SUPPORT (South Gloucestershire Pain Review Pilot) Study: a mixed methods evaluation

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Background

- **~1 in 7 adults** in the United Kingdom have **chronic non-cancer pain** (CNCP)
- Increasing use of **opioids** for CNCP in **primary care** despite a lack of evidence for the long-term safety and effectiveness of these drugs
- Long-term use of prescription opioids in CNCP associated with:
  - Opioid **dependence** and **addiction**
  - Increased **mortality**

- Scale of the problem of dependence is **unclear**
- People with prescription opioid dependence are **less likely** to access **traditional specialist substance misuse treatment services**
- National guidance recommends that commissioners provide **separate addiction services** to treat prescription opioid dependence

South Gloucestershire Pain Review Pilot

Aim

- Investigate the feasibility of a service in primary care for patients with CNCP treated with long-term opioids

Inclusion criteria

- Adult, primary care patients
- Long-term opioid analgesic use for CNCP
  - Taking opioids for >3 months
  - ≥ 3 opioid painkiller prescriptions in 3-month period

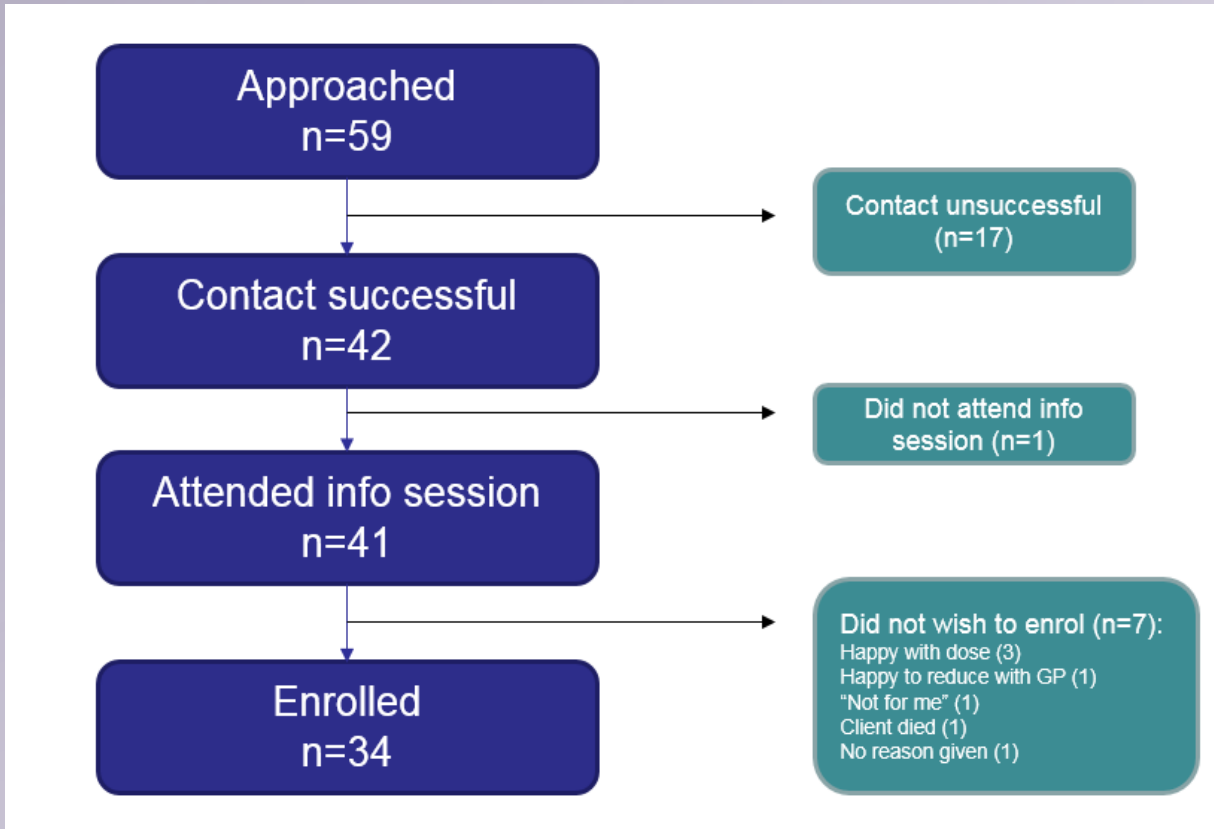
Exclusion criteria

- Illicit drug use
- End of life

Pilot service

- Help patients **understand their relationship with opioids** and support alternative **non-drug-based pain management** strategies
- Delivered in **2** GP practices in South Gloucestershire
- **Individually tailored**, multi-component service
- Delivered by project workers on a **one-to-one basis**
- Approach informed by:
  - **Shared care model**
  - Patient centred counselling
  - Cognitive Behavioural Therapy
  - Social prescribing
- **Partnership working** between 2 project workers, GPs, patients and consultants in pain management and addiction psychiatry

