

Implementing the Cerebral Palsy Integrated Pathway

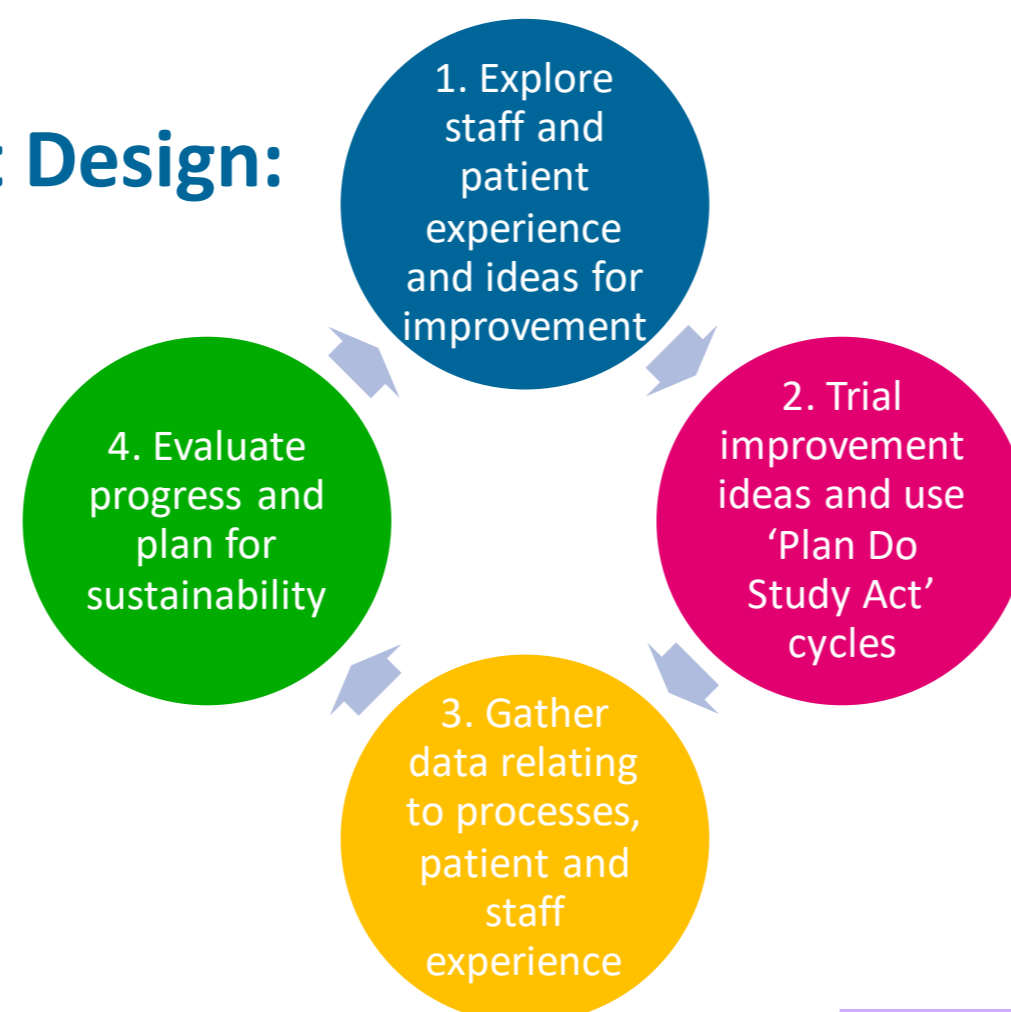
Lucy James, Children's Physiotherapist and HEE (Wessex) Quality Improvement Fellow 2019-20

1. Background Children and young people with cerebral palsy (CP) and similar conditions benefit from regular monitoring to identify and treat problems such as joint stiffness, muscle tightness and postural deformities as early as possible (National Institute for Health and Care Excellence, 2012). The Cerebral Palsy Integrated Pathway (CPIP) is now being implemented by services nationally. CPIP provides a hip x-ray protocol for children aged 2-16 years, and a standardised physical assessment of the lower limbs.

