UNIVERSITY OF CAMBRIDGE

ICM+ Users' Meeting

Use of ICM+ for running clinical trials

Experiences from the CPPopt trial COGiTATE

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08/09/2019

Division of Neurosurgery, Department of Clinical Neurosciences

Brain Physics Lab

COGiTATE

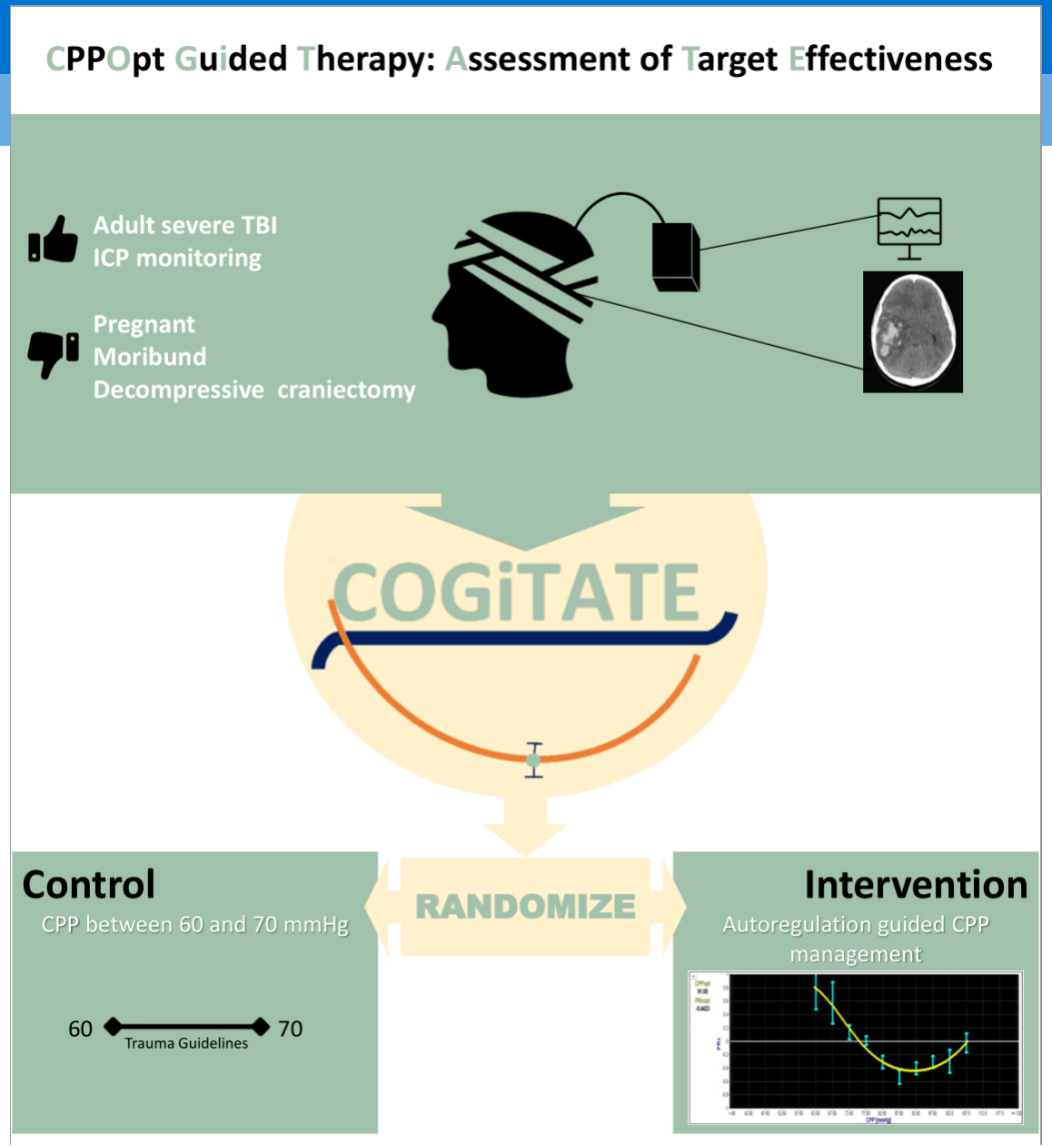
CPPOpt Guided Therapy: Assessment of Target Effectiveness

Jeanette Tas on behalf of team

Maastricht UMC+ | University of Cambridge | UZ Leuven | Radboudumc

Tuesday 09:10-09:20

Room CAG



Use of ICM+ for running clinical trials

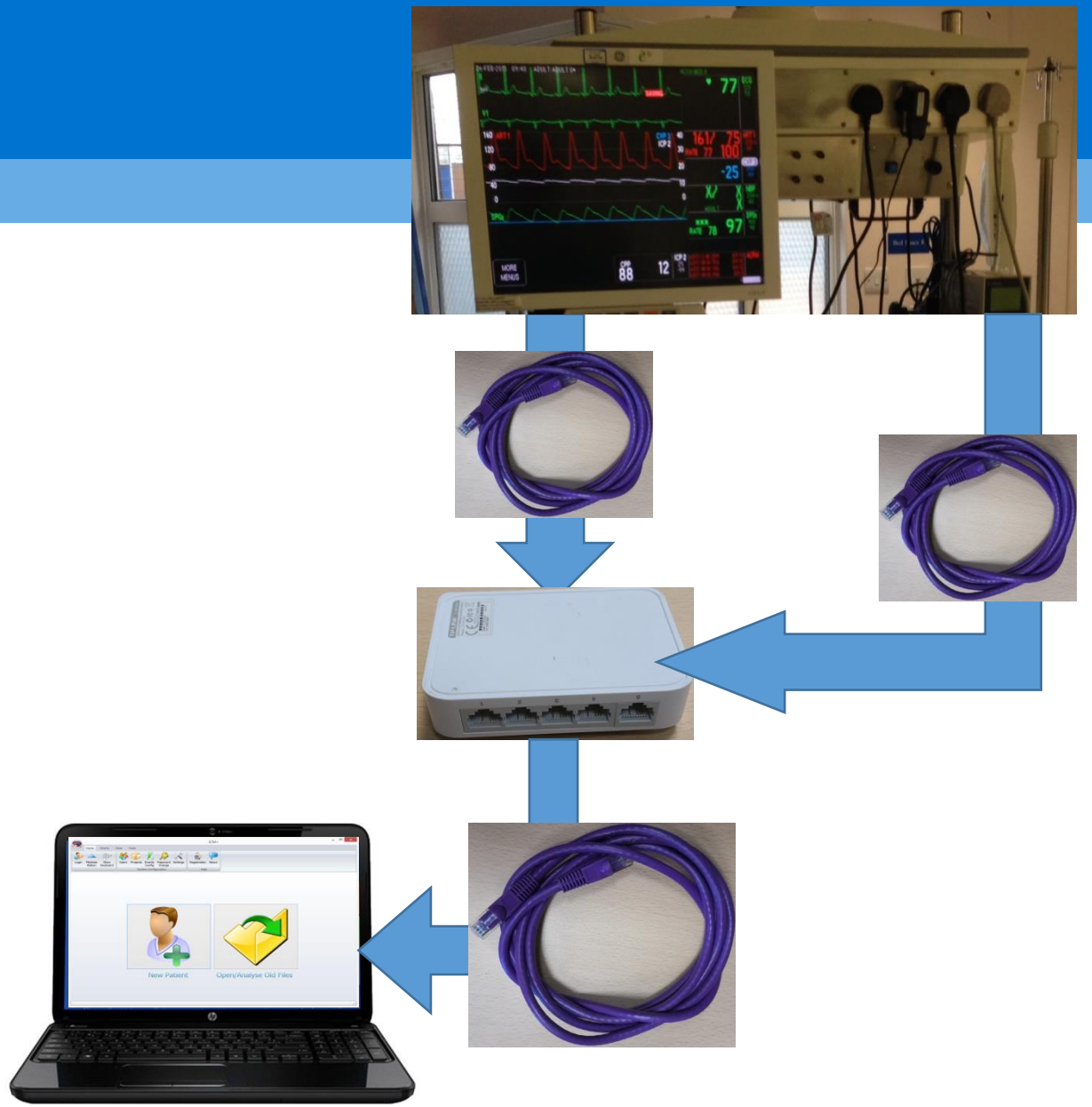
- **interventional multicenter randomized controlled trial**
- **based on a parameter that requires real time data collection and processing**
- **that requires a feedback from the clinical team.**

All of the things I will show taking COGiTATE as an example, can be adapted to other trials with different protocols

