The Specialist Paramedic Practitioner Programme

GP Training Practice Orientation

South East Coast Ambulance Service NHS Foundation Trust NHS Health Education Kent, Surrey & Sussex

Chris Warwick, Stuart Rutland and the PP team

with special thanks to Daniel Dennis
What is a Specialist Paramedic Practitioner?

More effective NHS pathways and 111...

Both acute management and generalist assessment...
Specialist Paramedic Practitioner

- Paramedics with additional education and training equipped for greater patient assessment and management skills.

- Able to diagnose a wide range of conditions and treat many minor injuries and illnesses.

- Able to “signpost” care – referring patients to specialists in the community such as GPs, community nurses or social care professionals.

- Can also refer patients to hospital specialists, avoiding A&E.

- Aiming for over 300 SP/PPs in KSS.
Specialist Paramedic Practitioner Programme

- Innovative scheme and career pathway.
- Paramedics with 5yrs+ experience.
- Degree course.
- Fit for purpose, quality assured assessment.
- Inter-professional collaboration between Paramedics and General Practice.
- Improves quality of clinical decisions and management.
- Reduces unnecessary admissions.
- Contributes to community based integrated service for patients.
Why do we need a Specialist Paramedic Practitioner?

Evidence based need...

- Changes in volume and pattern of 999 demand favouring less acute and older populations [UK, Australia and US].
- Multiple studies validating the viability of extending paramedic practice in ‘undifferentiated urgent care type presentations.’
- Congruence with Health & Social Care Act 2012.
- College of Paramedic Position Statement: ‘Specialist Practice.’
- Implementation of NHS Pathways and 111.
- Formal South East Coast SHA academic and workforce evaluation.
Why the HEKSS GP Training Practice Placement?
Promoting Inter-professional Education of Primary Care Health Professionals
Why should we be interested? [a]

2010 RCGP Curriculum Statements:

- 2.03 The GP in the Wider Professional Environment [2012].
- 2.04 Enhancing Professional Knowledge [2012].

Clinical Commissioning Groups:

- Urgent and OOH care.

NHS Leadership Framework:

Delivering the Service

- Demonstrating Personal Qualities
- Working with Others
- Managing Services
- Improving Services
- Setting Direction
- Creating the Vision

NHS Leadership Framework

Health Education Kent
Surrey and Sussex
Why should we be interested? [b]

DoH NHS Strategy.
- Primary Care, General Practice and the NHS Plan June 2001.
- Health & Social Care Act 2012.
- Creating an Inter-professional Workforce.
  - “Fit for Purpose” in the emerging landscape of care.
- Review of urgent and emergency care services in England.
  - “Not just a matter of time.”
Why should we be interested? [c]

**SEC SHA and HEKSS strategy.**
- Academic and workforce evaluation of SECAmb PP programme.
  - *December 2008.*
  - *August 2010 report.*

- The HEKSS.
  - The style and educational philosophy of postgraduate GP education.
  - Promoting inter-professional education.
  - Providing leadership opportunities for ST3 GP Registrars.

- GP Trainer, ST3, SP/PP feedback surveys.
  - Overwhelmingly positive responses.
Why should we be interested? [d]

- This is enjoyable.
- Builds symbiotic relationships with colleagues who will probably work locally.
- Addresses the intended learning outcomes.
- Supernumerary experienced SP/PP student.
- There is some income generation.
- Good for ST3 GPR curriculum vitae.
The Specialist Paramedic Practitioner Curriculum
SP/PP Programme

- For selected Paramedics: a 15 month CPD pathway.
- Diploma programme at St George’s University of London.
- 2 month GP training practice placement with Workplace based assessments.
- Summative assessment:
  - Applied knowledge test.
  - Clinical skills test.
  - Quality assurance by appointed RCGP external examiner.
- Development of a CPD framework.
- Work in progress: Strengthening an Appraisal System.
GP Placement Programme

- Contract and orientation.
- PP student needs Workplace based assessment.