Enrolment in service



Aim

To evaluate the South Gloucestershire Pain Review Pilot using qualitative and quantitative methods.

Methods: quantitative data

- Demographics
- Baseline to follow-up intervention changes:
  - Prescribed opioid dose - average daily morphine equivalent
  - Current Opioid Misuse Measure (COMM) – diagnosis of opioid use disorder
  - Brief Pain Inventory (BPI) - pain intensity and the interference of pain
  - Warwick-Edinburgh mental well-being scale - estimate mental well-being
  - Treatment Outcomes Profile (TOP) tool - physical and psychological health, and overall quality of life (QoL)

Methods: qualitative data

- 18 service-user semi-structured interviews
- 7 service-provider semi-structured interviews
  - Project workers (n=2),
  - Project workers' manager (n=1)
  - GPs in participating GP practices (n=4)
- Interviews explored:
  - Experiences of the service (acceptability, what worked well and what could be improved)

Methods: analysis

- Means and standard deviations, medians and inter-quartile ranges or counts and percentages
- Wilcoxon signed-rank test compared baseline and follow-up average prescribed opioid dose
- Thematic analysis used following a data-driven inductive approach

Baseline service user characteristics (1)

	Enrolled patients	
	n	%
Female gender	22/34	64.7%
Age (years; mean, SD)	51	10
Ethnicity		
White	31/31	100.0%
Other	0/31	0.0%
Employment status		
Employed	6/31	19.4%
Unemployed	23/31	74.2%
Retired	2/31	6.5%
Relationship status		
Single	6/31	19.4%
Married	19/31	61.3%
Separated	3/31	9.7%
Divorced	1/31	3.2%
Other	2/31	6.5%
Disability	20/27	74.1%
Previous pain clinic use	22/31	71.0%

Baseline service user characteristics (2)

	Enrolled patients	
	n	%
Reported reason for original opioid prescription		
Back pain	9/32	28.1%
Fibromyalgia	4/32	12.5%
Arthritis	5/32	15.6%
Spinal or disc degeneration/ deformities	5/23	15.6%
Other	9/32	28.1%
Opioid type		
Morphine	9/34	26.5%
Tramadol	10/34	29.4%
Oxycodone family	7/34	20.6%
Codeine	17/34	50.0%
Fentanyl	5/34	14.7%
Methadone	1/34	2.9%
Buprenorphine	3/34	8.8%
Nurofen plus	1/34	2.9%
Duration of use		
0-2 years	2/29	6.9%
3-4 years	3/29	10.3%
5-9 years	9/29	31.0%
10-14 years	6/29	20.7%
15+ years	9/29	31.0%
Motivation for use		
Pain	32/32	100.0%
Coping with feelings	4/32	12.5%
Addiction/dependence	3/32	9.4%
Sleep	1/32	3.1%
Withdrawal allowance	1/32	3.1%

Results: Enrolment

Enrolment

Identify and enrol eligible patients from GP practice

- GP referrals into service more efficient and effective than using the opioid risk assessment tool (ORAT)
- Recruitment acceptable to service users and providers

My only concern *was when they did send the letter through, it said it was called BAT* ***battling against tranquilisers*** *and I wasn't aware that's what the group was. That did sort of* ***really upset me*** *because I think battling against tranquilisers is someone who's using them as an addictive thing and* ***I wasn't using them because I was addicted****. I was using them to combat pain so I could continue a semi normal life. Service user*

Results: intervention content (1)

Enrolment	Intervention content
Identify and enrol eligible patients from GP practice	Assessment of service user needs

We kind of poke around kind of paying attention to areas where people feel like they're ***not getting kind of enough support*** *or whatever and try and* ***build up a picture*** *that we can* ***present back to the person****.* Project worker 1, Interview 13