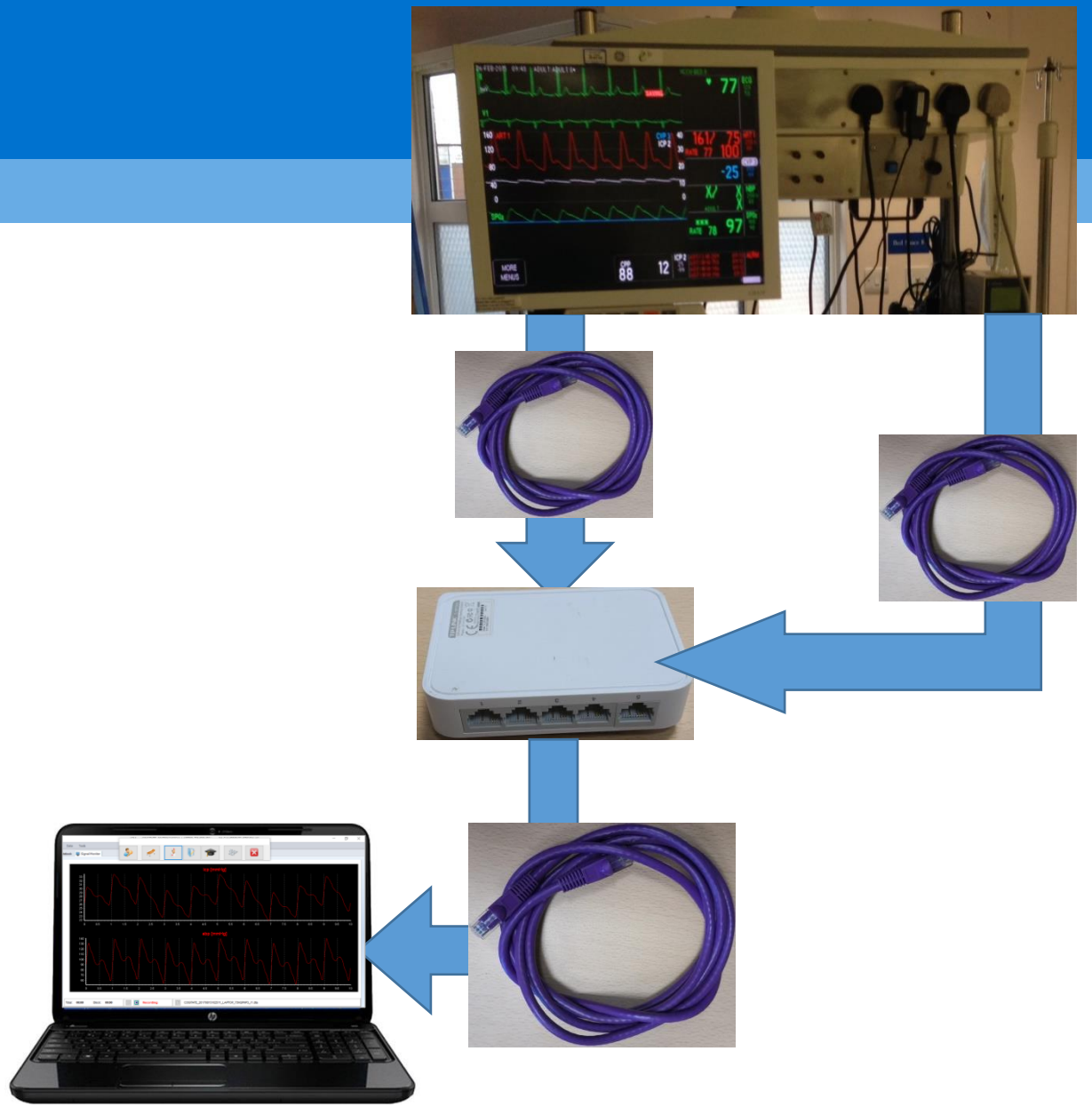
Daily life of a COGiTATE researcher

Daily life of a COGiTATE researcher

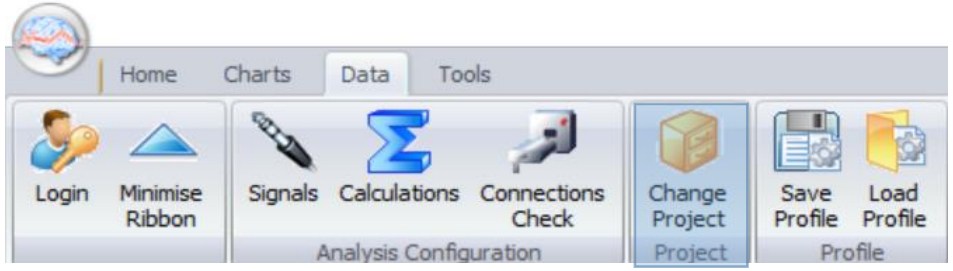
Local data collection

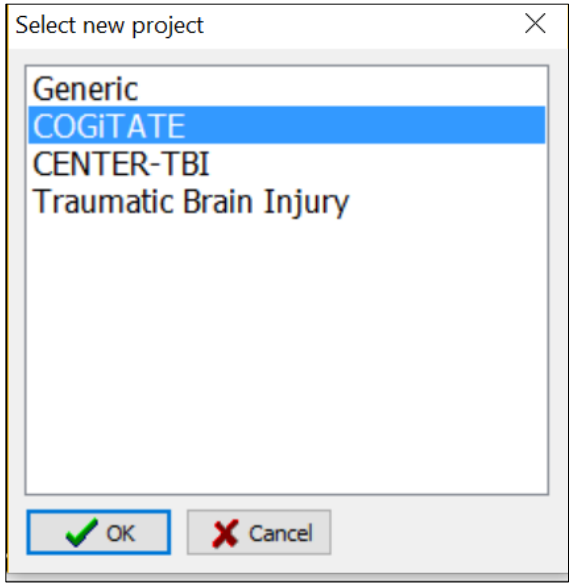


Local data collection

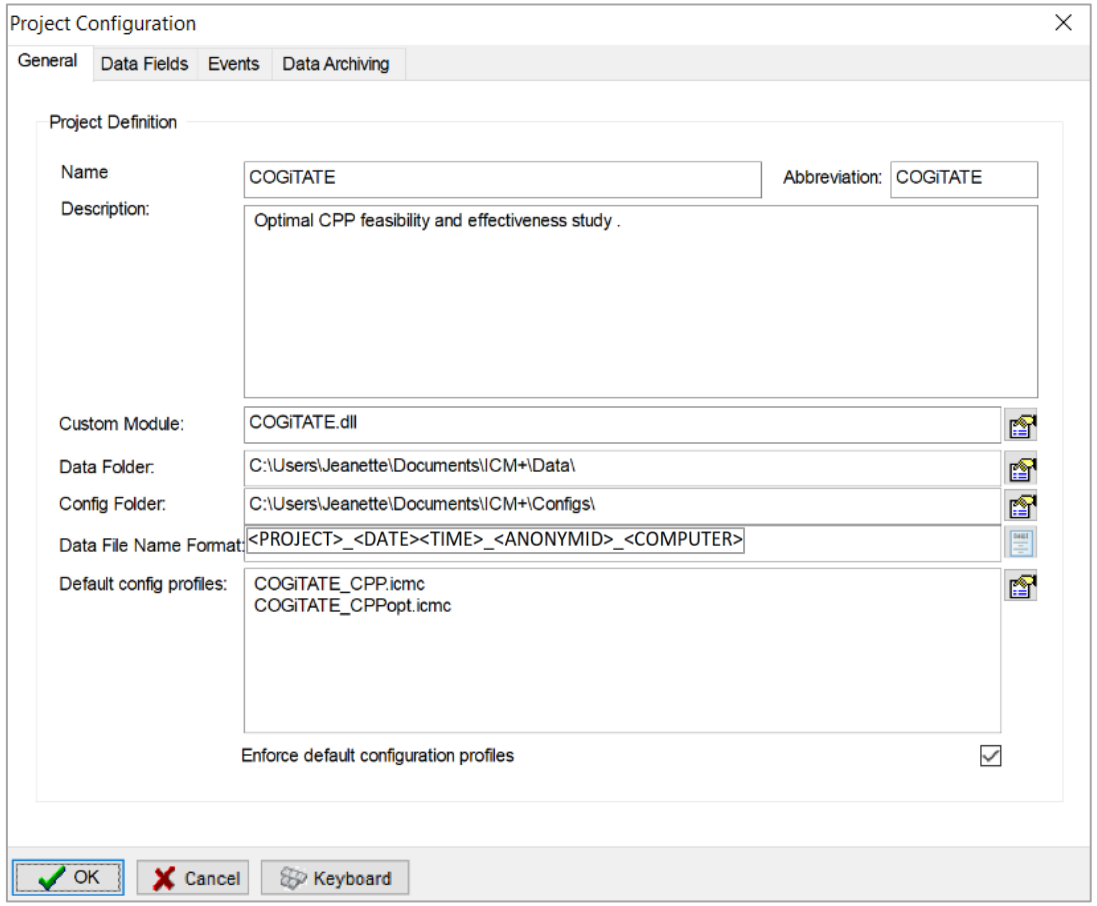


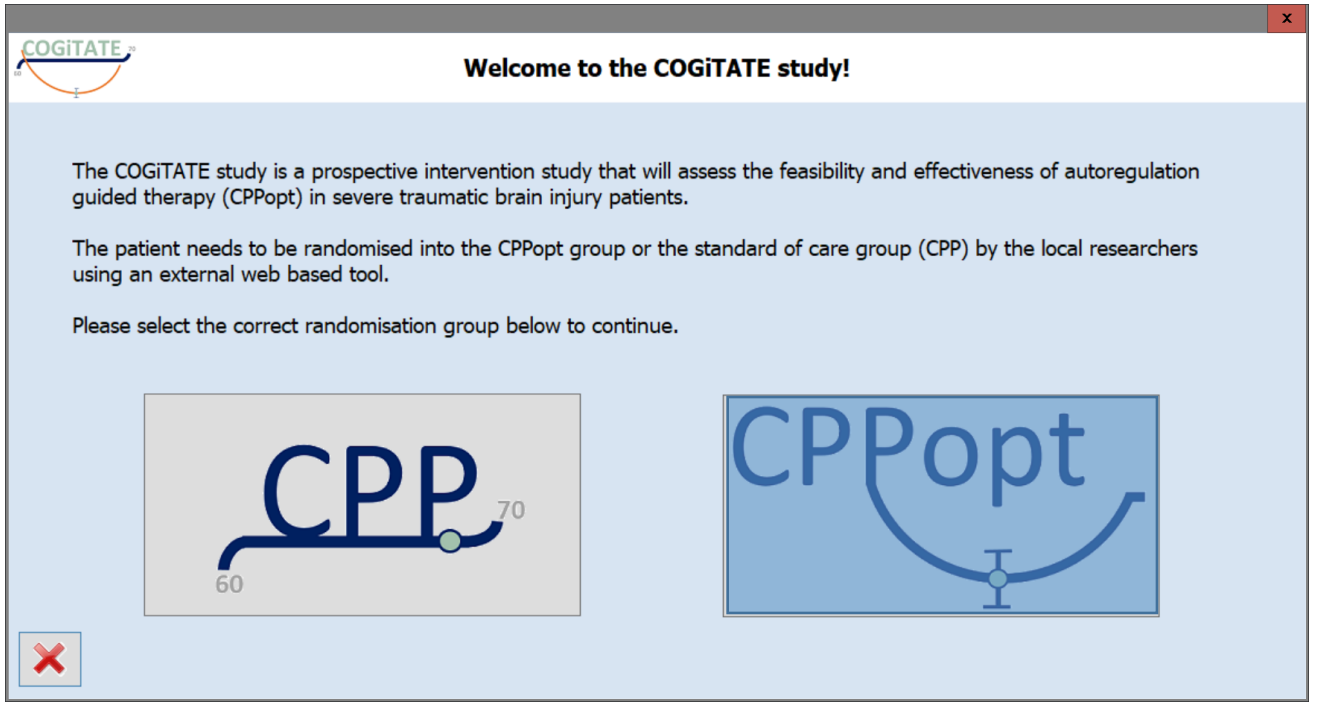
Start COGiTATE in ICM+ - change project





COGiTATE module in ICM+



