

How does context affect implementation?

Using case studies to capture diverse general practices' experiences during the IMP²ART trial

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Background

Methods

IMPLementing **IMPRO**ved Asthma self-management as **ROU**Tine (**IMP²ART**) is a multidisciplinary and theoretically-informed strategy to improve implementation of supported self-management and asthma outcomes in routine general practice. The strategy includes 1) patient resources to educate and support self-management, 2) asthma self-management training for practice staff, and 3) organisational strategies (audit/feedback, review template), with support from a trained facilitator. (Fig 1) The trial will measure overall clinical and implementation effectiveness, through unscheduled care and action plan ownership.

Design: Multi-site case study, using longitudinally collected qualitative data, nested within a larger mixed-methods process evaluation.

Sample: Up to four practices taking part in the implementation arm of the trial will be invited post-randomisation. We will seek diversity in the case study characteristics in terms of practice size, geography, and models of asthma care delivery to capture variation in implementation experiences.

Data collection: A wide range of data collection methods will be used. We will start collecting data from the first time the IMP²ART facilitator meets the practice at the "IMP²ART workshop". Data collection will continue over the two years in which a practice participates in the trial. (Fig 2)

Figure 1. IMP²ART's 3-level implementation strategy



The context in which any intervention is tested can affect its success, acting as barriers or facilitators to implementation. Additionally, some contextual factors may act as barriers in some places, but act as facilitators in others. Therefore, in IMP²ART, it is important to study the relationship between implementation and context, in order to understand how and why IMP²ART achieves its effects (or why it does not). Case studies make use of multiple sources of data to build in-depth understandings of phenomena. They are, therefore, ideal for studying the relationship between an intervention and context in a trial's process evaluation.¹

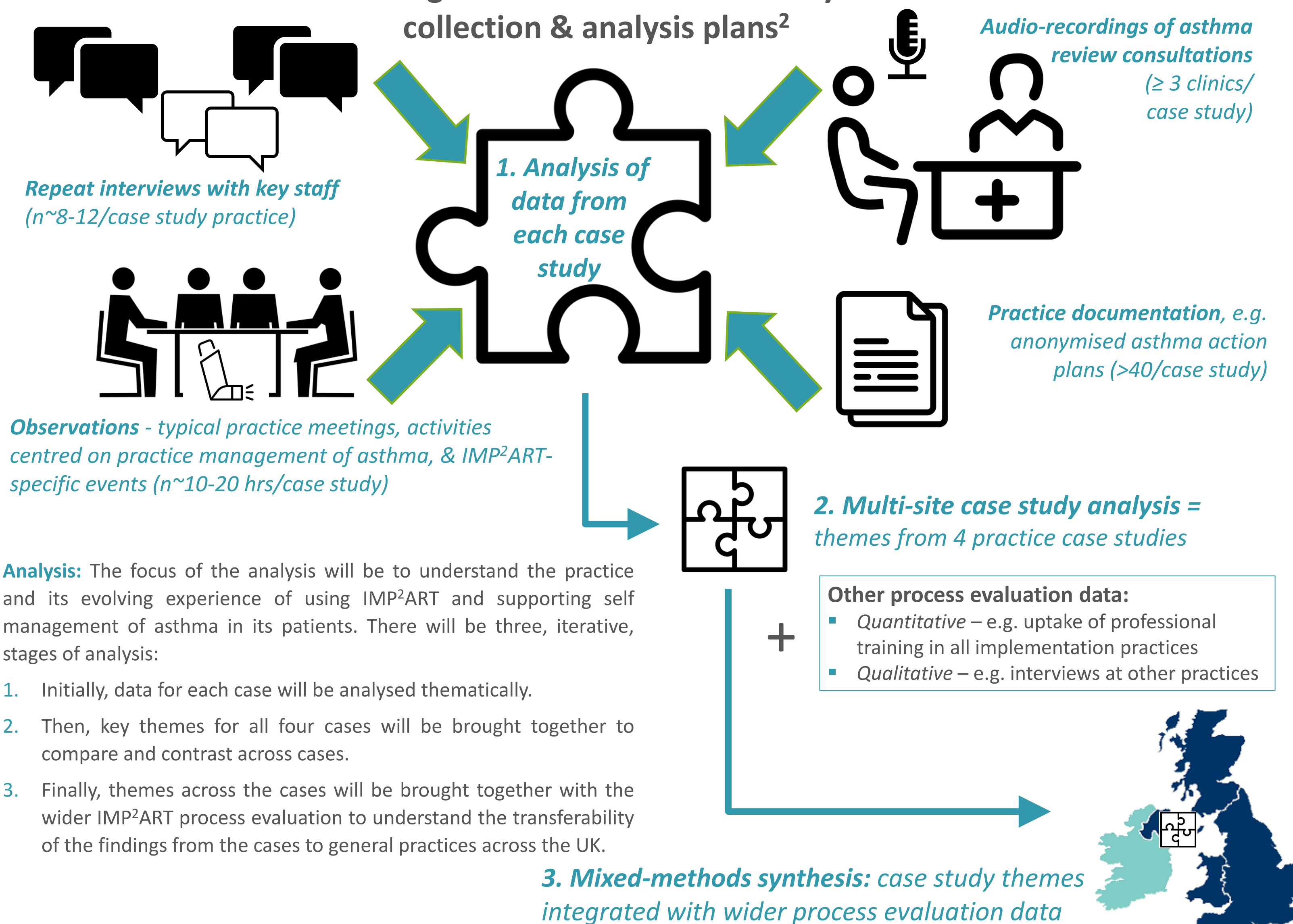
AIM: To learn - through case studies embedded in a process evaluation - how contrasting practice contexts and use of implementation strategies influence the effectiveness of IMP²ART.

Discussion

Since the COVID-19 pandemic, UK general practice has been subject to major changes and is likely to evolve further over the course of the next few years. By following practices over the two-year course of their involvement in the IMP²ART trial, these case studies seek to capture the processes by which practices implement support asthma self-management, their response to IMP²ART's implementation strategy, and the changing context in which they work.

References and acknowledgements: 1. Grant, A., Bugge, C. & Wells, M. Designing process evaluations using case study to explore the context of complex interventions evaluated in trials. *Trials* 21, 982 (2020). 2. Icons in figure 2 taken from Noun Project (<https://thenounproject.com>)

Figure 2. IMP²ART's case study data collection & analysis plans²



Observations - typical practice meetings, activities centred on practice management of asthma, & IMP²ART-specific events (n~10-20 hrs/case study)

Analysis: The focus of the analysis will be to understand the practice and its evolving experience of using IMP²ART and supporting self management of asthma in its patients. There will be three, iterative, stages of analysis:

1. Initially, data for each case will be analysed thematically.
2. Then, key themes for all four cases will be brought together to compare and contrast across cases.
3. Finally, themes across the cases will be brought together with the wider IMP²ART process evaluation to understand the transferability of the findings from the cases to general practices across the UK.

3. Mixed-methods synthesis: case study themes integrated with wider process evaluation data

