

# Forecasting the effects of COVID-19 across a whole mental health system: a computer simulation study

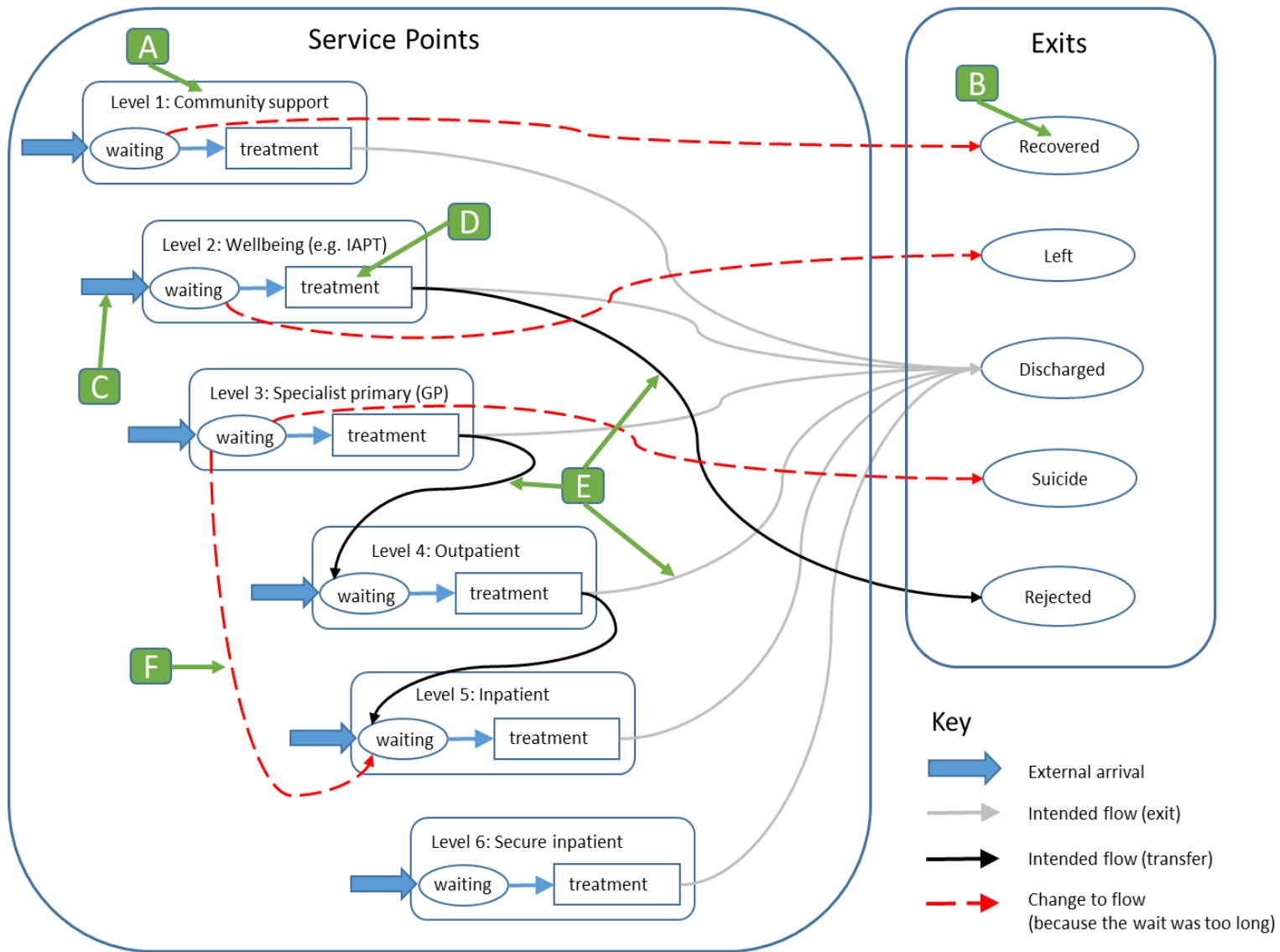
*Thursday 10th December 2020*

*Aim: To model the mental health system in BNSSG to forecast and understand the affects of COVID-19 on services and patient outcomes.*