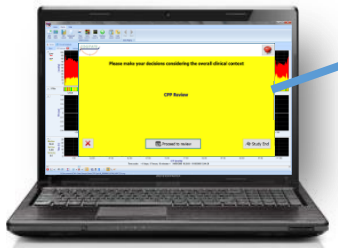


CPPopt arm

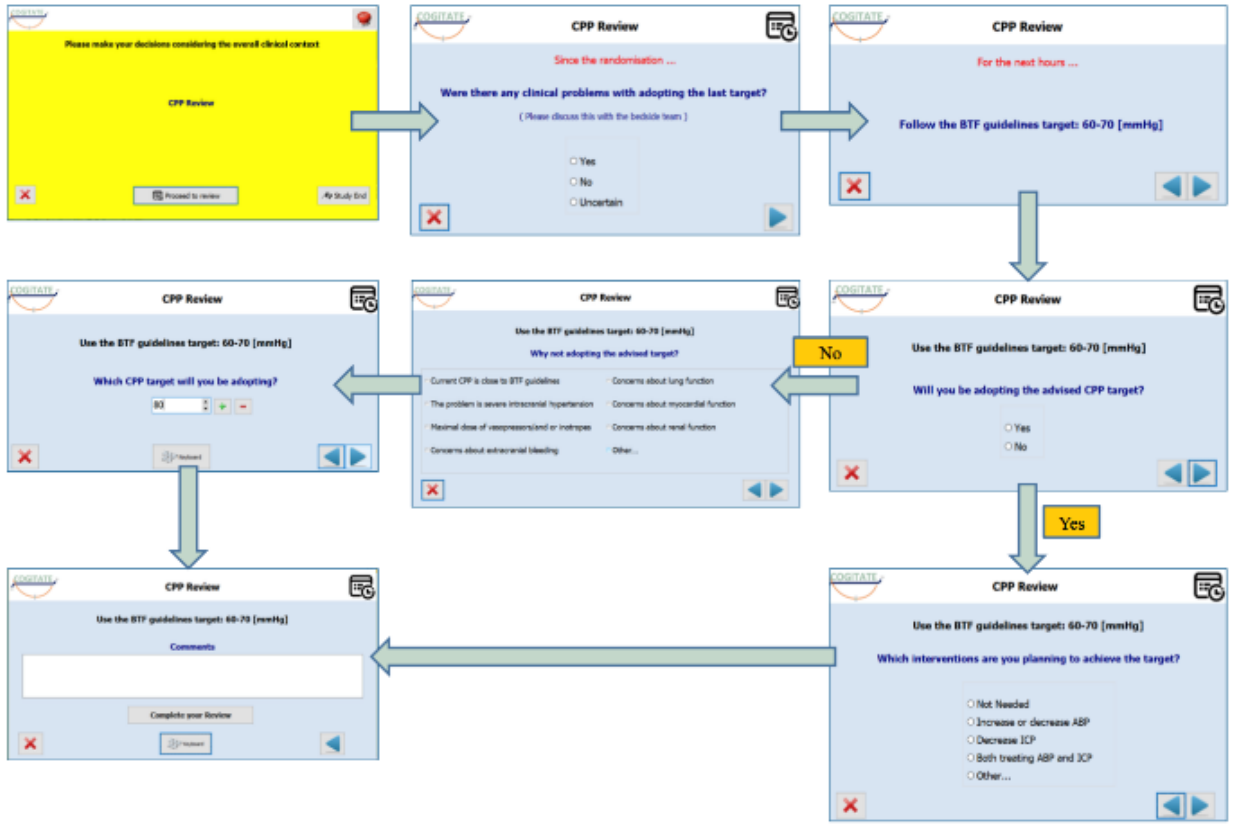
CPP review

Bedside monitor

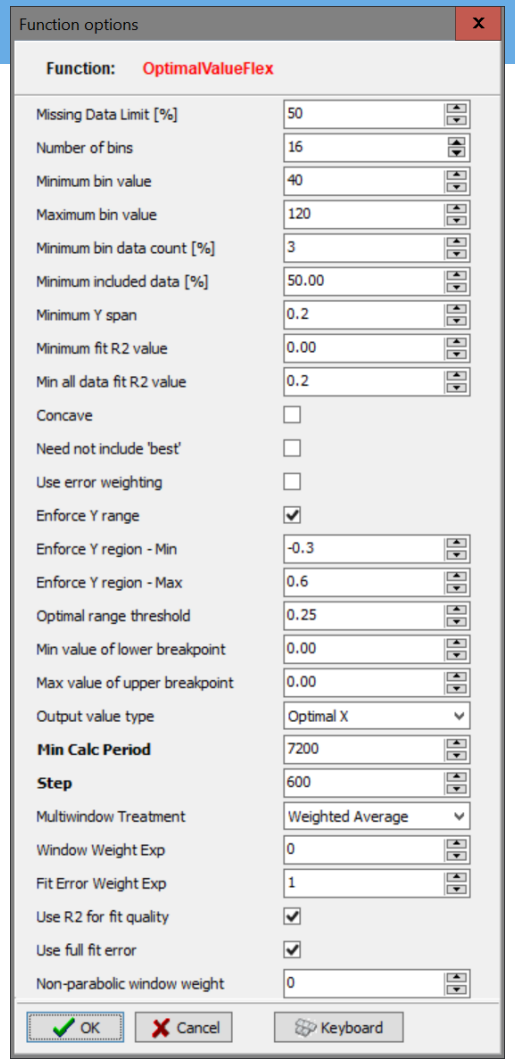
Laptop with ICM+

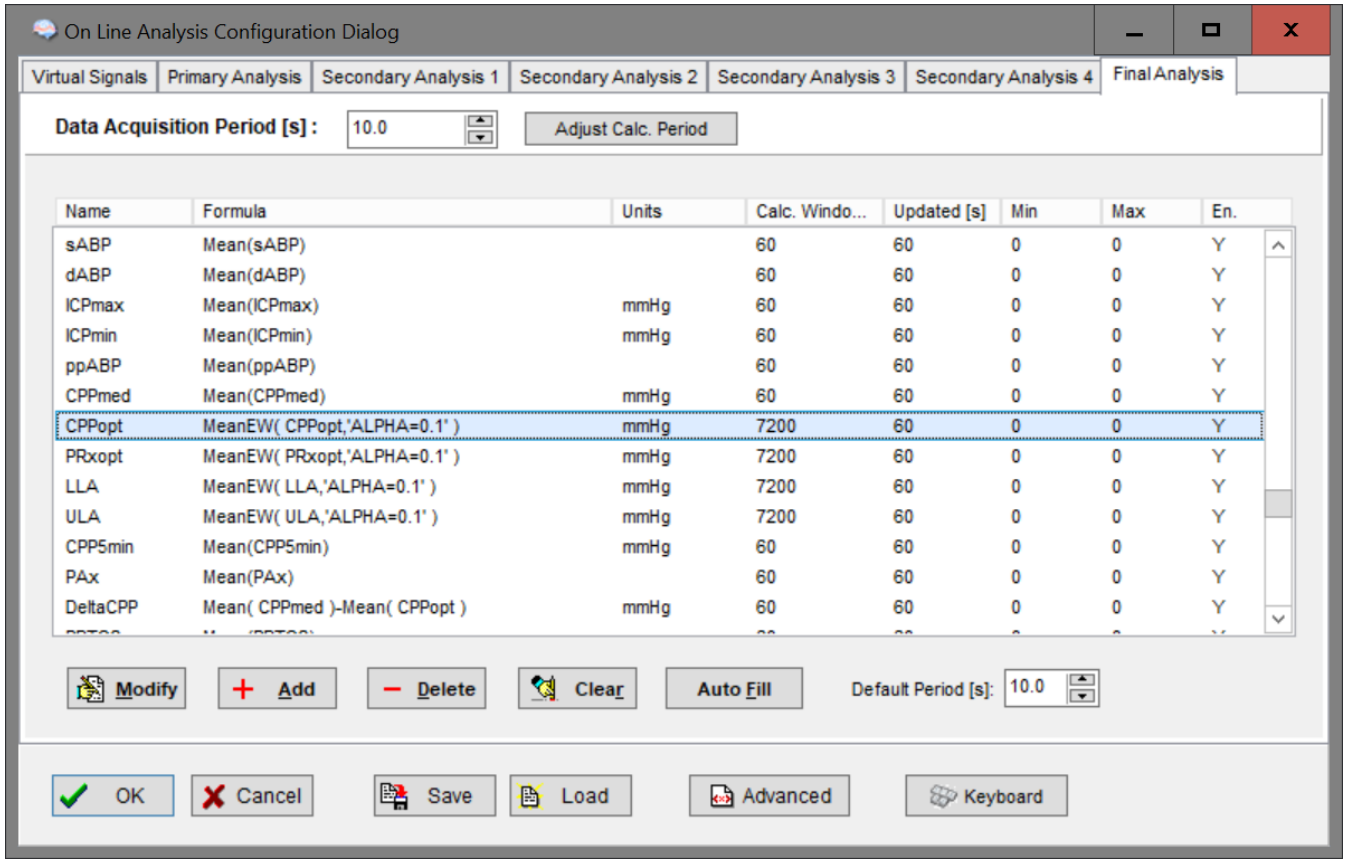


Clinical trial wizard plugins support



What information at the review?





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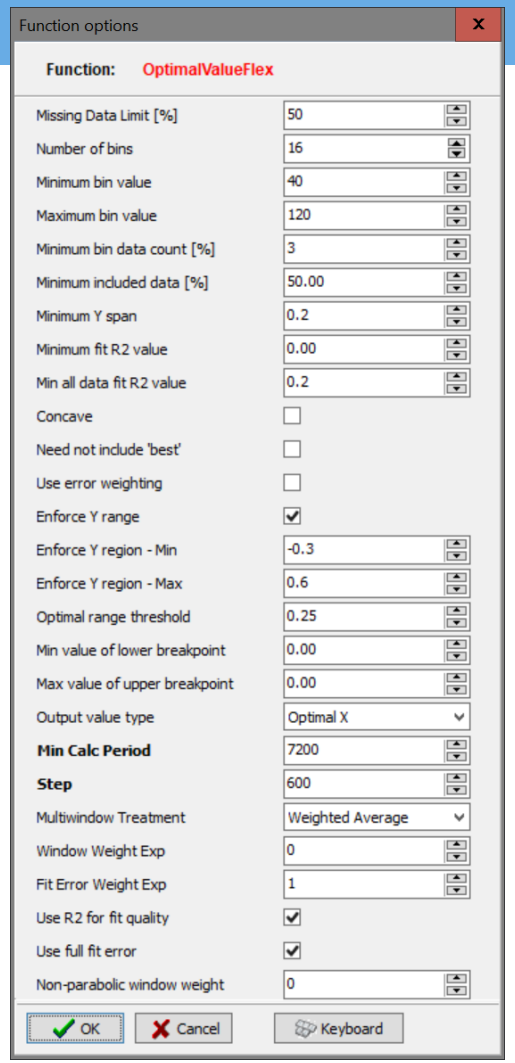
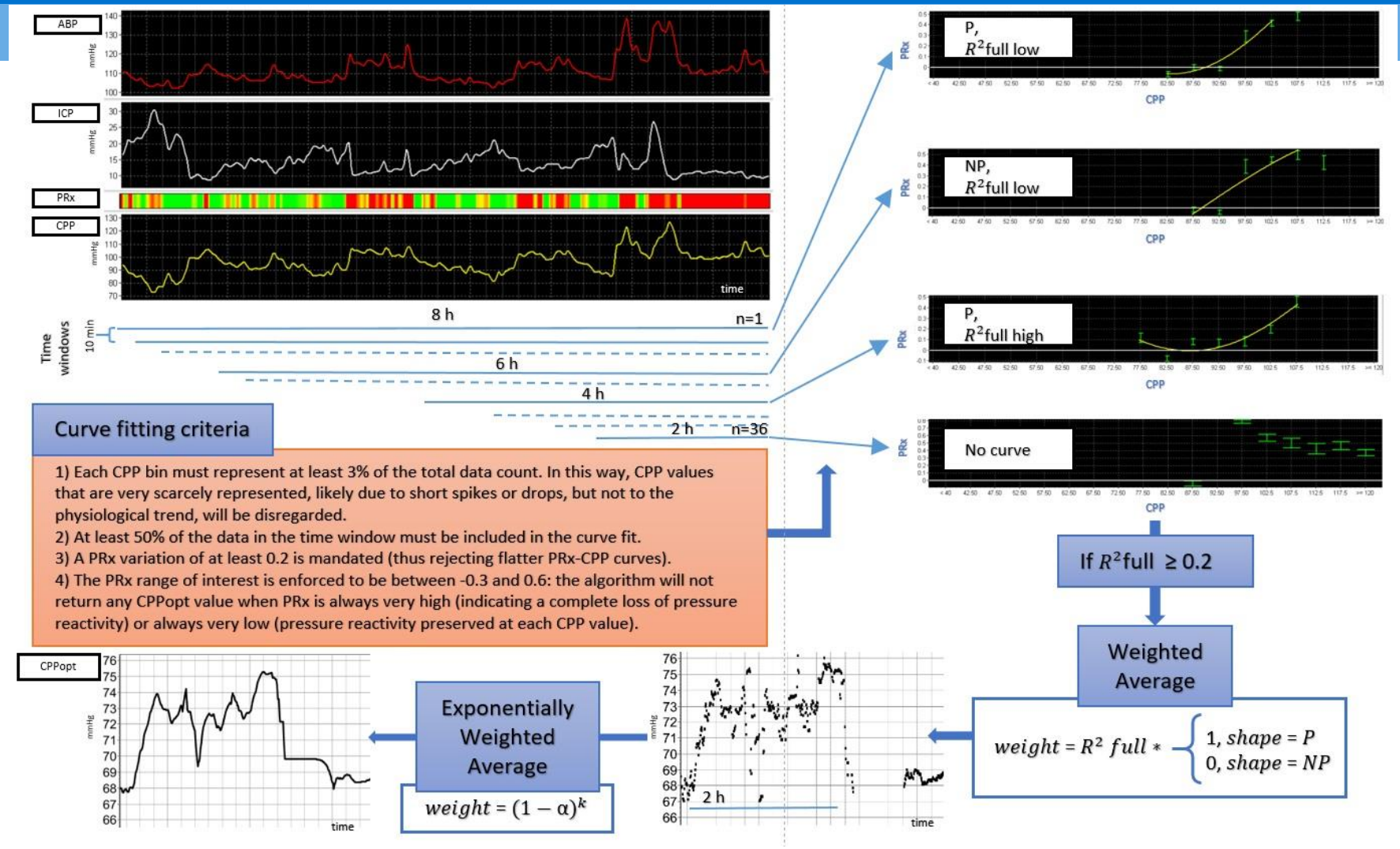