Results: intervention content (2)

Enrolment	Intervention content		
Identify and enrol eligible patients from GP practice	→	Assessment of service user needs	→ Pain management plan co-created with service users

Intervention content (3)

Enrolment

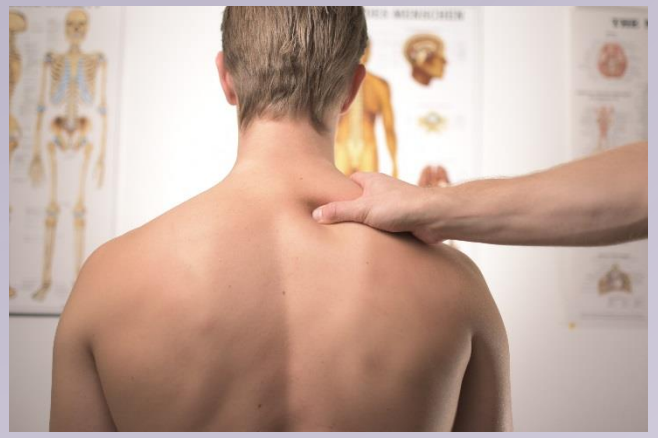
Intervention content

Identify and enrol eligible patients from GP practice

Assessment of service user needs

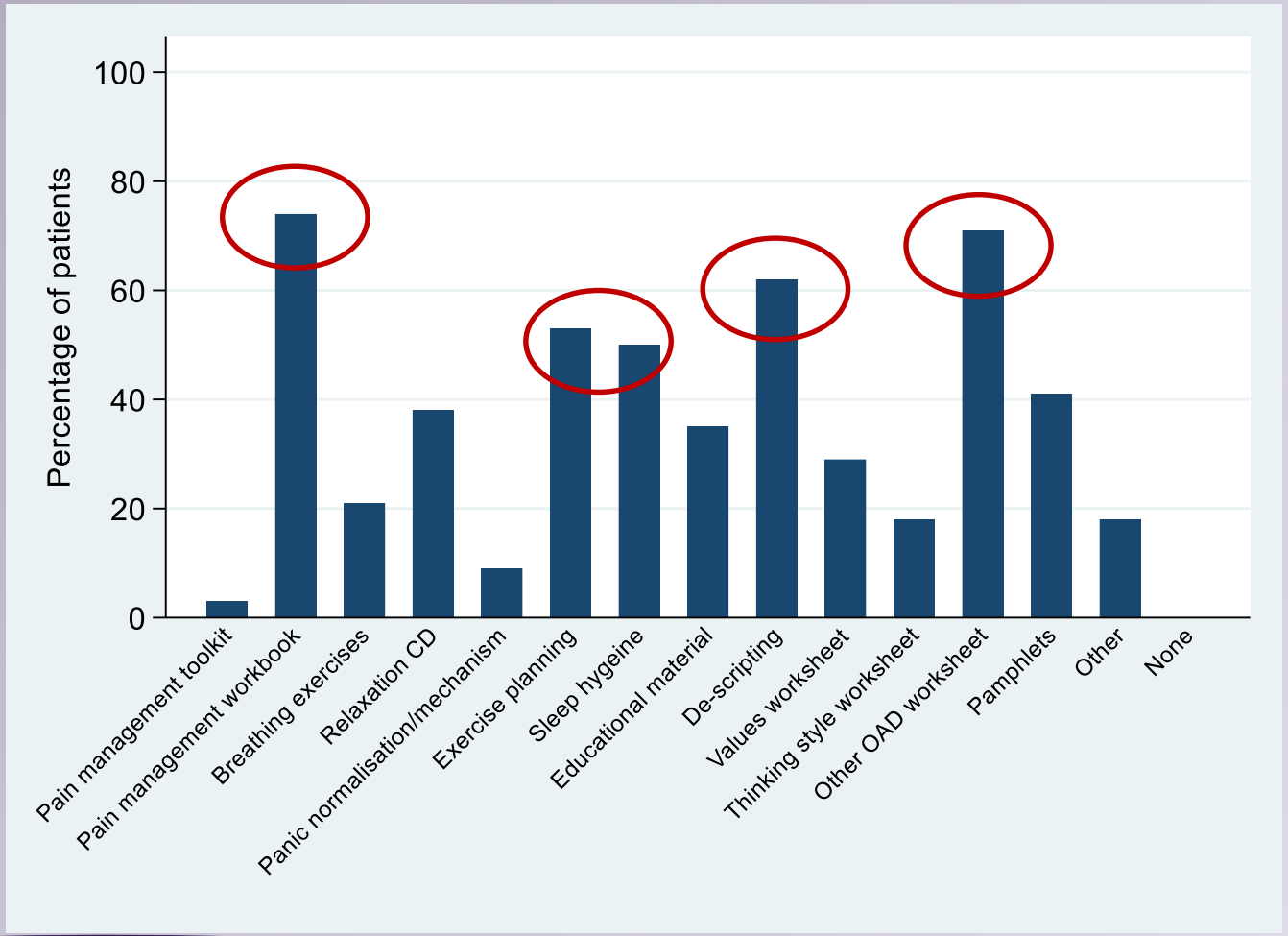
Pain management plan co-created with service users