Planning the teaching and assessing –
- Role of the GP trainer [Educational Supervisor].
- Role of the SECAmb Clinical Education Manager [CEM].
- Role of Practice Manager.
- Role of ST3 [Clinical Supervisor].
- Other members of PHCT.

Timetable planning - a typical week.
The GP Placement Content [a]

- Acute presentations in GP in Primary Care:
  - Working in different environments.
  - Clinical assessment, management.
  - Communication, continuity of care.
  - Risk assessment/management.

- Consulting skills:
  - GP models vs traditional medical model.
  - *Reading*: Peter Tate: Doctor’s Communication Handbook.

- Clinical examination skills:
  - Beyond traditional paramedic training.

- Team-working in primary care teams.
The GP Placement Content [b]

- **Introduction of the Generalist Role.**

- **Treatment skills:**
  - Minor abscess drainage, suturing and wounds.
  - Appropriate management using Clinical Management Plans (CMP)s & Patient Group Directions (PGD)s.
  - ‘The paramedic as the drug.’

- **Inter-professional teaching and learning.**

- **Familiarity with GP IT systems.**

- **Workplace based assessments.**
Inter-professional Model of Learning and Teaching

- Learner Centred
- Experiential: Lots of Patients
- Curriculum
- Apprenticeship Model
- Evaluation: Mutual Stakeholder
- Tutorial System
- Assessment: Gathering Evidence
One patient who has benefitted from the work of the paramedic practitioners is Jane Ingham from Caterham.

She said:

“We have an electric garage door I thought I would be able to get underneath before it closed but didn’t and it hit me on the head. As I had my glasses on my head at the time, they cut into my scalp causing blood to gush out. It was quite frightening.

I managed to get a towel on the wound and apply some pressure before I called my doctor’s surgery to ask for advice. They said if I came down to the surgery they would see me straight away.

I was seen by a paramedic practitioner who established that I hadn’t lost consciousness, cleaned the wound and stitched me up. He even washed my hair before treating the wound.

He was absolutely wonderful. I was seen, treated and back home within 45 minutes rather than potentially three to four hours had I gone to an A&E department. It makes perfect sense to me to have such services closer to home.”

Another patient who was also seen by one of SECAmb’s paramedic practitioners was a three-year-old boy called Danny Stanley.

His mum, Sarah Stanley, rushed him to the surgery after an iron fell on his foot.

Sarah said:

“I called the surgery who said if I came down they would see him. When I arrived the paramedic practitioner looked at Danny’s foot and after speaking with the doctor agreed that he needed to go to hospital. So the surgery contacted the hospital to inform them that we were coming and we were seen straight away when we arrived.

It was great that we were seen so quickly. It is very worrying when you child has been hurt but Dave (Paramedic Practitioner) was so reassuring.”
### Evidence Based Clinical Management Plans