What information at the review?

UNIVERSITY OF CAMBRIDGE

COGiTATE 70 60

UNIVERSITÀ DEGLI STUDI DI MILANO

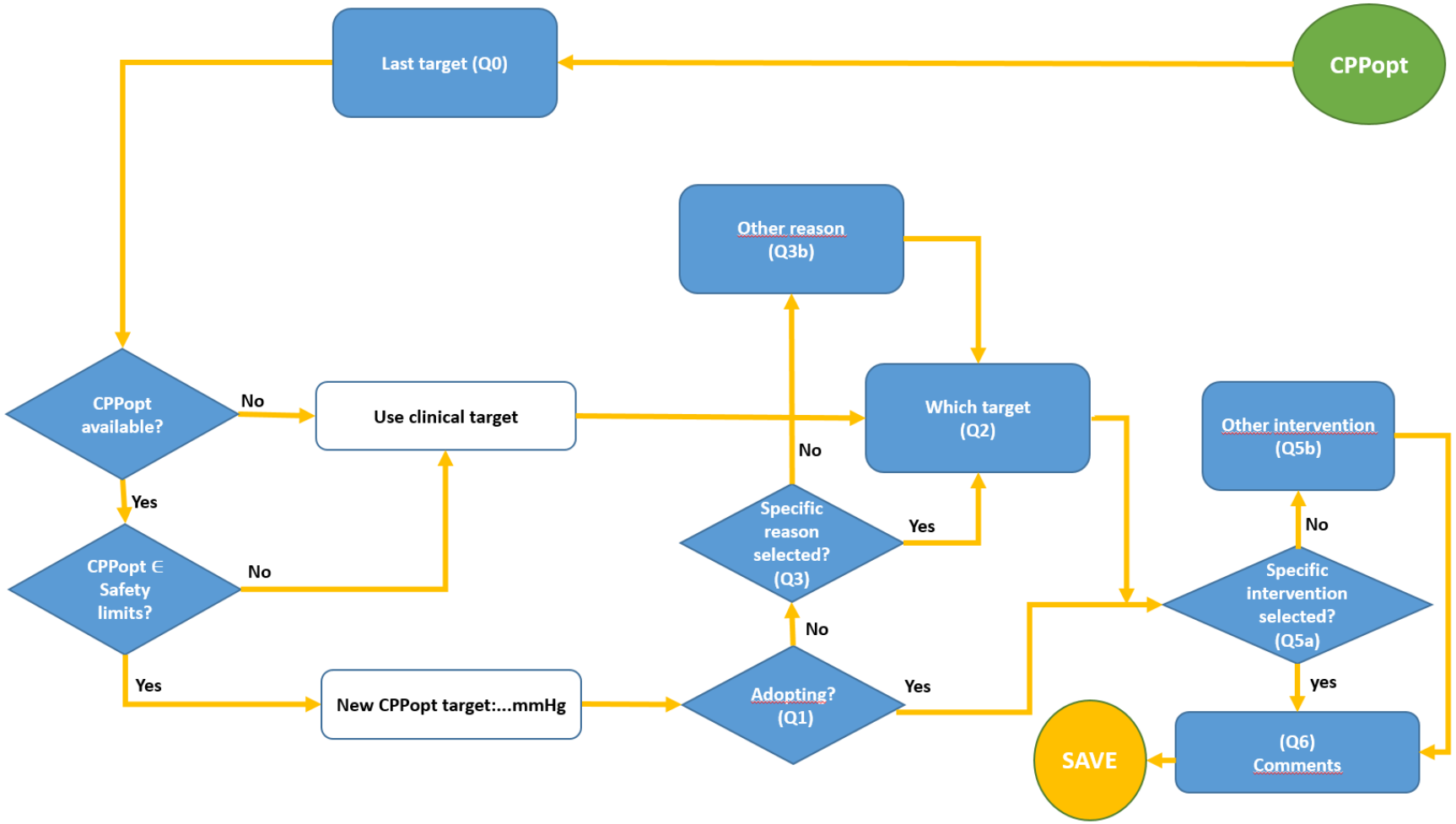
Optimal cerebral perfusion pressure assessed with a multi-window weighted approach adapted for prospective use: a validation study

E.Beqiri [1-2], A.Ercole [3], M.Aries [4], M.Cabeleira [1], A.Czigler [1,5], A.Liberti [4,2], J.Tas [4], J.Donnelly [1], L. Xiuyun [1,6], M.Fedriga [1,7], K.H.Chu [1], FA.Zeiler [3,8], M.Czosnyka [1], P. Smielewski [1]

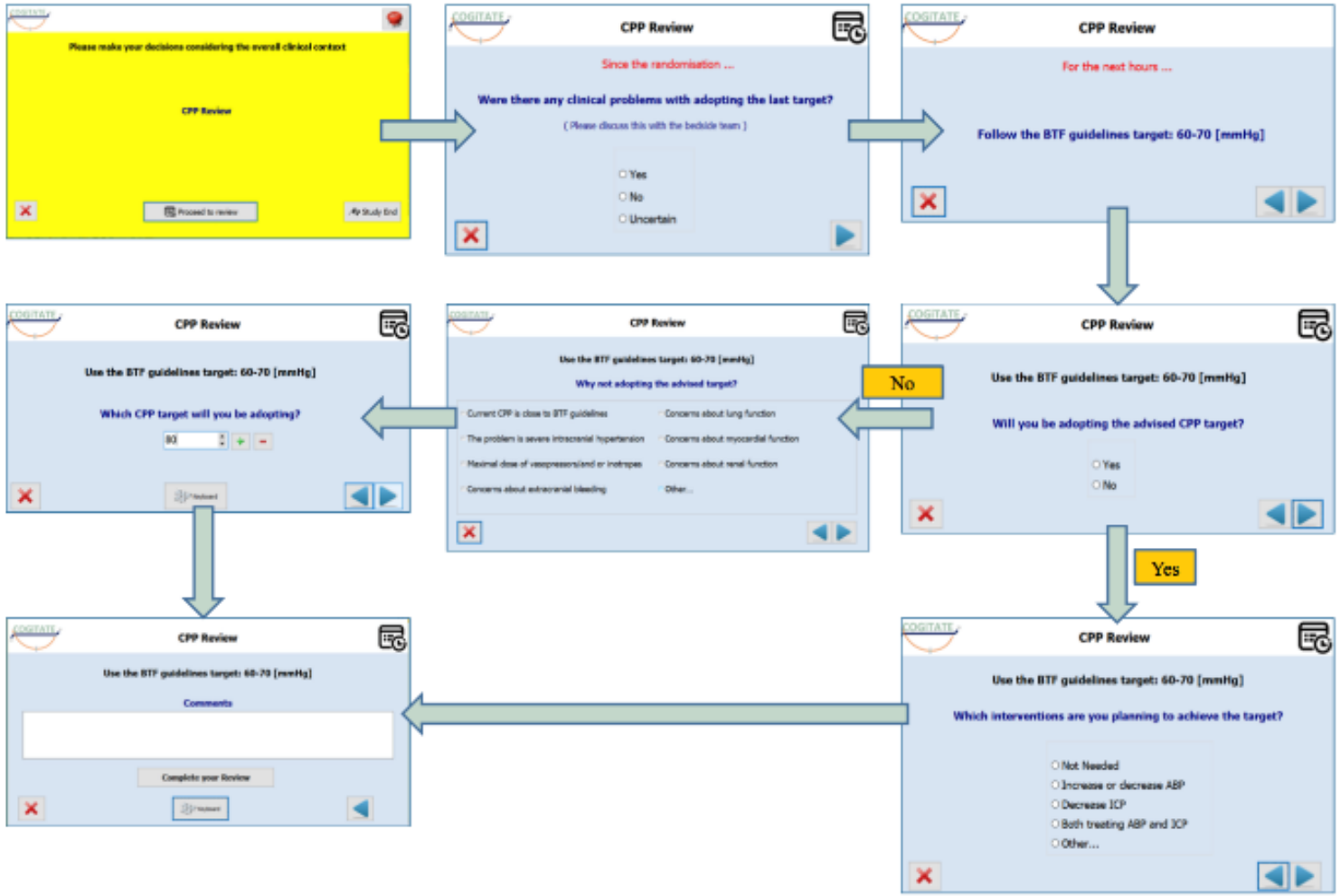
[1]Brain Physics Laboratory, Division of Neurosurgery, Department of Clinical Neurosciences, University of Cambridge, UK ; [2]Department of Physiology and Transplantation, Milan University, Italy; [3]Division of Anaesthesia, University of Cambridge, UK; [4]Department of Intensive Care, Maastricht UMC, The Netherlands; [5]Department of Neurosurgery and Szentagothai Research Center, University of Pecs, Medical School, Pecs, Hungary; [6]Department of physiological nursing, university of California, San Francisco, CA,94122, USA; [7]Department of Anesthesia, Critical care and Emergency. Spedali Civili University Hospital, Piazzale Spedali civili 1, Brescia 25123, Italy; [8]Department of Surgery, Rady Faculty of Health Sciences, University of Manitoba, Canada