Within session components:
- Goal setting
- Education
- Counselling
- Medication review
- Pain management strategies

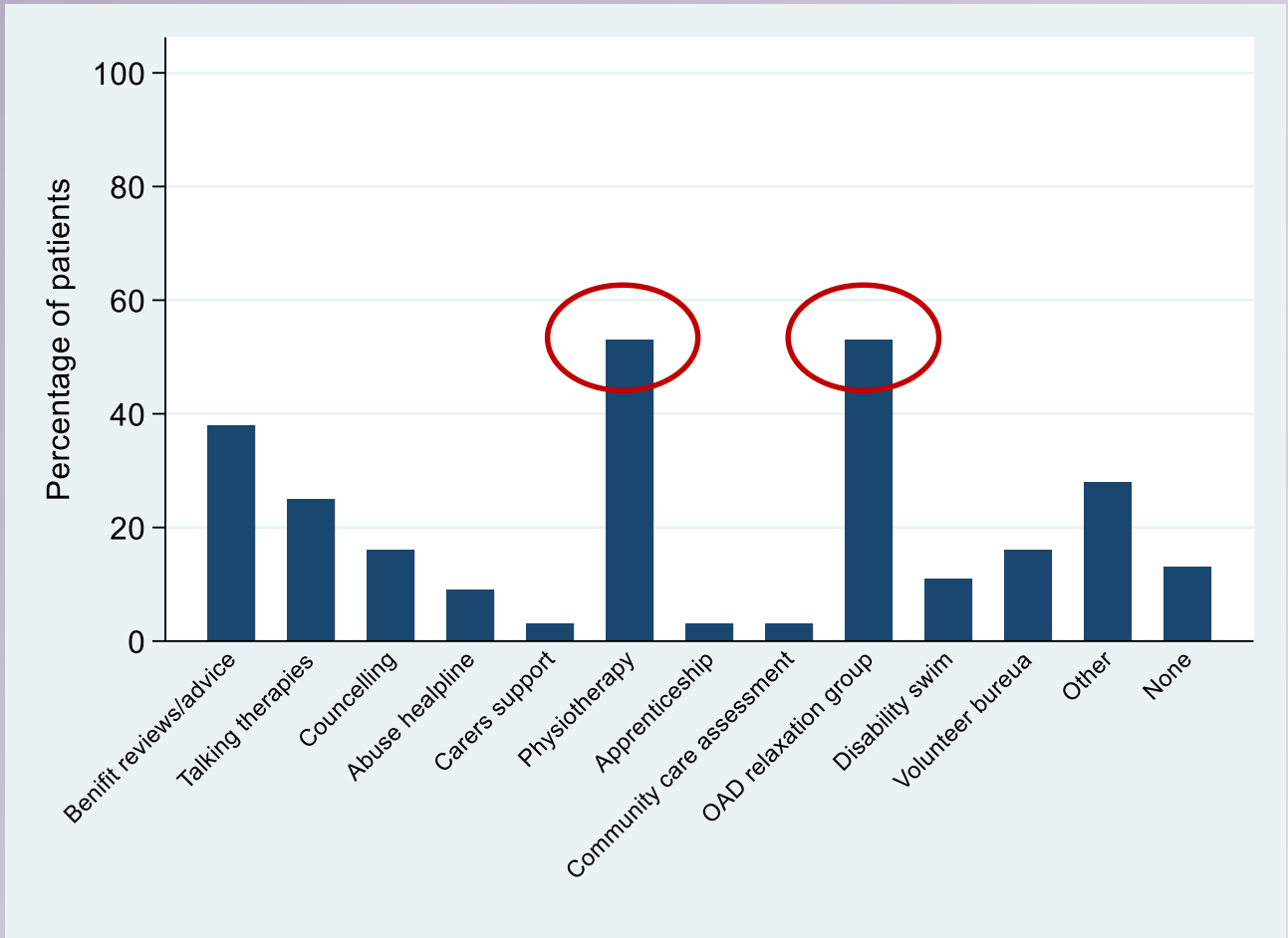


Referral to community-based services:
- Physiotherapy
- Relaxation and mindfulness group

Results – within service components



Results – Community based services



Results – positive experiences

- Tailored to individual needs (especially open-ended length)

*((Project worker 1))'s been trying to sort of **tailor his approach and his advice**, etc to my needs **rather than trying to push me into a box**.* Service user, Interview 22

- Time to discuss pain management

*It was one on one as well and **it wasn't rushed**. If you had something to say that he would just sit there or advise or listen.* Service user, Interview 21

- Relationship and communication with project worker

I think the strength of the service is probably having the right person doing it actually. I think someone who you know is passionate about what they're doing, and able to engage the patient and make them believe in it is really important. GP, Interview 20

- Alternative to the traditional medical model of managing pain

*I think it's starting from **psychological view point** and trying to engage them, rather than completely medicalising their pain.* GP, Interview 20

Results – negative experiences

- Delays accessing community based services

- Insufficient GP support and communication for patient and project workers

I think it is important if you're reducing that you are, I mean not to get special treatment, but you are able to have ***access to a doctor****, even if it's just a phone call to say, you know, can you help me.* Service user interview 9