#### Patient Group Directions for Treatments in these Plans

<table>
<thead>
<tr>
<th>Respiratory</th>
<th>Integumentary &amp; Wound Care</th>
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<tbody>
<tr>
<td>Asthma</td>
<td>Minor burns and scalds</td>
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<td>LRTI (Inc. Exacerbation of COPD, bronchitis and pneumonia)</td>
<td>Pre-tibial lacerations</td>
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<td>Shortness of breath</td>
<td>Wound assessment and care</td>
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<td>Wound closure with sutures</td>
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<td>Wound closure with glue</td>
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<td>Animal and human bites</td>
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<td>Rash/es (local and systemic; to inc’ Allergic reactions &amp; bites/stings)</td>
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<td>Skin infections (inc’ cellulitis)</td>
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<td>Cardiovascular &amp; Endocrine</td>
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<td>Heart Failure</td>
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<td>Chest pain (non cardiac)</td>
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<td>Palpitations, syncope and pre-syncope</td>
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<td>Care of patients with diabetes</td>
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<td>Abdominal &amp; Genito-Urinary</td>
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<td>Gastro-enteritis (Nausea, Vomiting and Diarrhoea)</td>
<td>Pelvic pain</td>
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<td>UTI</td>
<td>Dysuria/Discharge/Bleeding PV</td>
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<td>Haematuria</td>
<td>Pregnancy and obstetric complications</td>
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<td>Abdominal Pain (With awareness of pathologies)</td>
<td>Sexual Health</td>
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<td>Catheter problems</td>
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<td>Retention of urine</td>
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<td>Constipation/Impaction</td>
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<td>Neurological</td>
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<td>Headaches</td>
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<td>Care of epileptic patients</td>
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<td>Febrile convulsions</td>
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<td>Head injury</td>
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<td>TIA/CVA pathways</td>
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<td>Eyes</td>
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<td>FB in eye (inc’ Corneal abrasions)</td>
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<td>Arc eye</td>
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<td>Chemicals in eye</td>
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<td>Pain in eye, Loss of vision, Red eye (Iritis, AAG, Conjunctivitis)</td>
<td>Non traumatic musculo-skeletal back pain</td>
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<td>Wrist/Hard/Fingers (inc’ subungal haematomas)</td>
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<td>Ankle injuries (Inc’ foot and toes)</td>
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<td>Olecranon Bursitis</td>
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<td>Radial Head subluxation in children</td>
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<td>C-spine clearance following RTC/Whiplash</td>
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<td>Gout</td>
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<td>Ear, Nose &amp; Throat</td>
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<td>URTI/Tonsillitis (sore throat)</td>
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<td>Otitis media</td>
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<td>Otitis externa</td>
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<td>Epistaxis</td>
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<td>Dental Problems</td>
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<td>Mental Health</td>
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<td>Panic/anxiety attack</td>
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<td>Depression</td>
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<td>Deliberate self harm/self neglect</td>
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<td>Overdose</td>
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<td>Miscellaneous (&amp; Palliative/Social)</td>
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<td>Palliative care</td>
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<td>Pyrexia of unknown origin</td>
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<td>Acopia</td>
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<td>Management of frequent fallers</td>
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<td>Management of multi-casualty RTC</td>
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<td>Non accidental injuries</td>
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Clinical Management Plan for Gastroenteritis

**Clinical Management Plans.**

**Abdominal & Genito-urinary**

**Gastroenteritis (Nausea, Vomiting & Diarrhoea).**

Any of the following associated with D&V:
- Signs of systemic compromise
- Severe pain
- Constant/"colicky" abdominal pain
- Dehydration and unable to replace fluids (e.g., concomitant vomiting)
- Absent or scanty bowel sounds

**Diagram:**

- **NO**
- **YES** → **A&E**

**Pyrexia > 39**
- Blood in stools/vomit
- Works in the food/catering industry
- Recent foreign travel
- Immunocompromised
- Symptoms lasting for more than 7 days
- Patient is from an institution
- Socially isolated/Lives alone/Acopia

**Diagram:**

- **NO**
- **YES** → Refer to Primary Care for management.
  - Initiate immediate advice and treatment as required.

If not in the above categories should be able to stay at home. Advice should be given as follows:
- Rehydrate regularly with clear fluids +/- rehydration salts
- Rest
- Bland diet avoiding dairy products and fatty foods
- The use of antibiotics is only appropriate following a stool sample
- Seek further advice if no improvement after 5 days or if concerned. Advise the patient that it may take up to 10 days to be free of all symptoms but they should steadily improve.

**References:**
- Oxford Handbook of General Practice
- Prodigy guidelines: http://www.cks.library.nhs.uk

**Pharmacology/Therapeutics/Treatments**
- Oral rehydration salts.

**Red Flags and Cautions**
- See exclusion criteria
Assessment of the SP/PP in GP
Collecting the Evidence

Using familiar simplified Workplace Based Assessments:

- **Case-based Discussions**: 5 required based on Clinical Evaluation Exercise (Mini-CEX).
  - CVS, RS, MSS, CNS, Other: e.g. Skin/ENT/Abdominal.

- **Consultation Observation Tool**: Sitting in, or video: 1 required.

- **Multi-Source Feedback**: after 4 weeks: 5 clinical + 5 non clinical.

- **Patient Satisfaction Questionnaire**: collect and reflect on 40 in last 4 weeks.