Poster n ***305***

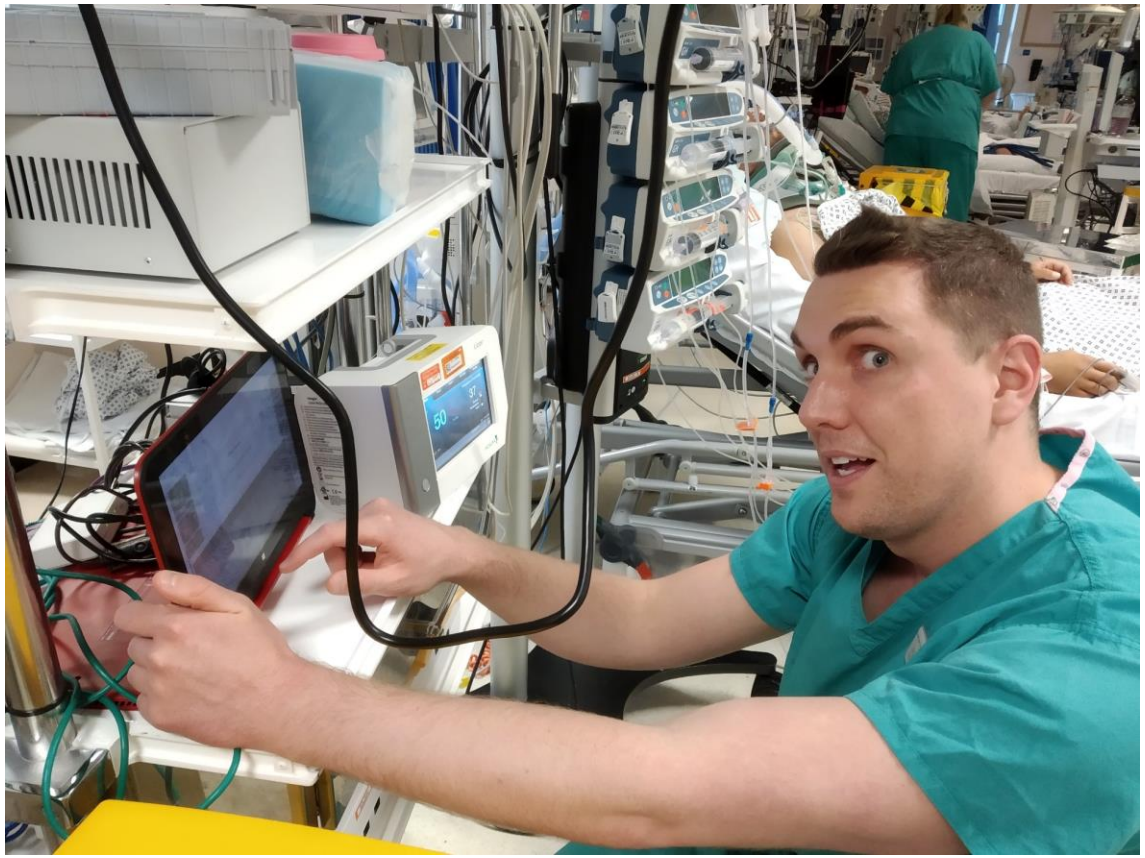
Logic for trial assistance



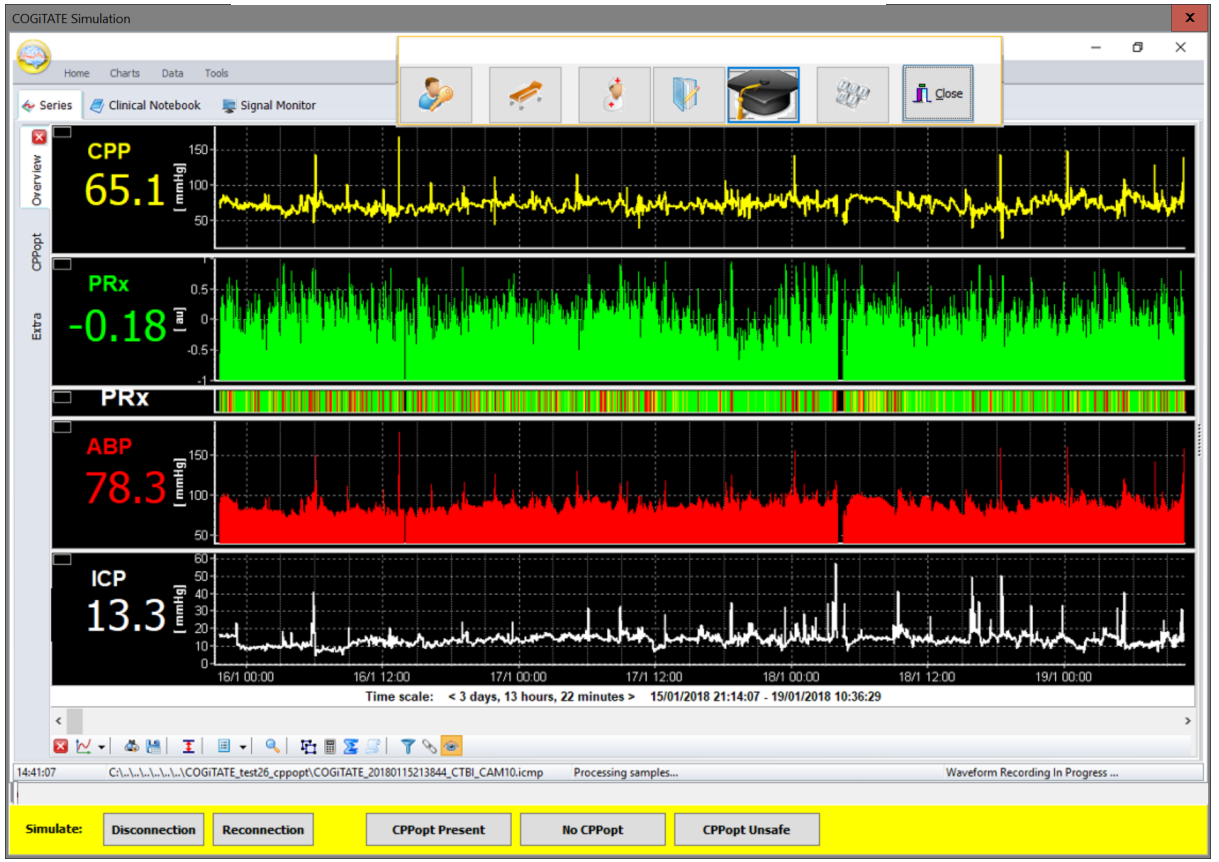
Forms for trial assistance



Simulator



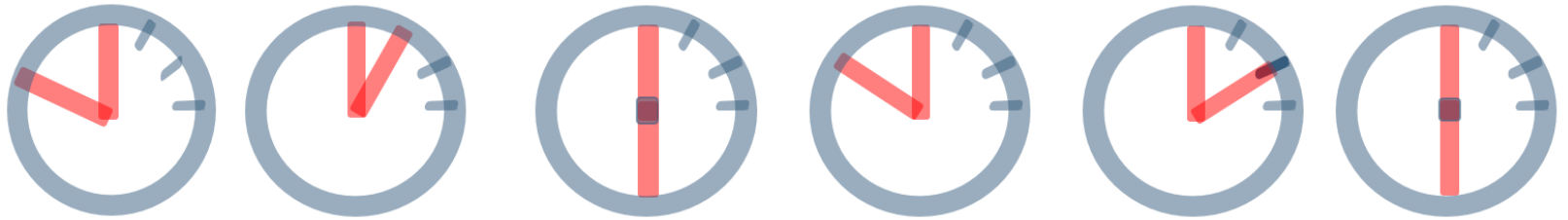
COGiTATE_Simul



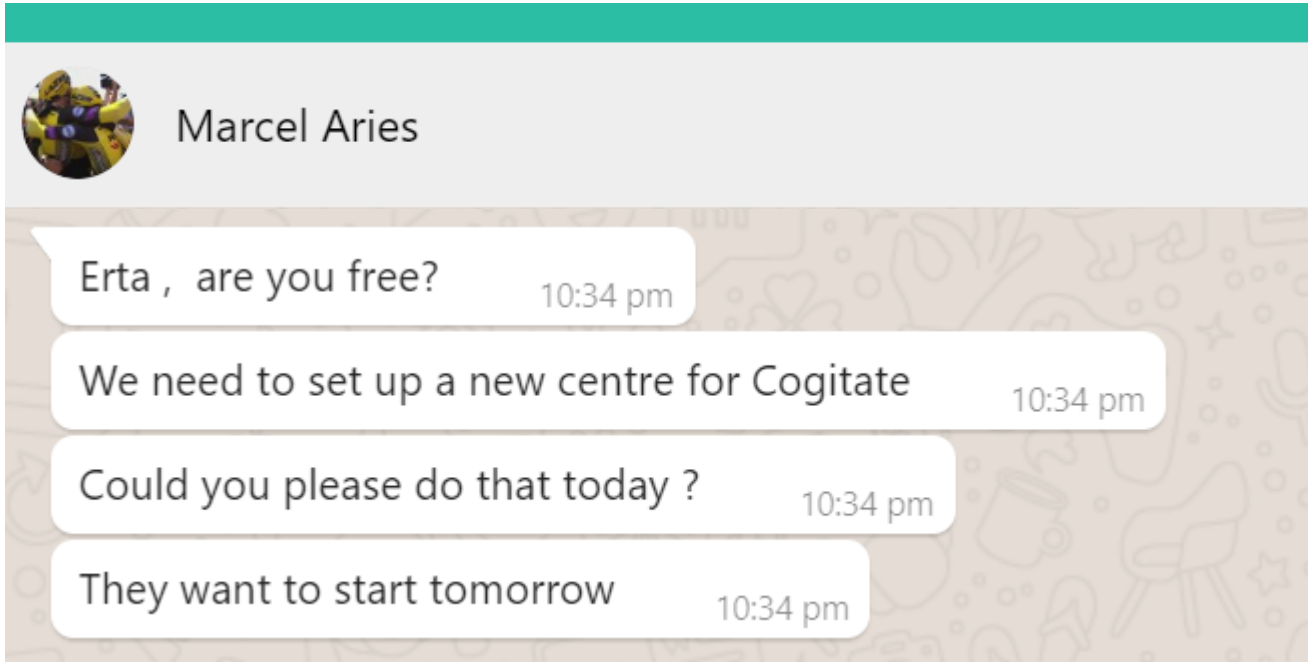
Time settings

Bedside monitor

Laptop with ICM+



