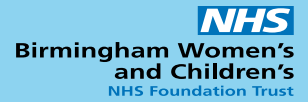


New Roles for Hospital Pharmacists- Pushing the Boundaries



Development of the Advanced Clinical Pharmacist
Practitioner... their place in the hospital workforce.

Hirminder K Ubhi
Advanced Clinical Practitioner Pharmacist



Conflict of Interest

- No conflict of interest



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Things to think about

- Have you heard of Advanced Clinical Practitioner Pharmacists ?
- Do you know what further training a Pharmacist would need to become an Advanced Clinical Practitioner?
- Can an Advanced Clinical Practitioner pharmacist undertake clinics, examine patients and diagnose conditions?

Content

- Pharmacist Roles
- Other healthcare models to provide doctor-delivered patient care
- The Emergency Department Pharmacist pilot (PIED)
- My training journey
- What is an Advanced Clinical Practitioner Pharmacist (ACPP)?
- Implementation of the ACPP in Hospital
- What do the Doctors think of this role?
- ACP - A new role for pharmacists

Pharmacist Roles across Europe

- Community Pharmacy
 - Dispensing
 - HIV Screening in Spain
 - Flu Vaccination in Portugal
 - Improving Medicines adherence in France, Germany & Italy
- Hospital Pharmacist
 - Dispensing
 - Manufacturing medicines

Pharmacist Roles in the UK

- Community Pharmacy
- Pharmacist working within Pharmaceutical Companies
- Primary care
 - Family Practice, Commissioning Care Groups (CCG)
- Hospital Pharmacist
 - Specialist Pharmacists, Prescribing Pharmacists
 - ITU, Renal, Hepatology, Elderly care, Paediatric

Hospital Pharmacist in the UK

- Clinical Pharmacist working on a ward
- Clinical screen of drug chart
 - Appropriate drug, dose, interactions, formulations, pharmacokinetics
- Dispensary - inpatient & discharge medication
- Education and learning
- Medicines management
- Medicines information
- Antibiotic stewardship team
- Quality Assurance

*Can other non-doctor
roles provide,
what has always been
considered “traditional”
doctor-delivered patient
care?*

UK Workforce background

- **Increasing and ageing population**- enhanced demand on the National Health Service (NHS).
- **Working time regulations** (Department of Trade and Industry, 1998), reduction in doctors' working hours, New Junior Doctor contract (2016), difficulties in recruitment and retention of medical staff.
- **Locum doctors** - expensive and offer limited continuity for patient care.

UK Workforce background

- **Government targets for health outcomes & patient demands for greater choice & accessibility** has necessitated a review of models for care delivery.
- Medical care increasingly provided by **non-medical practitioners**, with extended training and roles, working autonomously; with a greater skill mix.
- **Health Education England Pilot (PIED) (2014)** looked into prescribing Pharmacists and what was needed as additional training to work in urgent care settings.
 - Health Education England rolled this work out at a National level.
 - A need to standardise Advanced Practice training nationally, for other healthcare professionals

Lord Carter's Review 2016 (UK)

- In 2014 the Health Secretary asked *Lord Carter of Coles* to look at good practice and operational efficiencies in Hospitals

CLINICAL SERVICES	VARIABLE INFRASTRUCTURE SERVICES				
MEDICINES OPTIMISATION 1 Patient facing; ward pharmacy; medicines reconciliation; medicines discharge; prescribing; Out-patient and Pre-Admission Clinics; specialist Pharmacists; medicines administration and support 2 Organisational Assurance: Medicines Safety Officer; Governance role of Chief Pharmacist; Audit Programmes	SUPPLY CHAIN	E&T	ADVISORY SERVICES	R&D	SERVICES TO EXTERNAL ORGANISATIONS
Store/distribution and procurement; Aseptic; Production QC; Dispensing; Homecare					
Training provided to Pre-Registration Pharmacists and Technicians; N/Q Assistant staff; Post-Registration Pharmacy staff					
Medicines Information; Formulary					
Clinical Trials; Departmental Research					
Community; Mental Health; Hospices; Prisons; Care Homes; GPs					

Hospital pharmacy services shown as clinical or infrastructure. On average 55% of pharmacy time is spent on infrastructure services

*Is there a place for
Pharmacists in Emergency
Departments???*

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The ED Pharmacy Pilot (PIED) (2014)