2. Project Aim

To sustainably and seamlessly implement the Cerebral Palsy Integrated Pathway, so all children with CP and associated conditions have annual CPIP assessments and appropriately timed routine hip x-rays

3. Project Design:

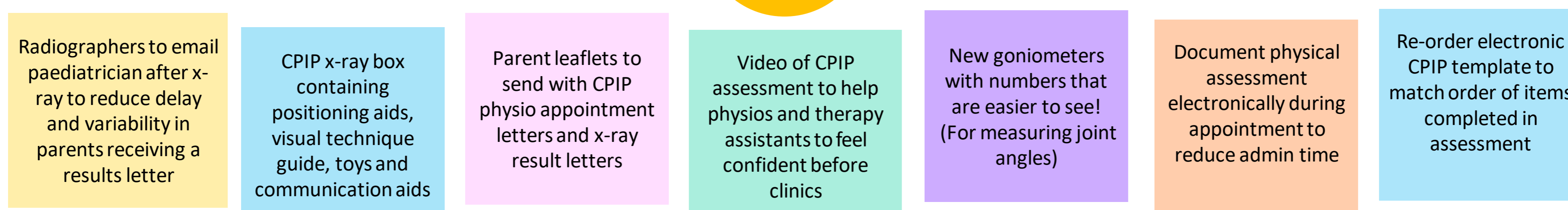


4. QI Activities Undertaken

- Group discussions and 1:1 interviews with members of the multidisciplinary team and parents / carers
- Driver diagram to collate ideas
- 'Plan Do Study Act' (PDSA) cycles of CPIP clinics
- Process mapping
- 'Mapping the last 10 patients'
- Emotional mapping
- Capacity and demand calculations
- Physio team workshop to discuss future plans

5. Improvement ideas implemented

The below ideas were generated by parents, physiotherapists, therapy assistants, community paediatricians, radiographers and play therapists:



6. CPIP Physio clinics The physiotherapy team have been trialling different clinic models. The below Statistical Process Control chart (Figure 1.) illustrates the uptake of clinic slots as a percentage of those available. The team reported that it has worked best doing CPIP appointments within their usual clinics.