New center setting up



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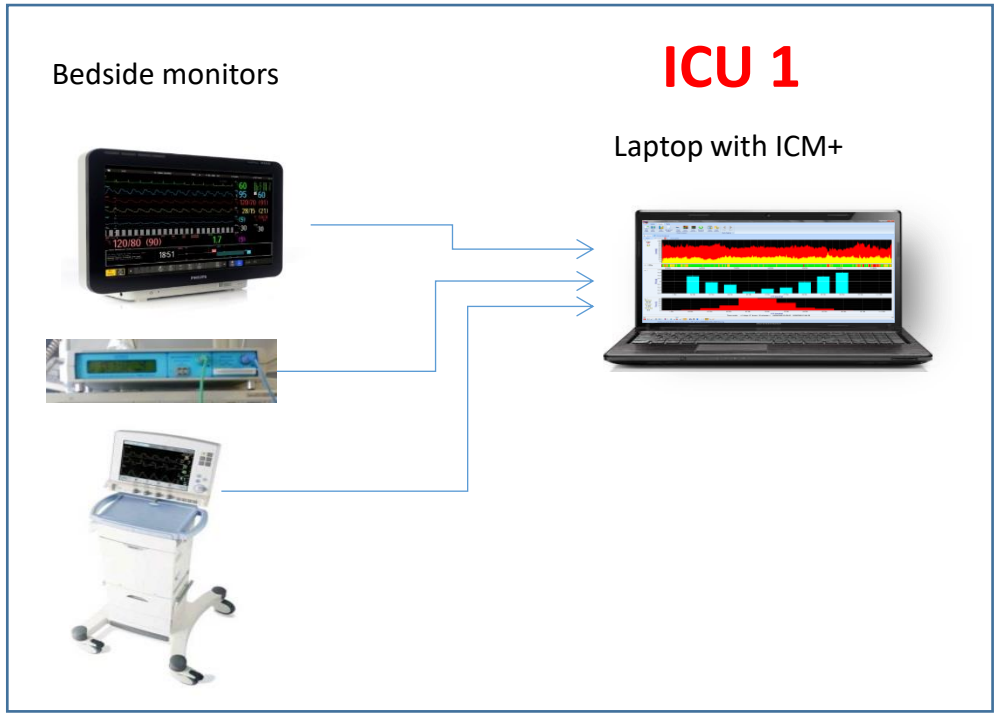

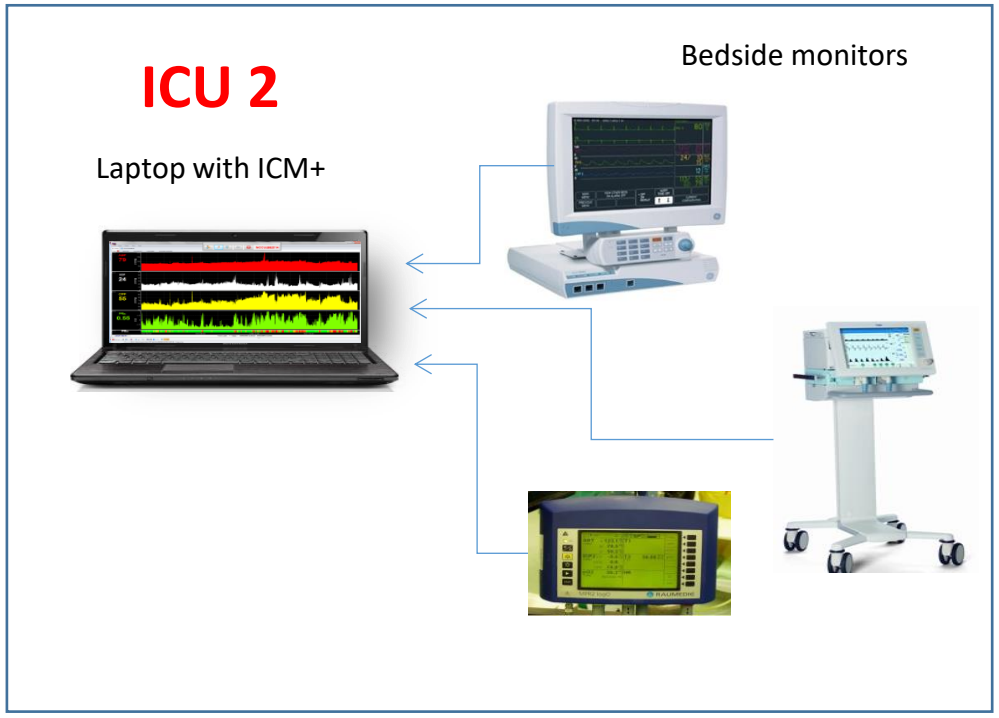

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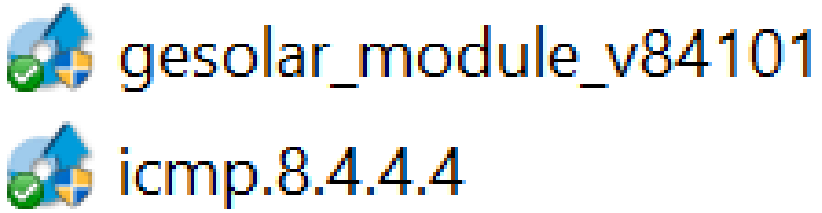

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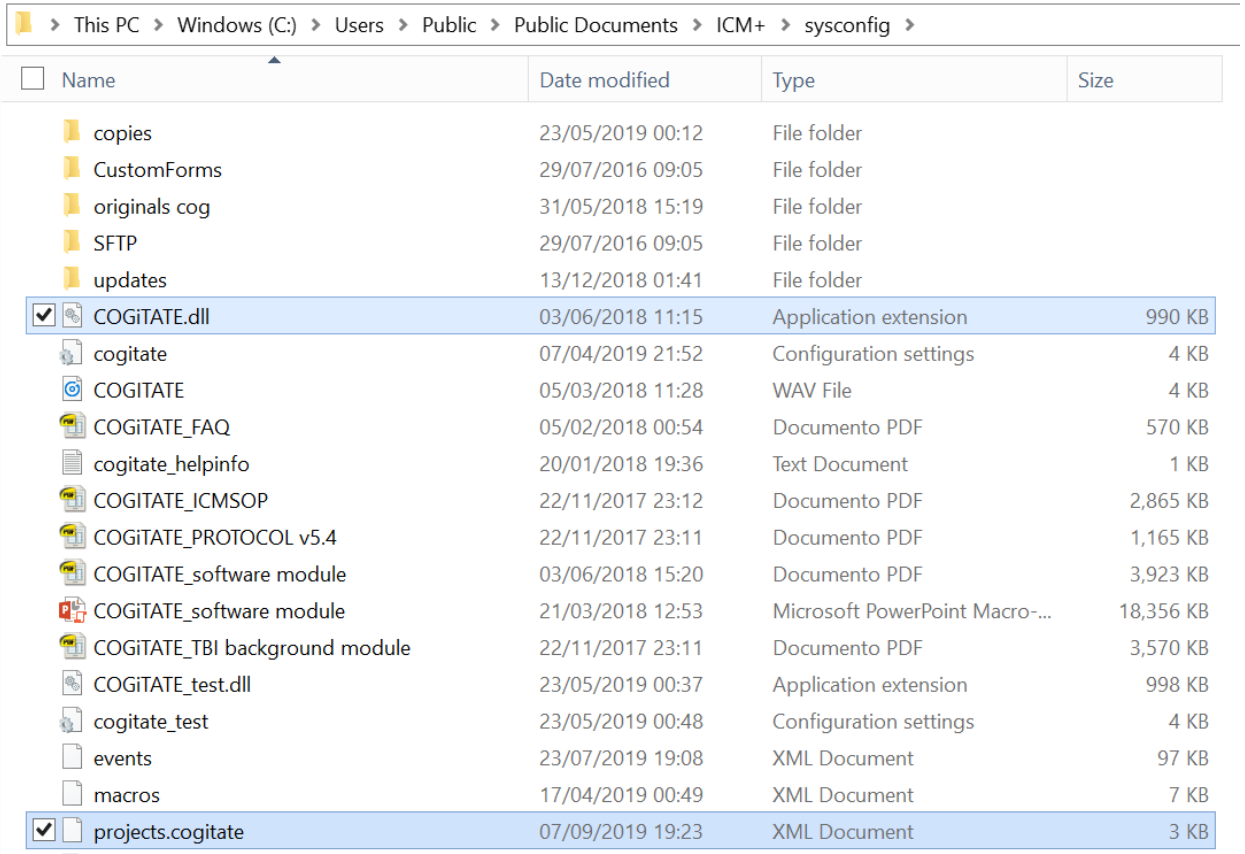