- Investigate potential of an enhanced clinical role for Pharmacists
- Independent Prescribing (IP) Pharmacist would look at the types of patients that attended the Emergency Department and document in their “opinion” what further training IP Pharmacists would need to treat these patients.
- The vision - working as part of the multi-disciplinary team
 - Advanced Practice Nurses & Physician Associates
- Three Trusts – 3 Prescribing pharmacists in each:
 - Heart of England Foundation Trust
 - Birmingham Children’s Hospital (BCH -paediatrics)
 - Worcester Hospital

PAM Categories

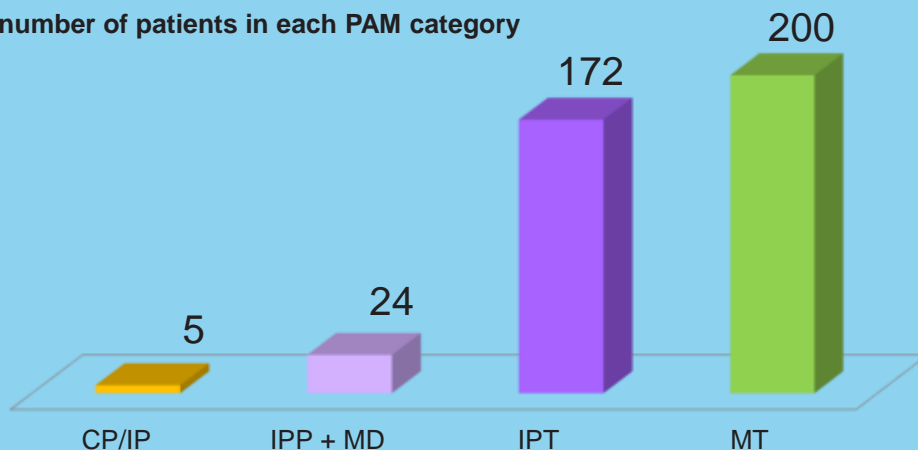
- Reviewed patient data and coded according to a perceived professional ability to manage (PAM) the patient by the IP Pharmacist.
 - **CP:** Community pharmacy intervention e.g. Conjunctivitis
 - **IP:** IP Pharmacist intervention e.g. Asthma
 - **IPT:** IP Pharmacist with enhanced skills training.
e.g. Abdominal pain? Differential diagnosis?
 - **MT:** Medical team only – Pharmacist intervention unsuitable.
e.g. Major trauma patient
- PAMs independently checked by a consultant to ensure they were appropriately categorised.

The Birmingham Children's Hospital (BCH) was phase II of the project

- Independent pharmacist- **Me**
- Reviewed patients over a 7.5 hour day
- Week 1: Spent time in Triage with nurse (Vitals, Presenting complaint & Past medical History)
- Week 2: Continuation of week 1, with additional follow through of patient
 - " ED Pilot: Please find me to observe clinical assessment of the patient"
- Week 3: Shadowing nurse, consultant, junior doctors. (Other than minor injuries work not separated)
- Week 4: Similar to week 3, with review of cases dealt with senior medical input

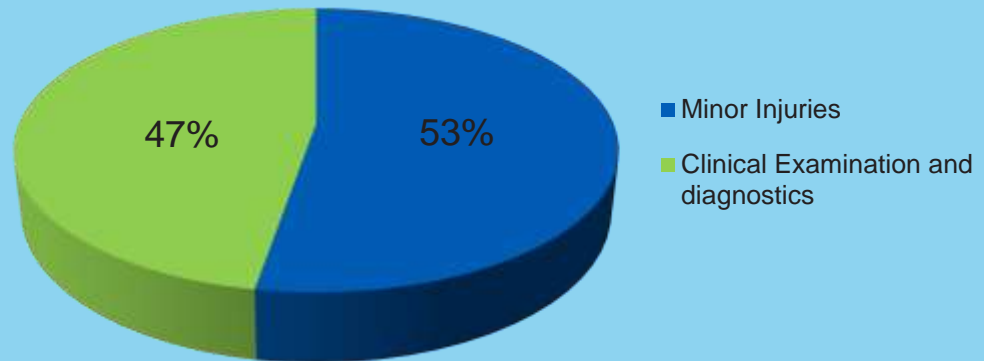
What we found....

The number of patients in each PAM category



- 401 Patients reviewed over 4 weeks in triage, consultant/Medical/ Advanced nurse practitioner, 24 hours of retrospective notes

What did the additional training required for the 42.9% (n=172) IPT caseload look like?



