Care Homes Independent Pharmacist Prescribing Study (CHIPPS): Experiences from non-randomised feasibility Study

Christine Bond

on behalf of CHIPPS team

Chief Investigator:
David Wright UEA
Background

- Medicines use in care homes is suboptimal
- One person should assume overall responsibility for medicines management
- Pharmacist independent prescribing (PIP) provides an opportunity for pharmacists to assume this role
- National programmes investing in increased pharmacist roles
- Evidence needed to develop services
CHIPPS programme: Aim

To develop and deliver a cluster randomised controlled trial to assess the effectiveness and cost effectiveness of pharmacist independent prescribers (PIPs) assuming responsibility for medicines management within care homes compared to usual care.
CHIPPS overview

WP1: Systematic Review (SR) of evidence on medicine optimisation, stakeholder views, service spec.

WP2: Identification and evaluation of potential outcome measures

WP3: Development of Health Economic approaches

WP4: Develop and test training

WP5: Non-randomised feasibility study

WP6: RCT with internal pilot
Objectives of feasibility study

- test and refine service specification (developed in previous work packages)
- assess service and research acceptability via a qualitative process evaluation
- estimate the size of eligible population
- explore recruitment and retention
- assess participation and follow up rates
- test feasibility of data collection and identify reasons for missing data
- evaluate potential outcome measures
- determine suitability of outcome measures used to measure resource use in a care home setting
- assess appropriateness of PIP training package
PIP role

- Care homes
- GP practice
- Community pharmacy
- Care home staff
- Assess and address need
- Processes for medicines

• Pharmaceutical Care Plan

• Optimise (doses, monitoring)
• Repeat prescriptions
• Maintain records
• Initiate Rx for minor ailments

Medication review

Prescribing

Training and support

Communication

• Care homes
• GP practice
• Community pharmacy
Method

Four sites

GP/PIP

CH (s)

10 residents
Method

GP/PIP
- Registered PIP
- Trained and competent
- 16 hours per month
- Working with GP

CH (s)
- 65 years and older
- At least one regular med.
- Not end of life

Four sites

10 residents

3 month intervention
Results - Patient recruitment

Assessed for eligibility (n = 127)
Norfolk - 35, Belfast - 18, Grampian - 48, Leeds - 26

36 (28%) residents excluded
[7 (5.5% by GP) and 29 (22.8%) did not meet inclusion criteria]

91 (71.7%) residents approached
[33 (36.3%) declined, 5 (5.5%) were not contacted]

53 (58.2%) agreed

Recruited (n = 40)
Norfolk - 10, Belfast - 10, Grampian - 10, Leeds - 10

Followed-up (n = 40; 100%)
Lost to follow-up (n = 0; 0%)

13 (24.5%) on waiting list
PIP Activities

GP practice

Care home
PIP Activities

- Practice meetings
- Med. Reconciliation
- Care planning
- Repeat Rx
- Monitoring
- Referral

GP practice

PIP
PIP Activities

Med. reconciliation
Med. management
Medicine rounds
Medicine related issues
Training
Met residents and relatives to discuss general health and meds.

Care home
Quantitative data
Case Study – Male 89 years

Medication at baseline
- Risperidone 1mg bd
- Mirtazapine 30mg nocte
- Memantidine 10mg nocte
- Paracetamol 1g qds prn
- Diazepam 5mg prn
- Ranitidine 150mg bd
- Lamotrigine 25mg mane 50mg nocte
- Nebivolol 2.5mg od
- Lactulose 10ml od

PIP intervention
- Staged reduction of risperidone to 250mcg bd
- Reduced diazepam to 2mg bd prn
- Stopped ranitidine and started Peptac 10mls qds prn
- Started Vitamin D od

Outcome measures
- EQ-5D (proxy)
  - BL 0.666, VAS 45%
  - FU 0.788, VAS 80%
- MMSE
  - BL unable to complete
  - FU 15/30
- Falls
  - BL 2
  - FU 0
- Drug Burden Index
  - BL 1.97,
  - FU 1.17
Qualitative outcomes

Interviews  GP, CH manager and staff, Patients/relatives, PIP

• Overall very positive
• Few changes suggested

Focus groups  PIP

• Service pressures impacting on time to meet care home staff
• Pharmaceutical Care Plans were time consuming
• Difficulty meeting GP (CCG employed pharmacist)
• Suggested time insufficient (20 hours cf 16 hours per month)
What interviewees said

the pharmacist was able to spend more time with the resident looking at the medications, speaking to the staff who knew the residents really well and getting a detailed history which **we know the GPs haven’t got the time to do** (CHMan)

I think you know overall it just had led to better patient care, better medicines management you know for those patients and nursing homes. (GP)

the nurses would give you the impression that they don’t want any changes … but when you chat to them (the patient/rel.) they were happy to stop things (Ph)

they’ve got their fingers on the pulse of the medicines that’s coming out and everything like that and the GP sees that many people that he wouldn’t know what to give ya. (Pt.)
In conclusion

- PIPs were valued
- Existing working relationship with GP important
- Patient outcomes show trend to improvement

Research programme has systematically
- informed changes to service specification
- confirmed design of definitive RCT
- identified optimal outcome measures
- provided foundation for health economic assessment
- provided reassurance that trial is feasible
CHIPPS Research team
https://www.uea.ac.uk/chipps