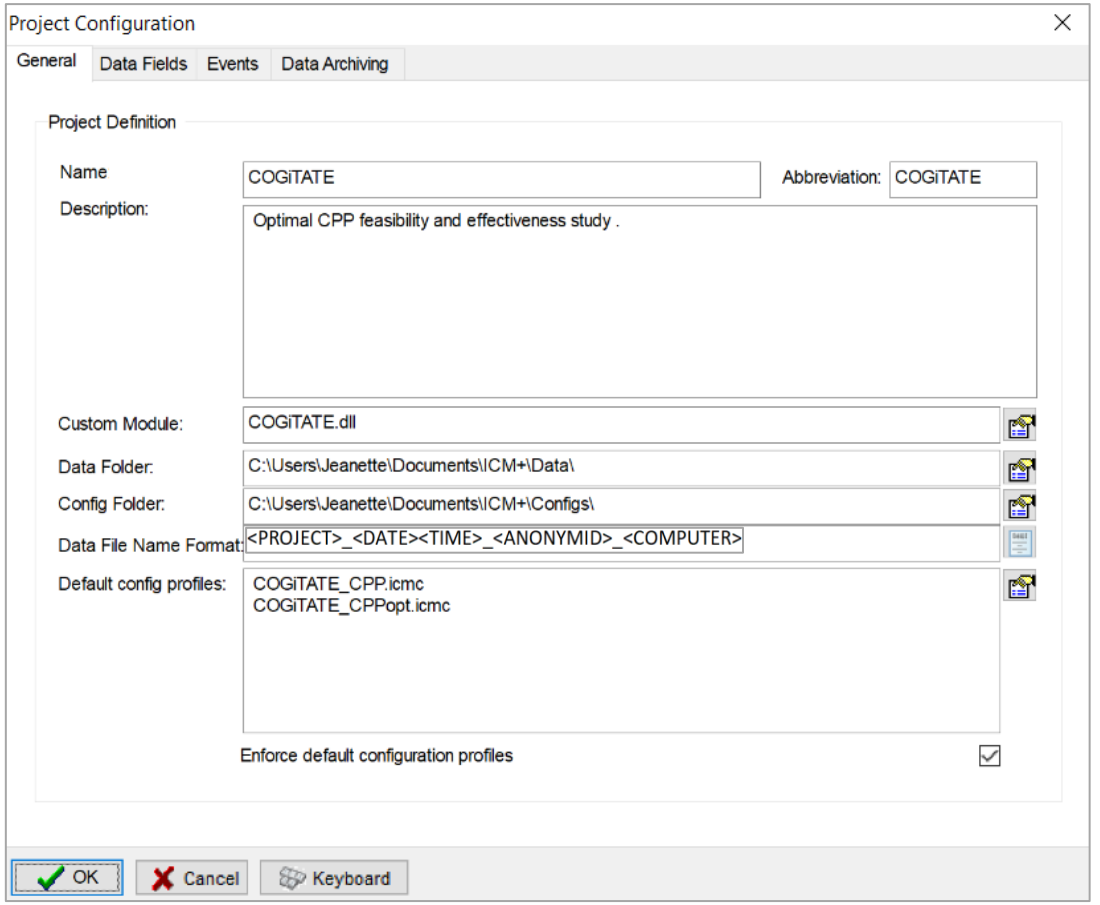

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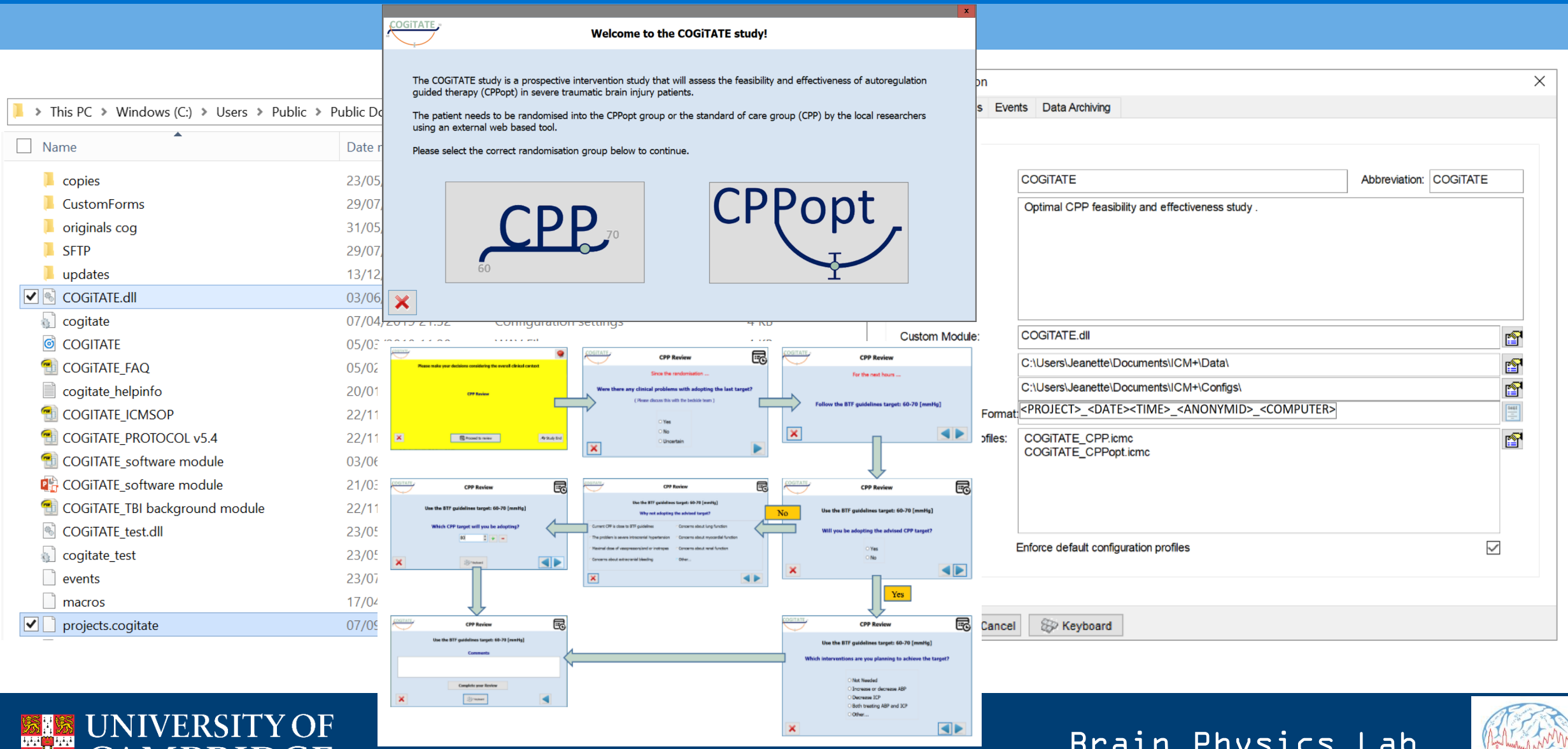

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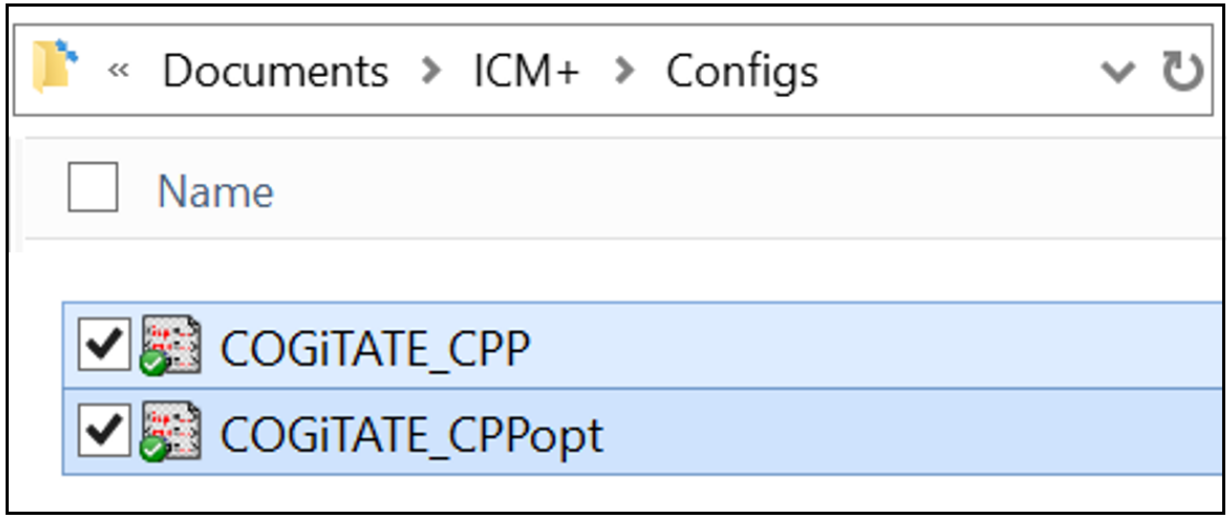

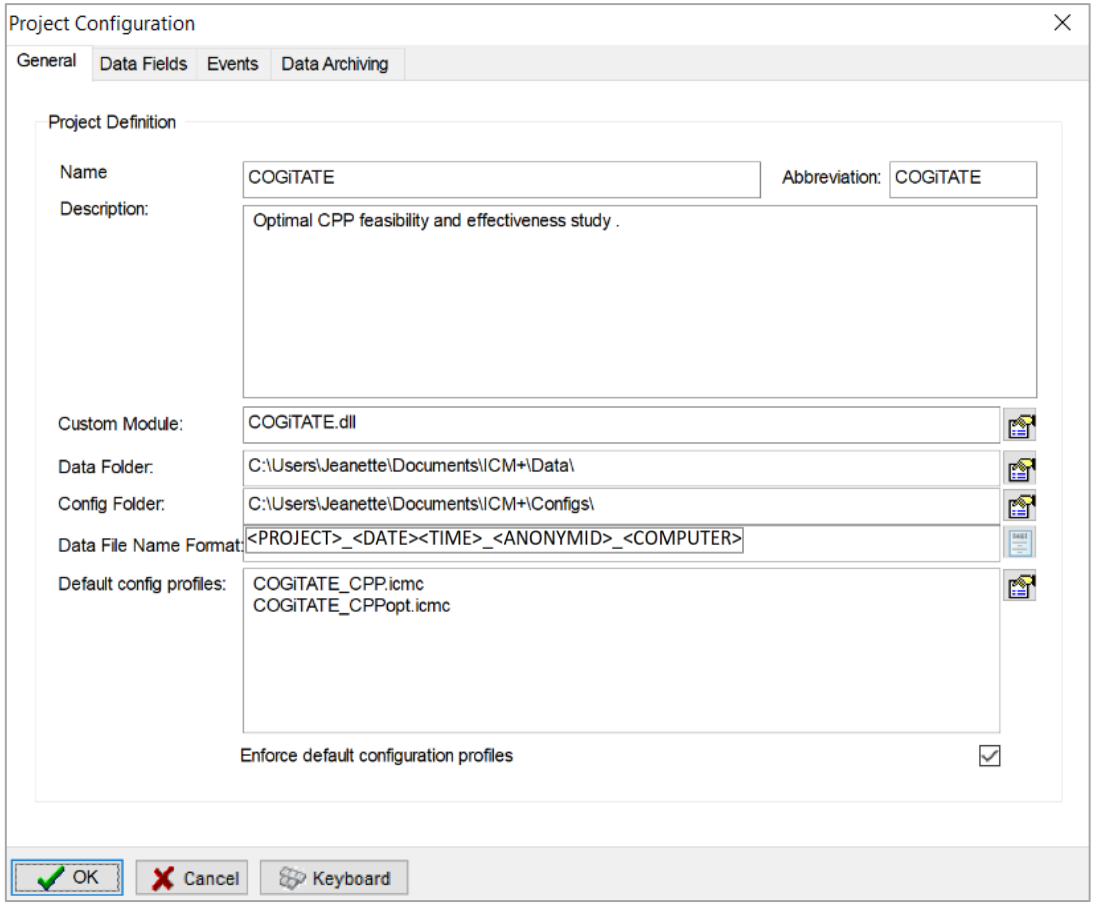

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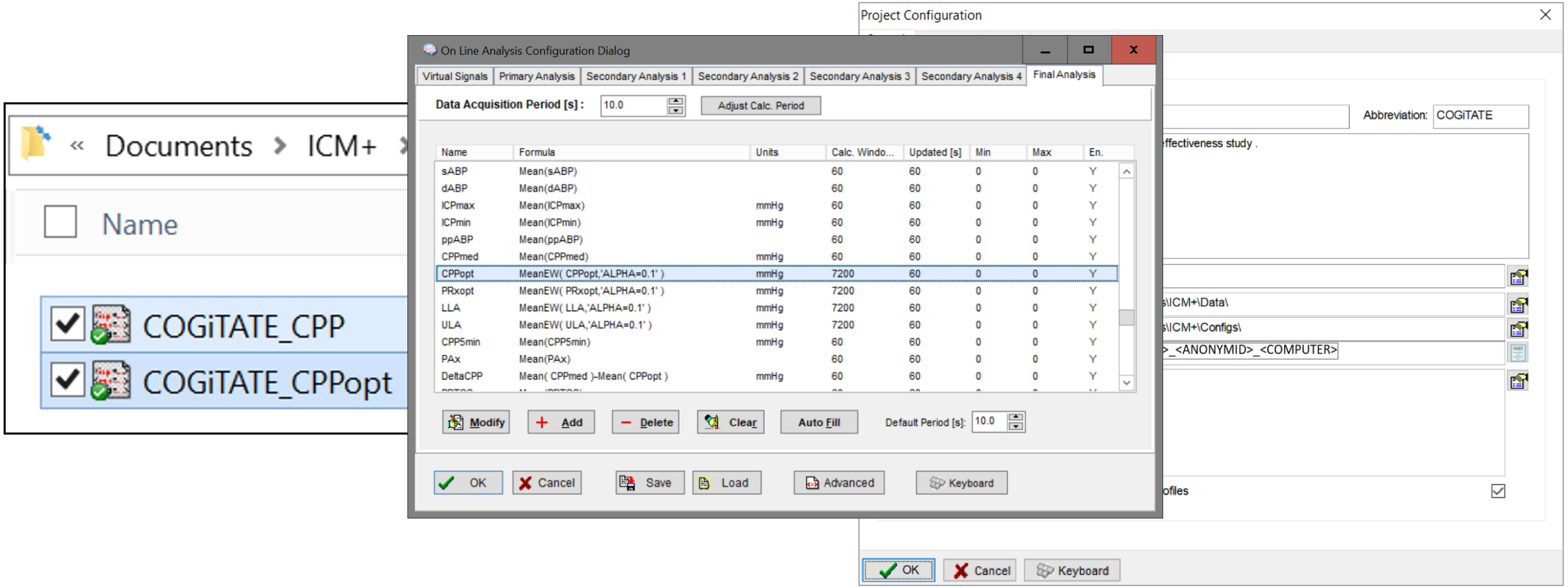