Clinical Examination skills training

Coding	Clinical Training needed
1	Chest Examination - Stethoscope, X-rays e.g. Wheeze/crackles, croup, bronchiolitis
2	Abdominal examination e.g. UTI, constipation
3	Minor injuries e.g. ankle sprain, hip pain, fractures
4	Ear Nose & Throat Examination e.g. coughs and colds, ear pain, eye infections
5	Neurological examination
6	Dermatology e.g. rashes

The next step for ED Pharmacist Study

- PIED Pilot was a success – Approximately 42% cases presenting could be dealt with by IP Pharmacist with additional training
- The Royal Pharmaceutical Society-
 - What do A&E Pharmacists do?
 - <https://youtu.be/mV1s0D-h6ug>
- PIED-ENG rolled out nationally across 49 hospitals



The next step for ED Pharmacist Study

- Review of Advanced Practice training across the West Midlands
- Three initial pilot IP Pharmacists to qualify as Advanced Clinical Practitioners, **the first in the country**
- On completion of Advanced training – IP Pharmacists returned to EDs to repeat initial pilot.

My Training Journey...

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“Advanced clinical Practice for Healthcare professionals”

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- Non-medical healthcare professionals e.g. Nurses, Paramedics, physiotherapists & **Pharmacists**
- Funding provided by NHS Health Education England (HEE)
- Training provided by Warwick University Medical school
- Learning and working as multidisciplinary teams
- Two modules to give Postgraduate Certificate qualification
- 15 month course – part 1 of 3 year masters course (MSc)
 - Already having gained prescribing qualification
 - Already trained to Masters level

Course Syllabus (2014)



- Two modules undertaken – Post graduate certificate in advanced clinical practice
- **Clinical examination**
 - Portfolio- 3 Majors, 30 acute presentations, 10 Direct Observational Practical Skills (DOPS)
 - 4 station - Objective Structured Clinical Examinations (OSCEs)
 - 4000 word assignment
 - *With reference to current national recommendations, critically analyse the impact of advanced practice on quality, safety and patient experience.*
- **Clinical Investigations and diagnostics**
 - Portfolio - 12 clinical cases with critical appraisal of investigations undertaken
 - 2 station OSCEs
 - 2000 word assignment
 - *Using a reflective model, critically analyse the decision making and selection of investigations of a patient you have treated, discussing if this plan adheres to current best practice guidelines.*

Training commitments



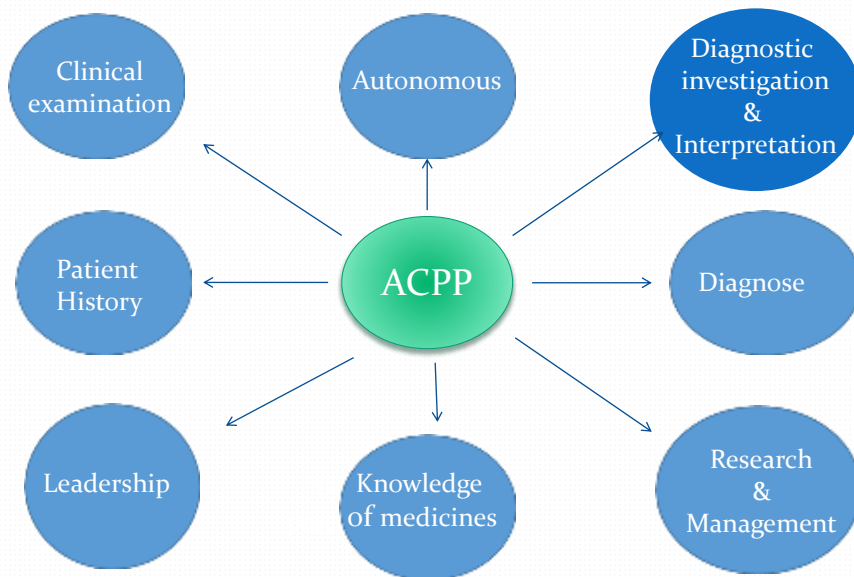
- Course traditionally undertaken by Nurses & Paramedics
- Senior practitioners - may not have degree or post graduate qualification...To undertake 3 year Masters degree
- **Pharmacists – My experience**
- Undergraduate - MPharm & MRPharmS 2002
- Post graduate
 - Independent Prescribing 2008
 - Clinical Dip Therapeutics & Independent Prescribing 2012

ACPP Training May 2014 – July 2015

- Two days practice (Total 390 hours clinical time)
 - ED & Paediatric Assessment Unit with General Paediatric medical team
- Supervised by an Consultant Advanced Nurse Practitioner
 - Gain practical experience within the ACPP Trainee role
 - Final competency sign off
- Detailed Paediatric practice portfolio of autonomous practice demonstrating attainment of clinical competence



What is an Advanced Clinical Practitioner Pharmacist?