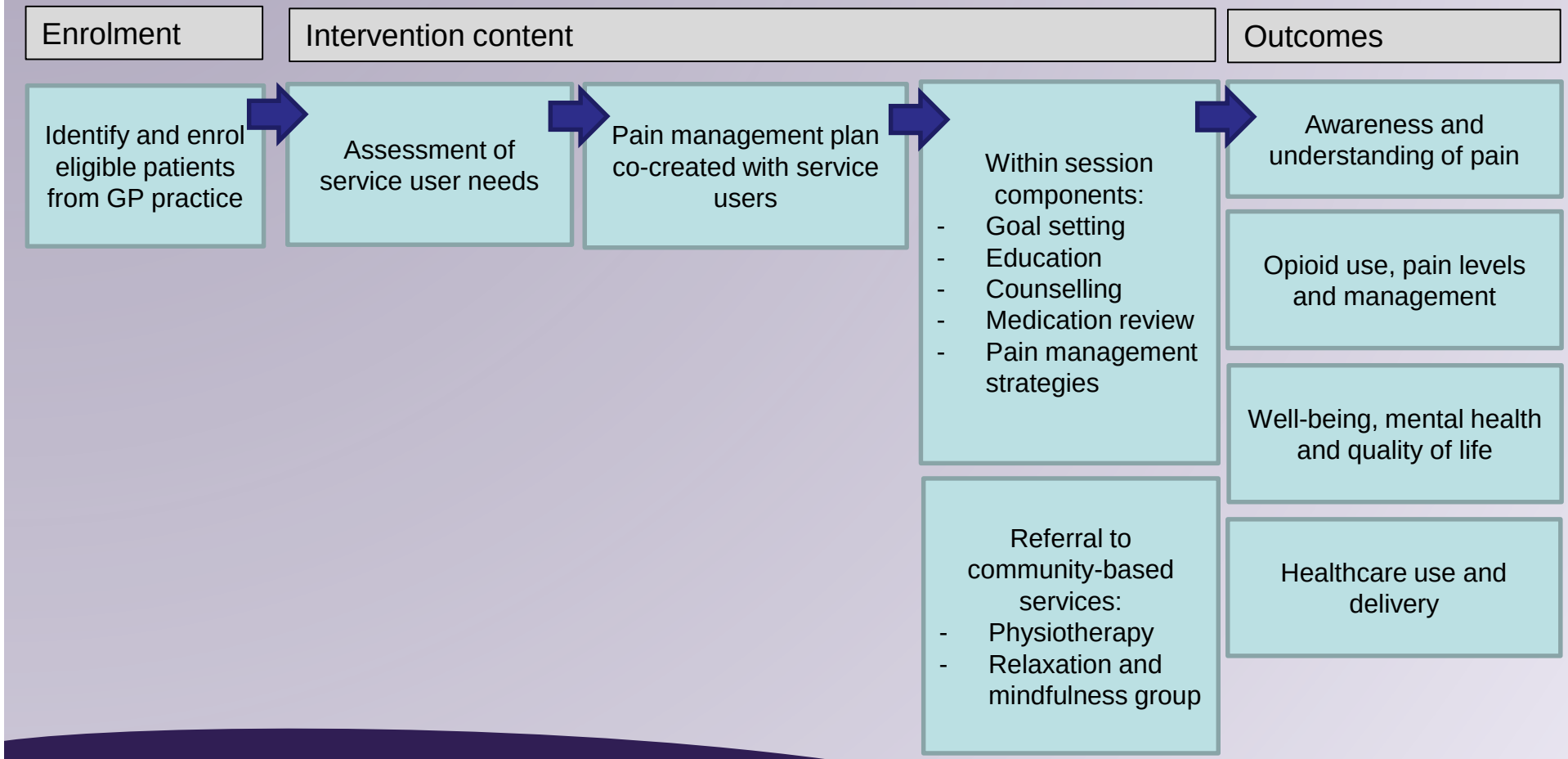
- Negative psychological effects

In the early days I did find it quite difficult because when you're talking about your pain and your lifestyle, it's just ***highlighting how bad you feel****.* Service user, Interview 2

- Slow pace of progress

It would be nice if it was a ***little bit quicker*** *but he has to understand what my problems are before he can really plan to do anything about them so, it is fine* Interview 4

Intervention



Results – awareness and understanding of pain

Greater understanding of pain, what opioids do and their effectiveness for chronic pain treatment

> *There was quite a bit of **information that I didn't realise** which was quite good (…) mainly about **how the pain sort of works**, how it sort of – **the different sort of systems within your body**, how it reacts on them...* Service user, Interview 8