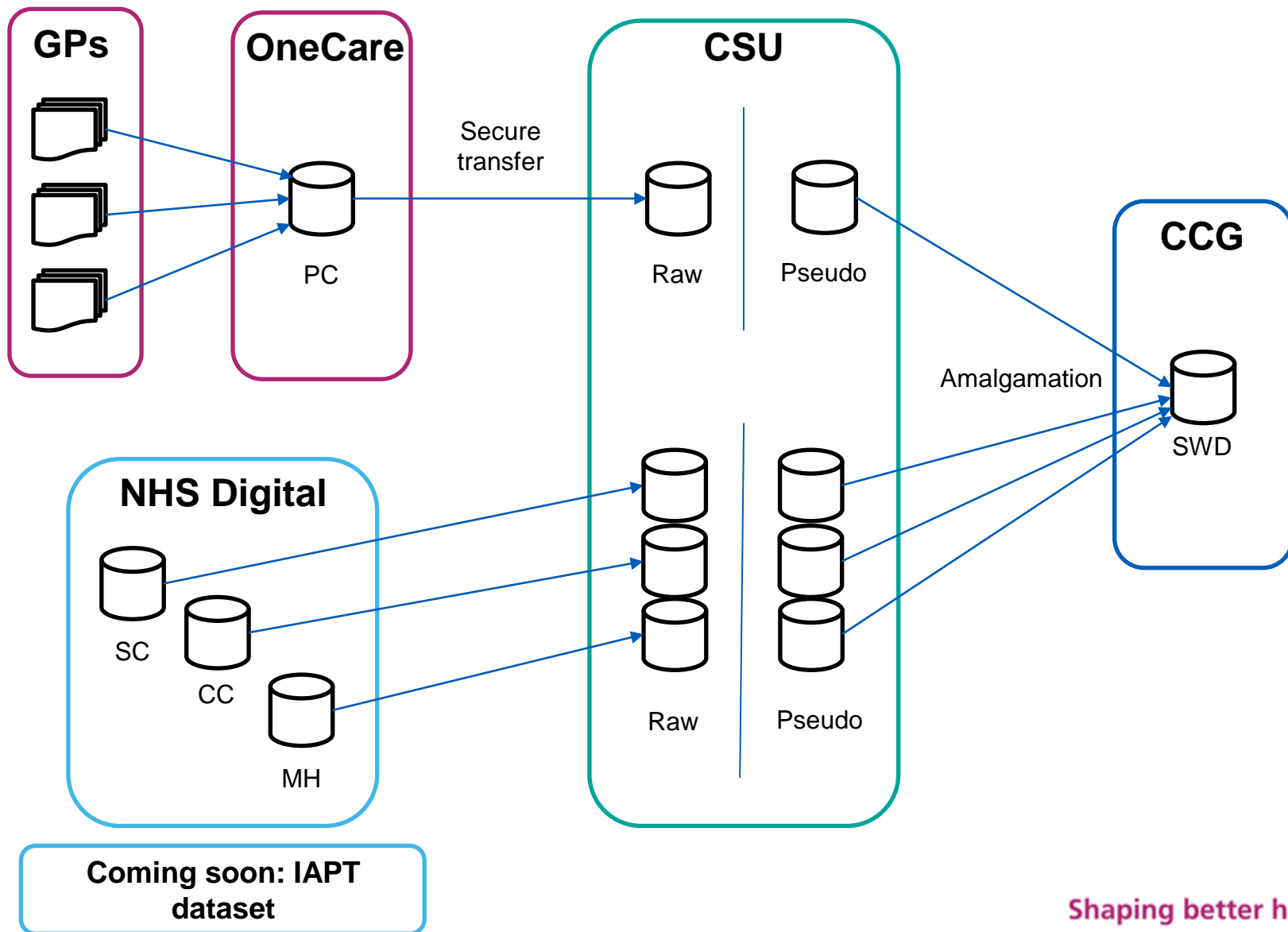
Jennifer Cooper (Bristol University/ BNSSG CCG) [jennifer.cooper@bristol.ac.uk](mailto:jennifer.cooper@bristol.ac.uk) /  
[jenny.cooper10@nhs.net](mailto:jenny.cooper10@nhs.net)

# Background

- Increasing demand for mental health services due to COVID-19 (direct/indirect)
- New demand: Healthcare workers, people affected by the social and financial consequences of lockdown, bereavement, and virus anxiety.<sup>1,2</sup>
- The NHS-funded mental health system is not currently configured to meet this demand.
- If demand cannot be met at the appropriate level of need then the severity of need may escalate, resulting in increased pressures for more specialist and scarce resources
- Few examples of modelling of mental health services pre and current COVID
- Method needed to understand how the changing profile of demand brought about by COVID-19 may manifest in the system, and potential interventions to best mitigate any negative impacts.



# BNSSG System Wide Dataset



# Team

## UoB

- Dr Jennifer Cooper, Senior Research Associate Health Data Science and Medical Statistics
- Rachel Denholm, Lecturer Epidemiologist and Lecturer in Applied Health Data Science
- Professor John Macleod, Director NIHR Applied Research Collaboration West (ARC West)
- ?, Research Associate/Senior Research Associate (Livia Pierotti)

## AWP

- Dr Julian Walker, Director of Research and Development, Consultant Forensic Clinical Psychologist, Avon and Wiltshire Mental Health Partnership NHS Trust

## NHS BNSSG CCG

- Ben Murch, Modelling and Analytics Manager
- Dr Richard Wood, Head of Modelling and Analytics

# Thanks for listening

[jennifer.cooper@bristol.ac.uk](mailto:jennifer.cooper@bristol.ac.uk)