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The CHIPPS Research team acknowledges the support of the National Institute of Health Research Clinical Research Network (NIHR CRN) and Chief Pharmaceutical Officers for NHS England, NHS Scotland, NHS Northern Ireland.
I think the pharmacist was able to spend more time with us and the resident looking at the medications that they were on, speaking to the staff who knew the residents really well and getting a detailed history which unfortunately we know the GPs haven’t got the time to do … (CHMAN)

The pharmacist doesn’t know her history, the pharmacist doesn’t and I said but there will be a time, yes she may always have to remain on some type of antipsychotic dose . (CHMAN)

I’ve been struggling with getting the monthly script and the systems the cycles already started …. this is what the care homes need (CHN)

….we’ve been looking at somebody who we want some pain relief, it didn’t arrive, it was supposed to arrive on Friday …….but one word from XXXX (PIP) and there it is. CHMan
I think pharmacists are increasingly a crucial resource within primary care and there have been moves over the last couple of years to bring in more pharmacists to GP practices on a full time basis.

because XXXX (PIP) is going in and dealing with maybe some of the issues that we would have dealt with in the past, that there’s the potential that you see your patients less and you have less of a close relationship with some patients in the nursing homes so that would be a potential negative going forward.

so we see it as a very positive thing. XXX (PIP) brings a lot of knowledge and time-efficiency to us and we work I guess side by side is the best way to put it.

I think you know overall it just had led to better patient care, better medicines management you know for those patients and nursing homes.
Pharmacists

the nurses would give you the impression that they don’t want any changes ... but when you chat to them (the patient/rel.) they were happy to stop things

...and I think that’s fine if you have a good working relationship with that GP practice ....

everybody is getting the monitoring but they don’t do anything with the results....the one on lithium that was not in range was a big one for me

I’ve made a point of talking to the HCA ... you get an awful lot of valuable information... particularly things to do with constipation... nurses say they have terrible constipation but HCA shows you the records that say no
Patients and relatives

So, what do you think about having a pharmacist in a care home?
...yeah, it’s a good idea...
...do you think so, why do you think it’s a good idea?
Well then the people can get individual medicines what they need.
.. do you think there’s a greater benefit of like chatting to a pharmacist compared to a GP?
Yeah...... they’ve got their fingers on the pulse of the medicines that’s coming out and everything like that and the GP sees that many people that he wouldn’t know what to give ya.
So when the GP comes to see you do you ever talk about your medicines or anything like that?
I never see a GP. (Patient)

Sometimes I find when you go through GPs it takes much longer if, you know, if you ask them to reduce something, the time then they pass it on. I found with Clare, after her phone call, it’s implemented straight away, you know, there’s no hanging around, which is good, I like that. Can’t think of much else, that’s about all, really (Relative)
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<thead>
<tr>
<th>Outcome measure</th>
<th>Baseline</th>
<th>Follow up</th>
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<tbody>
<tr>
<td>Falls</td>
<td>13/30 (43%)</td>
<td>6/30 (20%)</td>
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<tr>
<td>ADRs</td>
<td>0/30 (0%)</td>
<td>0/30 (0%)</td>
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<tr>
<td>MMSE mean &amp; SD</td>
<td>20.21 [SD 7.55] (n=14/30)</td>
<td>20.91 [SD 6.4] (n=12/28)</td>
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<tr>
<td>Barthel mean &amp; SD</td>
<td>7.30 [SD 5.9]</td>
<td>7.07 [SD 5.9]</td>
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<tr>
<td>Drug Burden Index mean &amp; SD</td>
<td>0.92 [SD 0.84]</td>
<td>0.805 [SD 0.74]</td>
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<tr>
<td>Number of STOPP incidences</td>
<td>139 (n=29)</td>
<td>83 (n=28)</td>
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<tr>
<td>Number of START incidences</td>
<td>80 (n=29)</td>
<td>58 (n=28)</td>
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<tr>
<td>EQ-5D-5L Mobility</td>
<td>3</td>
<td>1</td>
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<tr>
<td>EQ-5D-5L Self-Care</td>
<td>3</td>
<td>2</td>
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<tr>
<td>EQ-5D-5L Usual Activities</td>
<td>3</td>
<td>2</td>
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<tr>
<td>EQ-5D-5L Pain/ Discomfort</td>
<td>2</td>
<td>2</td>
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<tr>
<td>EQ-5D-5L Anxiety/ Depression</td>
<td>2</td>
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<tr>
<td>EQ-5D-5L Index</td>
<td>0.666</td>
<td>0.761</td>
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### Results – Patient Characteristics

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<tr>
<th>Characteristic</th>
<th>Description</th>
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<tr>
<td>Male</td>
<td>10/30 (33.3%)</td>
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<tr>
<td>Age mean</td>
<td>85 years (SD 6.6)</td>
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<td>Age range</td>
<td>67-96 years</td>
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<td>Nursing/ Residential</td>
<td>22 (73%) nursing 8 (27%) Residential</td>
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<tr>
<td>No.meds. per patient</td>
<td>Mean 9.1 (Range 1-22)</td>
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