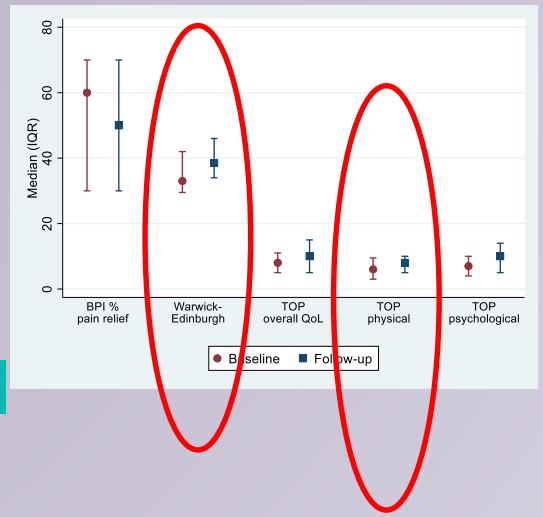
Tracking patterns in pain and opioid use → recognise when opioids were not taken in response to pain levels

Results – wellbeing and quality of life

Higher = better

*I mean it's actually **more painful** if I'm being quite honest with the **morphine reduction** and it's quite hard actually as well, you know, **because you've had that sort of emotional crutch for twenty something years.*** Service user, Interview 3

- Change of 3-8 points = 'meaningful'
- **14/22 (64%)** improved by 3 points or more
- **9/22 (41%)** improved by 8 points or more

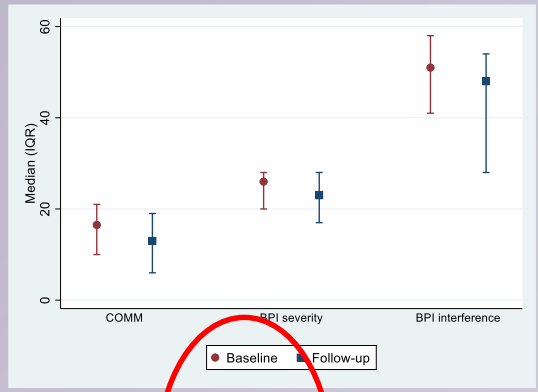


BPI = Brief Pain Inventory, TOP = Treatment Outcomes Profile

Results – wellbeing and quality of life

Lower=better

- Score ≥9 = opioid misuse
- Baseline = **24/28 (86%)** service users ‘misusing’
- Follow-up = **15/22 (68%)** at follow-up