How did I feel during my training and practice?

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How I felt.....

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- Excited & scared – new opportunity
- “Alone and isolated” – Only 1 of 3 pharmacists in the country
- “Supported” – By nursing staff, medics and my boss
- “Proud” – Pharmacists providing “Hands on” patient care & Part of something new
- “Tired” – intense training and time invested
- “Frustrated” – comments like “ If you want to be a Doctor!”

What did I do with this training next?

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ACPP role at BCH

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- Unfortunately no role available in the ED at BCH
 - No shortage of trainee Doctors
 - Advanced Nurse Practitioners newly embedded in roles
- **Hepatology team** - pioneers in new workforce models e.g. Physicians Associates
- Pilot role - two days a week for 6 months
- Specific training to the speciality learnt "on the job"
- Added benefit of **Pharmacist skills**, but in the ACPP capacity
- Streamlined discharge process, as both Pharmacy and speciality processes understood – patient discharge, with minimal delays

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Day to day work with the Hepatology team

- **Worked along side the medical and surgical teams**
 - Providing continuity of care
- **Working as part of the medical team**
- Pre-operative **assessment** of new admissions
- Undertake histories
- Venopuncture & cannulation
- Examining the patients
- Part of speciality ward round and multidisciplinary meeting
- Prescribing – inpatient and discharge medication

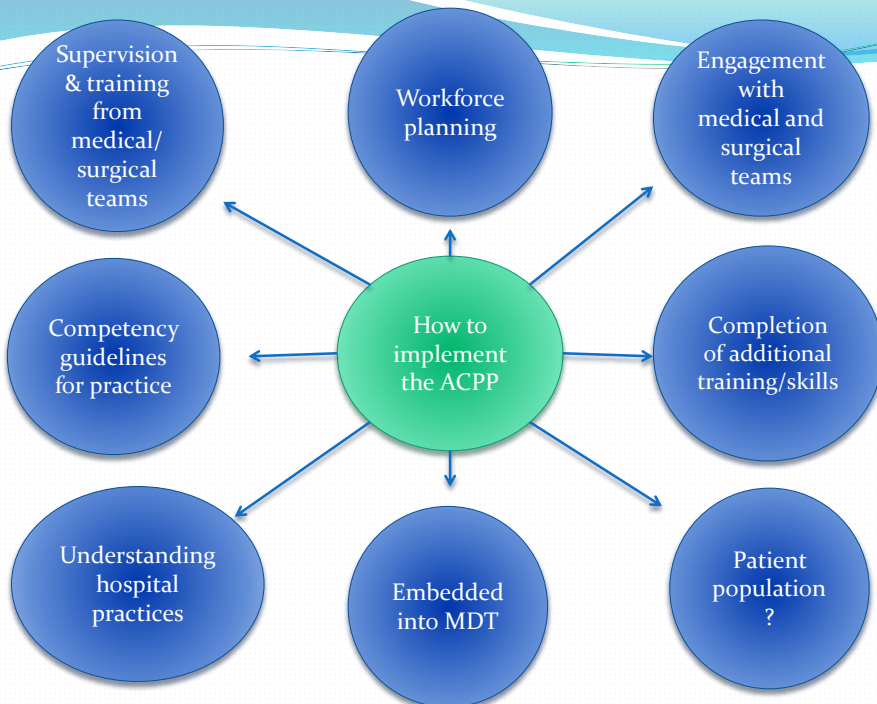
Outcomes from the pilot...

- 6 months placement, 2 days a week
- Appropriate support for development not in place for the role
 - Time pressures, individuals own needs for development
- No funding to continue
- Disappointed medical/surgical team... Saw value in role
- Gained **valuable experience and knowledge**
- Able to utilise new skills and put into practice
- Allowed me to continue with the traditional role as a pharmacist with far greater understanding and integration with the team