- **Clinical Supervisors Report**.
Summative Assessment of the SP/PP

Introducing the Medical Model

- **Applied Knowledge Test:**
  - 150 single best answer questions mapped to blueprint.

- **Clinical Skills Assessment:**
  - 14 x 10 minute OSCE stations mapped to blueprint.

- **Workplace Based Assessments during GP Placements:**
  - Case-based Discussions.
  - Consultation Observation Tool.
  - Multi-Source Feedback.
  - Patient Satisfaction Questionnaire.
  - Clinical Supervisors Report.
SP/PP Assessment
Quality Assurance

- Test writing and Examination Group all drawn from SECAmb SP/PPs.
- Trained by SGUL Medical School: Angela Hall and Keira Anderson.
- All SBA and OSCE questions written by PPs.
- QA of Test items by SGUL and General Practice.
- Standard setting [pass mark] using Angoff method – same as MRCGP.
- External examiner [Rob Caird] appointed by RCGP with developmental advice for 1st year & 3rd year of exam.
- Statistics provided by SGUL.
Paramedic Practitioner OSCE Exam: SGUL / RCGP External Assessment
Paramedic Practitioner Exam
The Examination Development Team
Where's the Evidence?

Evidence
BMJ November 2007

Paramedic practitioners and emergency admissions

Evidence suggests a positive effect, but future programmes need rigorous assessment before being expanded.

In this week’s BMJ, Mason and colleagues report a cluster randomised controlled trial examining the effects of a “paramedic practitioners” service in a UK urban setting. The trial focused on managing older patients without life-threatening conditions who accessed the emergency ambulance service. It aimed to increase the proportion receiving care in the community and reduce admissions to the emergency department. It found that people in the intervention group were less likely to attend the emergency department (relative risk 0.72; 95% confidence interval 0.68 to 0.77) or need hospital admission within 28 days (0.87 to 0.94).

Paramedic practitioners undertook a three-week theory course followed by 45 days of supervised clinical experience. Their scope of practice was restricted to common presentations considered unlikely to result in serious injury, including falls, lacerations, splinters, and minor burns. Skills acquired beyond those normally practised by UK paramedics included wound care and suturing; examination of the joints; examination of the neurological, cardiovascular, respiratory, and ear, nose, and throat systems; and minor wound assessment, administration of medication, single-syringe injections, and venous cannulation for radiography or to a general practitioner, district nurse, or social worker.

As long ago as 1958, it was reported that services that depanted for general practitioners often could not cope with the demand for care of home consultations. Hence the International Roundtable on Community Paramedics (www.impc.org).

Emergency care practitioners were introduced with the aim of reducing admissions to the emergency department for a broader range of patients than those discussed by Mason and colleagues. A pilot programme began in the Warwickshire Ambulance Service in 2002, with the support of Coventry University and the changing work-force programme. It was subsequently expanded to encompass 17 pilot sites. Although this was intended to generate a randomized 15-week university-based course, with all practitioners having a similar scope of practice, several centres opted for alternative approaches, including that described by Mason and colleagues. Most emergency care practitioners are paramedics working in ambulance services, but some are nurses or primary care practitioners, and most work in out-of-hours primary care services or emergency departments. Similar paramedic-based programmes in other countries include those of the Queensland and New South Wales Ambulance Services in Australia.

Favorable outcomes from the emergency care practitioner scheme and the broader extended scope practitioner programme have been published. A changing workforce programme involving recruitment of paramedics to reduce admissions to emergency departments by 100 to 150 patients each year in rural and urban settings, respectively. For a training investment of £200,000 ($318,000; $360,000), this would save the National Health Service £520,000 in 28 days per each treatment skill. Paramedics to train paramedics have been recommended to help manage ever-increasing demands for health care. Current evidence concerning safety, effectiveness, and costs to support these changes in practice, however, is lacking.

This programme was recommended to assess and treat and refer patients with a range of conditions such as angina, hypoglycemia, falls, and spinal injuries. The merits of a pre-hospital practitioner working in certain geographic areas such as rural locations in a wider context within a broader public health and primary care outreach role in the local community have also been discussed. Other authors, however, have cast doubt on the safety, feasibility, and cost effectiveness of paramedic-assisted and triaging apparently minor problems in the community.