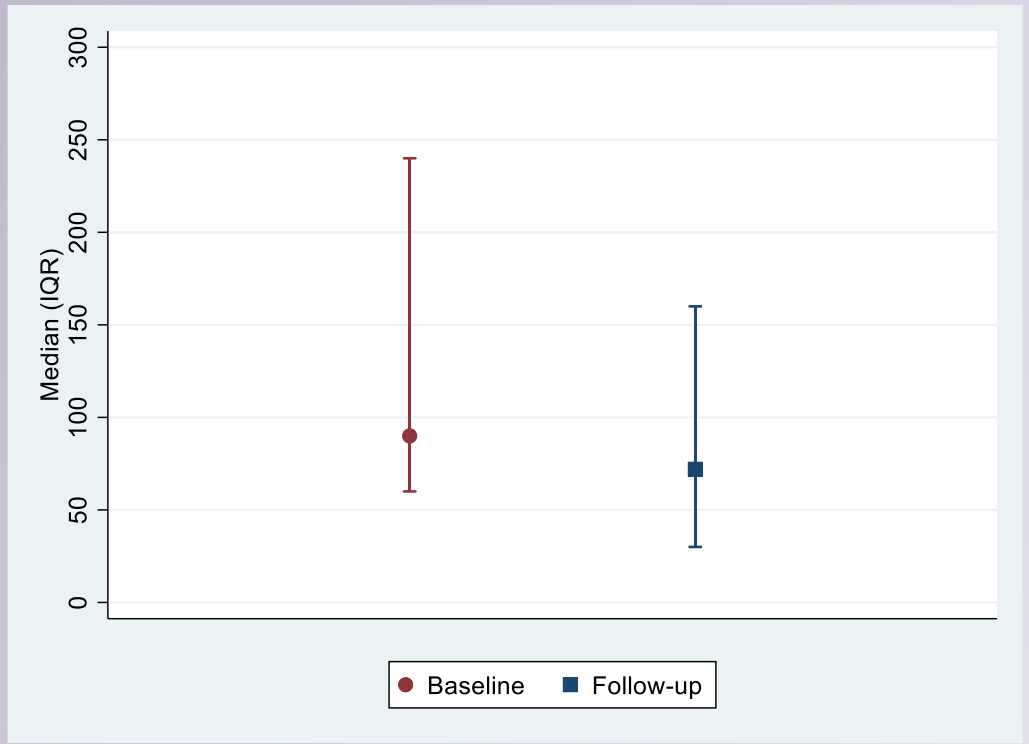
COMM = Current Opioid Misuse Measure, BPI = Brief Pain Inventory

Figure 2: Prescribed opioid dose

SSA SOCIETY FOR THE STUDY OF ADDICTION

Results – Prescribed opioid dose

- Baseline = **90mg** (IQR 60 to 240)
- Follow-up = **72mg** (IQR 30 to 160) (p<0.001)
- **15** = reduced dose (3 reduced to 0)
- **19** = no dose change
- **0** = increased dose



Lower=better

Results: Healthcare use and delivery

- Reductions in GP consultations reported by GPs and service users
- Pilot did not save GPs' time
- GPs described greater consideration of prescribing appropriateness

Implications / recommendations

- Important to keep the service individually tailored
- Project worker and relationship with service user = **key ingredient of service**
    - Project workers concerned about running the service with high numbers of service users and short appointment times
- GPs require funding to support future involvement
    - Clinical supervision
    - GP identification and referral of eligible patients
    - Patient review meetings

Conclusions

- Pilot service model has shown promising results
  - Acceptable to service-users
  - Improvements on most health, well-being and QoL outcome scales
- Similar service models may help address and prevent misuse of opioid analgesics for the treatment of CNCP
- Interventions are also required to support changes in GP prescribing practices
- A randomised controlled trial is needed to test the effects of this type of care-pathway on opioid dependency and pain management

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