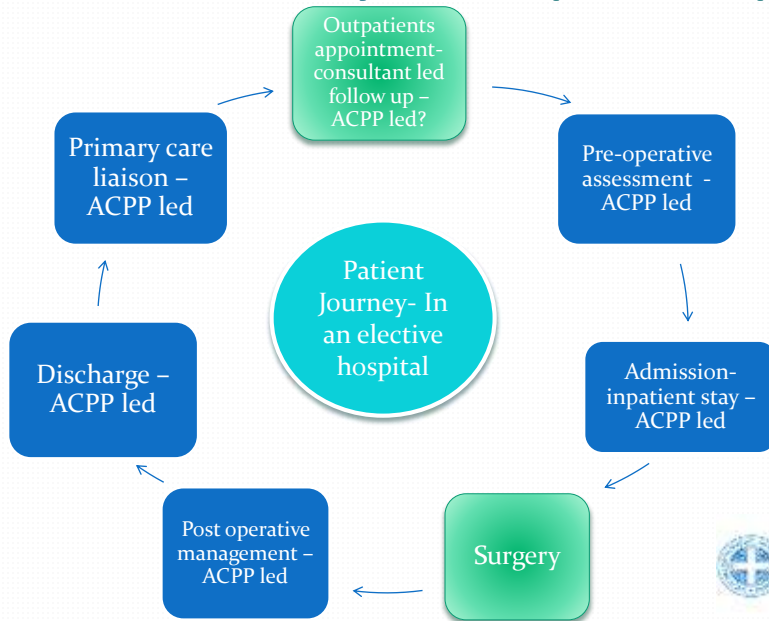
Implementation of the Advanced Clinical Practitioner Pharmacist

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ACPP role at The Royal Orthopaedic Hospital



Pre-operative assessment clinic (POAC)

- Prescribing pharmacist – speeds discharge
- **Medicines reconciliation**
 - Reduce **medication errors** at admission, inpatient stay and discharge
- **Examine patients** - cardiac, respiratory and neurological function to ensure they are fit for surgery
- Working as part of the **Multidisciplinary Team**
 - **Work load managed to enable Anesthetist to see complex cases**
- Pre-operative **Optimisation** of medicines for surgery
- Patient co-morbidities referred all to general practice

Ward-based Practice

- **Examining patients**
- Request appropriate investigations & interpret
- **Summarise patient history during ward rounds with the medical/surgical team**
- Work as part of the Multidisciplinary Team
- **Appropriate knowledge** of medicines
- **Reduced errors in prescribing** - CD requirements, formulation, understanding of issues with unlicensed medicines
- **Timely discharge**- better patient experience



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*What did doctors think about
Pharmacists undertaking
these roles?*

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How did the ACPP help with timely patient care and clinician workload?

- “Extended role pharmacist who can prescribe is useful and a step in the chain that’s not always there”
- “Having extra bodies around, able to do clinical assessment is very useful”

What were the key benefits of the ACPP ?

- “Safer and more streamlined care”
- “Very useful asset to the Multidisciplinary team”
- “Superior knowledge regarding medicines management and pharmacology”

When asked about the ACPP role across the Trust or NHS as a whole, the responses included:

- “Advanced practice is still a fairly new concept for our Trust”
 - “Senior medical team’s **skeptical**”
- “Pilot demonstrated that these individuals are **more than capable** of undertaking the relevant education and training to successfully achieve the requirements for being a clinician”
- “Depth of pharmaceutical knowledge, can only **enhance practice** in order to utilise NHS resources more appropriately”
- “Prove that healthcare professionals from backgrounds, not traditionally considered to be ‘**hands on**’, can be supported and trained in clinical examination and diagnostics very successfully”



ACP - a new role for Pharmacist... a new reality



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Things to think about

- Have you heard of Advanced Clinical Practitioner Pharmacists ?
 - A role, requiring a registered practitioner to have acquired an **expert knowledge** base, complex **decision-making** skills and clinical competences for **expanded scope of practice**, the characteristics of which are shaped by the context in which the individual practices
- Do you know what further training a Pharmacist would need to become an Advanced Clinical Practitioner?
 - Ability to **clinically examine patients**, understanding of diagnostics and investigations, prescribing of medication, understanding of research and audit, leadership & management skills
- Can an Advanced Clinical Practitioner Pharmacist undertake clinics, examine patients and diagnose conditions?
 - YES - with the **theoretical underpinning** and **practice base** to enable health care professionals to **deliver safe and effective autonomous care**, they can work at a **senior clinical** decision making level

Take home messages

- New roles for Pharmacists.
- Can teach pharmacists new skills, to enable them to examine patients for diagnosis and management.
- Advanced Practice training taught with other healthcare professionals
- To truly work as part of the multidisciplinary team and make a difference (Alongside other roles such as Advanced Practice Nurses and Physician Associates)
- To help deliver excellent patient care.



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Thank you for listening

Any Questions?

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