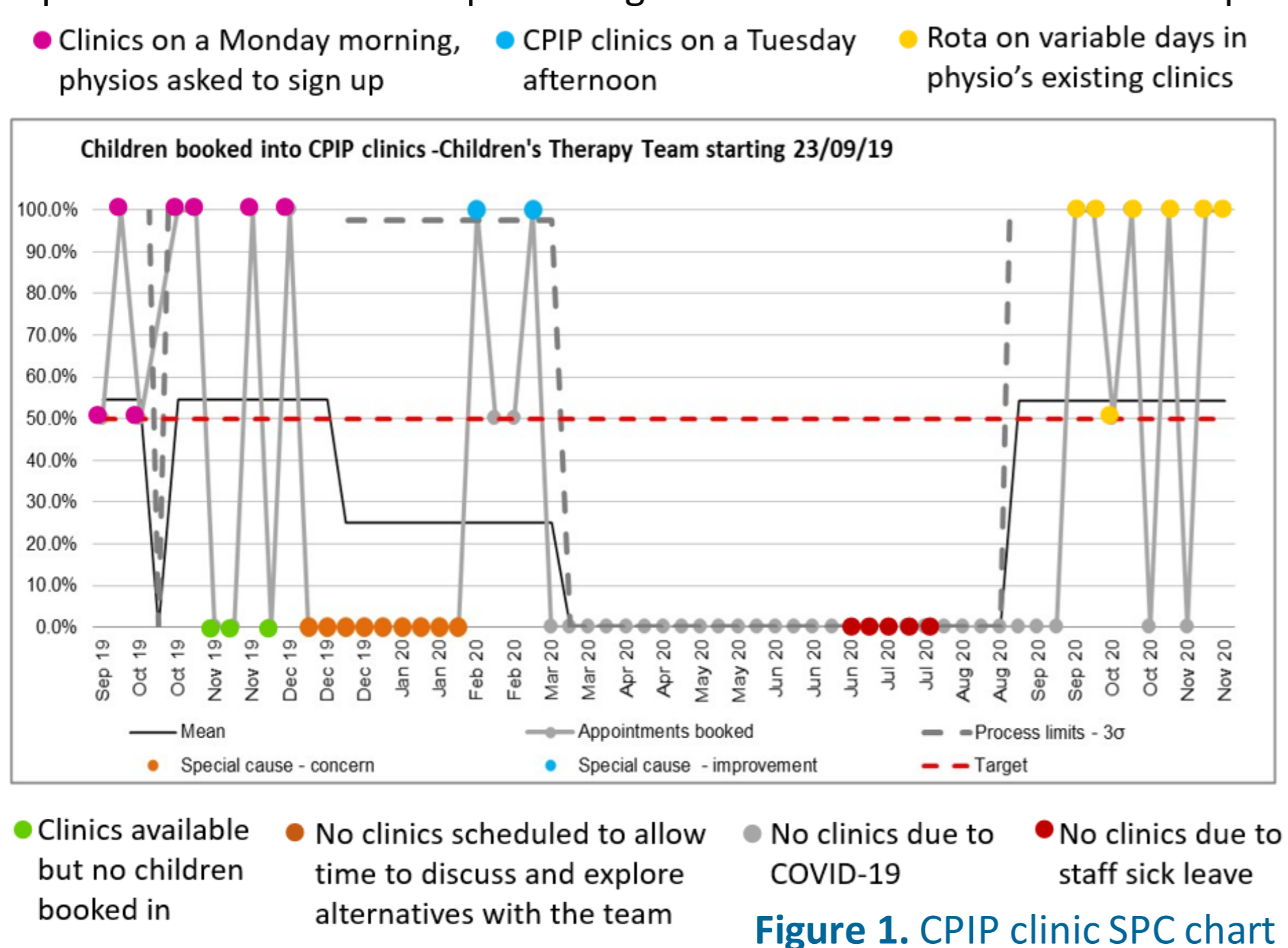


Figure 1. CPIP clinic SPC chart

7. Emotional mapping

A visual emotional map was used with 10 children at the start and end of their CPIP physio appointments. The below Pareto charts (Figures 2 & 3) demonstrate that children's experience of CPIP appointments is generally positive. One child was worried before his appointment because he does not like having his legs stretched!

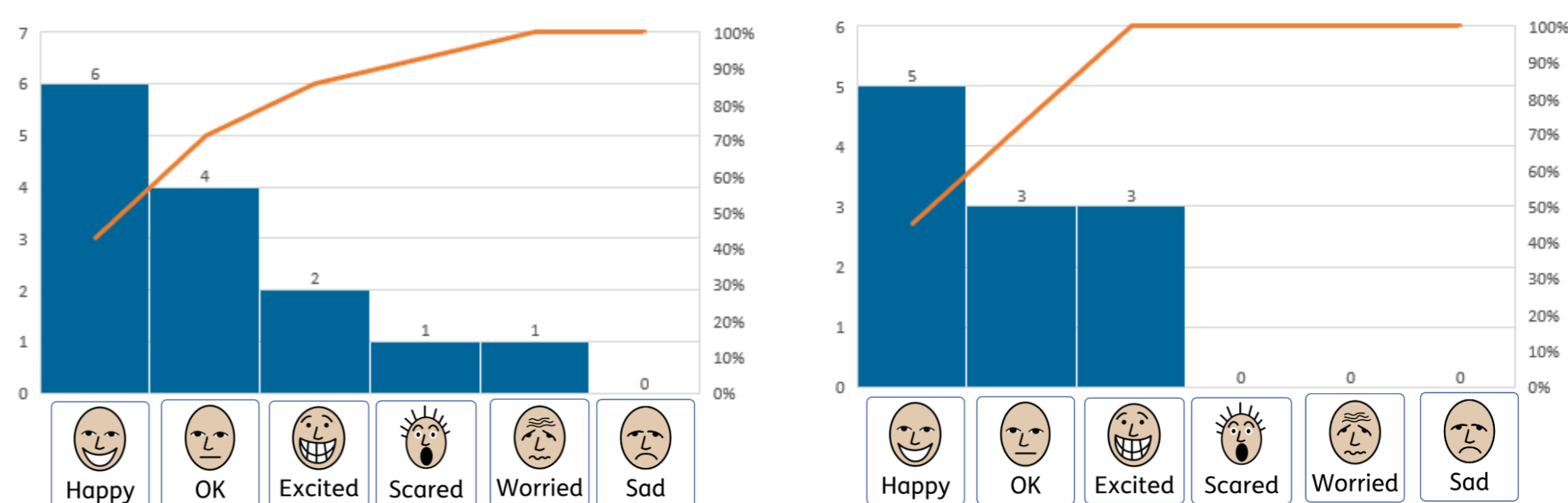


Figure 2. Start of CPIP appointment

Figure 3. End of CPIP appointment

8. Outcomes

Figure 4 illustrates the improvements in implementation of CPIP across the service compared to an audit completed in 2018.

Variabilities and delays have been reduced as a result of radiographers sending an email to the paediatrician when a child has had an x-ray. 'Mapping the last 10 patients' revealed that:

- Before - 50% of patients received a results letter, with a maximum wait of 25 days.
- After - 100% of patients received a results letter with a maximum wait of 19 days.