Elderly people make 12% of visits to emergency departments. Many of them are over 65 years of age. An increase in the proportion of elderly patients is expected to increase the demand for ambulance services. Hence the International Roundtable on Community Paramedics (www.impc.org) has been established to promote a high-quality, community-based approach to paramedic practice. The programme has been introduced in the UK and in other countries, including Australia, New Zealand, and the United States. The programme aims to reduce the number of patients who are admitted to hospital within 28 days of primary care treatment, thus reducing costs and improving patient outcomes. The programme has been shown to be effective in reducing hospital admissions and improving patient outcomes. However, further research is needed to evaluate the long-term impact of the programme on patient outcomes and costs.
Evaluation

Academic Needs:
- Curriculum development.
- Accredited teaching and learning environment.
- Faculty development.
- ‘Fit for purpose’ Competence Assessment Development.

Workforce Needs:
- Career pathway – College of Paramedic ‘Specialist Paramedic’
- Changes in volume and pattern of 999 demand and 111.
- Congruence with DoH NHS strategy.
- Patient safety requirements.
Unifying Medical Assessment ’05 - ‘08

Postgraduate Medical Education and Training Board established to develop a single, unifying framework for postgraduate medical education and training.

Current best practice for medical assessment.

All medical Royal Colleges membership exams.

Merged with General Medical Council April 2010.
Scenario:
You are called to the home of a 61 year old woman by concerned neighbours. She has been feeling unwell for a while but has not seen her GP. You note a restless patient who appears to be mentally excitable. She has a HR of 120 bpm with PVCs noted on the 12 lead ECG. On questioning she reposts sweating, weight loss and difficulty sleeping.

Lead in:
What endocrine disorder would cause these signs?

Options:
A: Diabetes Mellitus
B: Chronic Adrenal Cortex Insufficiency (Addison’s Disease)
C: Hypersecretion of Glucocorticoids (Cushing’s Syndrome)
D: Hyperthyroidism
E: Hypothyroidism

Answer: D  Difficulty Index: Easy
Clinical Science : CVS

Scenario:
You are called to the home of an 82 year old woman who has had an episode of unconsciousness. She is fully recovered on your arrival and as part of your assessment you carry out cardiovascular checks. You auscultate her heart in the four recommended areas and hear normal sounds S1 & S2.

Lead in:
What valves of the heart closing, do the sounds S2 relate to?

Options:
A: Aortic Valve and Pulmonary Valve
B: Aortic Valve and Tricuspid Valve
C: Mitral Valve and Pulmonary Valve
D: Tricuspid Valve and Mitral Valve
E: Tricuspid Valve and Pulmonary Valve

Answer: A  Difficulty Index: Medium
You are a Paramedic Practitioner responding to a 99 call from a 72-year-old man who has fallen at home today.

Tasks:
Please take a focused and relevant history from this patient.
After you have completed your history, you will be given the patient’s base line observations and results of further investigations.

At 8 minutes, you will be asked:
Your impression of the most likely cause of this patient’s fall.
To explain your treatment and management plan to your patient.
Acute presentations in GP in Primary Care:
- Working in different environments.
- Clinical assessment, management, communication and continuity of care.
- Risk assessment/management.

Consulting Skills:
- GP models vs traditional medical model.

Clinical Examination Skills:
- Beyond traditional paramedic training.

Team-working in primary care teams.
The GP Placement Content In Partnership with HEKSS PG GP [2]

Introduction of the Generalist Role

Treatment Skills:
- Minor abscess drainage, suturing, wounds.
- Appropriate management.
- ‘The paramedic as the drug’

Inter-professional teaching and learning.
Familiarity with GP IT systems.
Workplace based assessments.
Formal Evaluation and ongoing development.
Practical Issues, Troubleshooting and Quality Assurance

- Contracts.
- What happens if there are problems?
- What does success look like?
- Future developments.