8% of calls without GP
- 69% reduction in GP telephone advice
- 38% reduction in attendance at centre
- 23% reduction in home visits

Lattimer et al. 1998
Walk-in centres

• 297 ‘standardised patients consulting at 20 walk-in centres, 20 GP, 11 NHS Direct
• Postcoital contraception, chest pain, sinusitis, headache, asthma
• WiC achieved significantly higher scores for ‘essential items’ than GPs and NHS Direct

Grant et al. 2002

• WiC improve access to care, but not necessarily for those with greatest health needs

Salisbury et al. 2002
Patients Perceptions of NP consultations

• Patients are confused about role of NP, but generally find consultations acceptable
  “... it does make sense because if it takes pressure off the doctors it gives them more time to spend with people who need that attention. I’m happy to speak to anyone at any level provided they are qualified to do what I need at the time. I don’t necessarily need to see a doctor for something like this if I can be dealt with by the nurse. I am very happy to have that attention”

• Patients value familiarity with their healthcare professional
Comparison of NP and GP consultations

- More discussion about how to use treatments
- More detailed advice
- More treatment options
- More concern about acceptability and cost of different treatments
- More social, emotional and patient-centred talk

Seale et al. 2006
Patients accounts of differences in roles of nurses and GPs

- Desire to see GP if problem seen as serious
  - Colds and influenza could be seen by nurse
  - Heart problems by GP
- For some, GP seen as most ‘prized’ resource
- Confused about nurses role
- Most did not mind seeing nurse for current appointment but saw it as a ‘one-off’
- Carrying out delegated tasks, specific procedures
- Nurses have more time for them

Redsell et al. 2006
Summary of the Evidence

• Health outcomes no different
• Consultations longer
• More information sharing
• Satisfaction generally higher
• Possibly increases in referrals, reconsultations
• Costs probably similar (less if training taken into account)
• Impact on workload uncertain
My Experience

- Great resource
- Work as part of team but sometimes seems like isolation
- Practice Nurse versus Nurse Practitioner
- Excellent knowledge about certain areas
- Doctors can become de-skilled
- Nurses lack confidence in certain areas
- Wasted time waiting for prescriptions
- Implications of only having ‘more complicated’ consultations
Primary Care Nurses in Canada
What might work best?

- Working side-by-side with shared list
Thank You

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