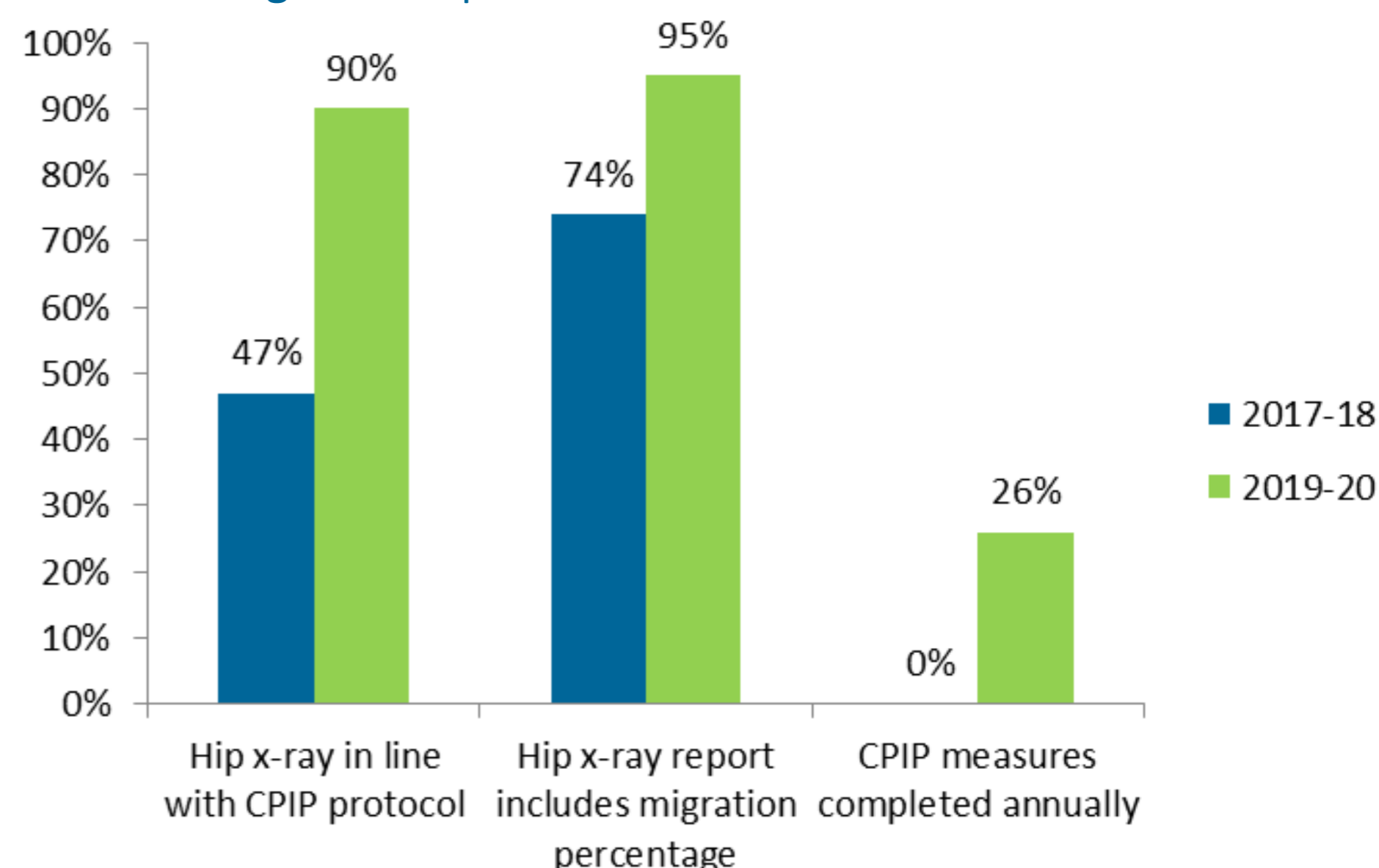
The community paediatricians have also reported increased awareness of CPIP, improved communication, and improved quality of x-ray images. This improvement is likely to be multifactorial, and it is acknowledged that the Paediatric Radiography team have been working hard to implement robust CPIP processes within their busy department.

Members of the physio team have reported that it feels more achievable to do CPIP clinics, and that they are seeing the benefits for patients. We now have a clinic rota, admin processes, and ways to maintain skills and confidence in the team.

9. Sustainability

This Fellowship has enabled us to ensure CPIP is more embedded in our practice. We also have more robust processes in place, and roles and responsibilities defined, which will promote sustainability. The QI skills gained will enable us to continue working towards this aim, and to recognise and celebrate the difference we can make to the care our patients receive.

Figure 4. Improvements in CPIP across the service



10. Personal lessons

1. Be curious, listen to other's insights and be mindful of assumptions!
2. Create the conditions for others to share, develop and try their ideas.
3. QI tools can help you to break down a large project and involve others.
4. Plan Do Study Act cycles can help to work out what to change or try next. It's ok if things don't work first time!
5. Small changes can make a big difference towards the overall aim.
6. Plan processes that promote sustainability

References: National Institute for Health and Care Excellence (2012) Spasticity in Under 19's: Management. Clinical guideline 145 (online)

<https://www.nice.org.uk/guidance/cg145>