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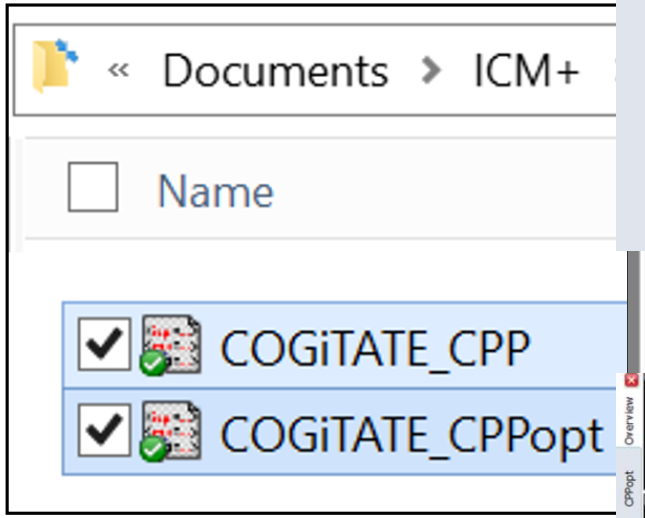
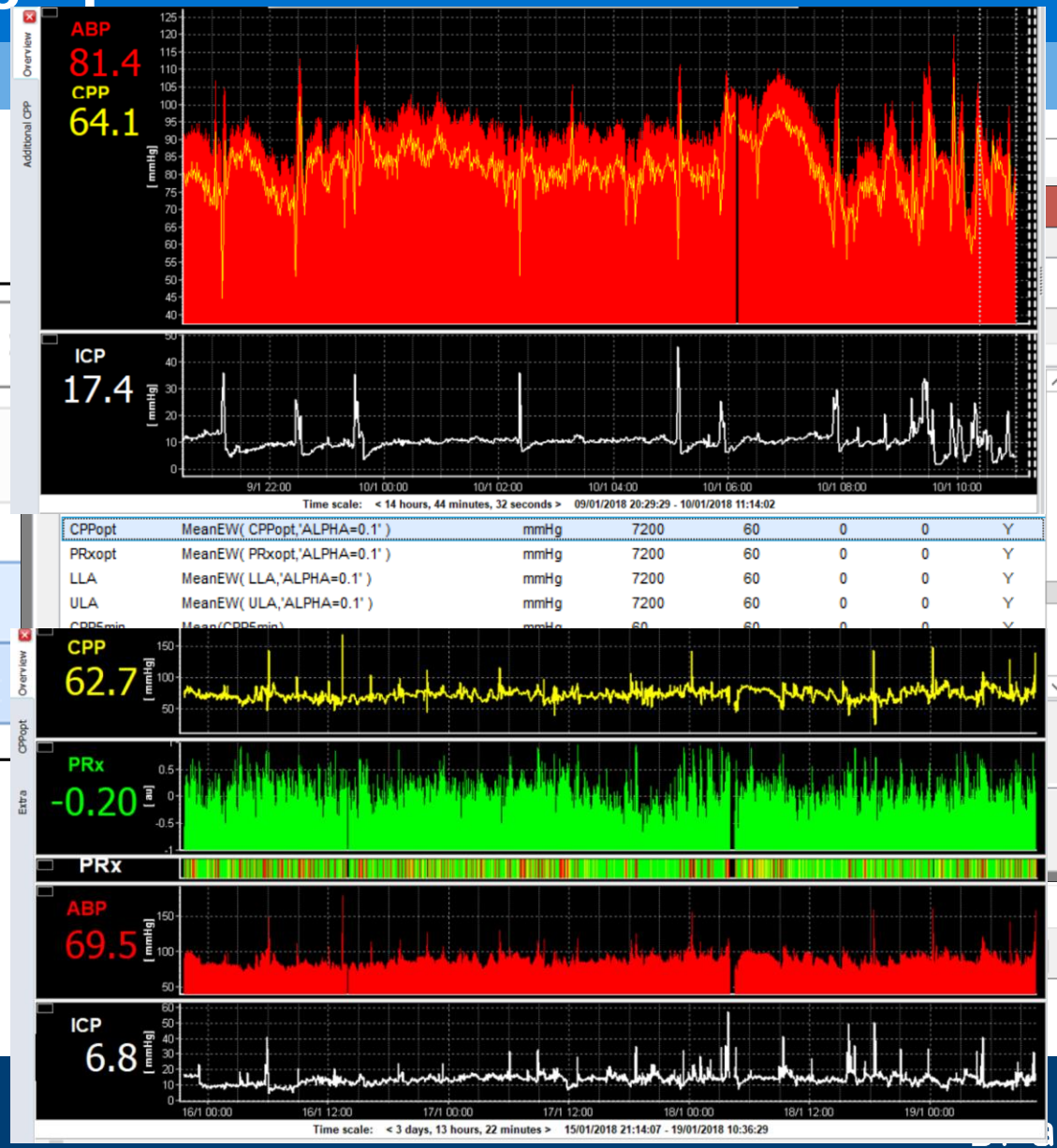
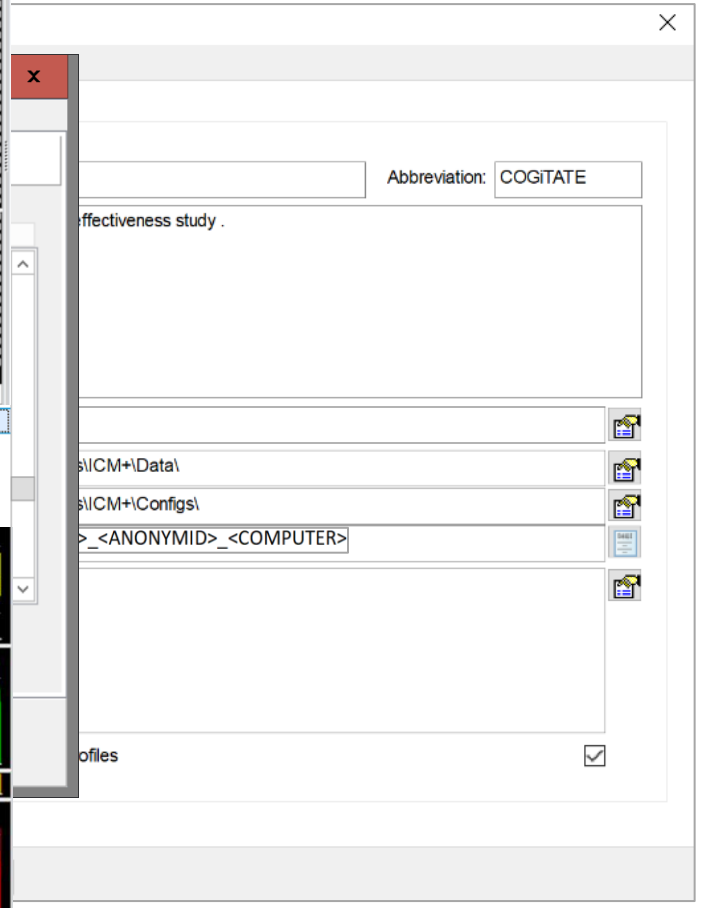
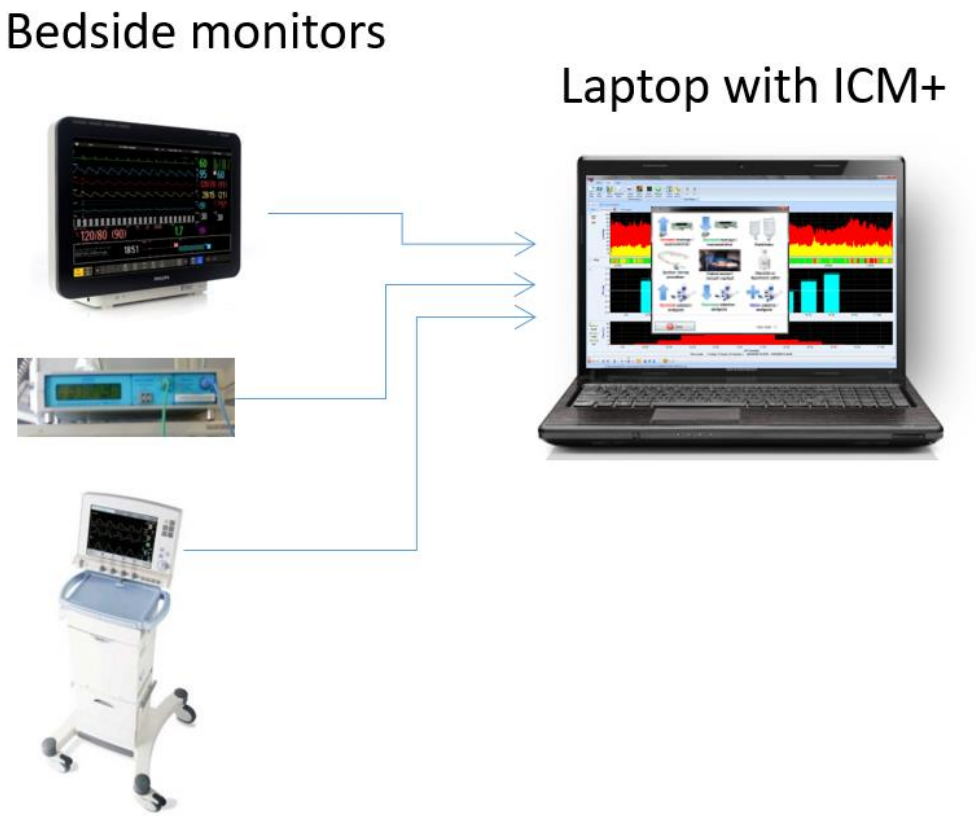
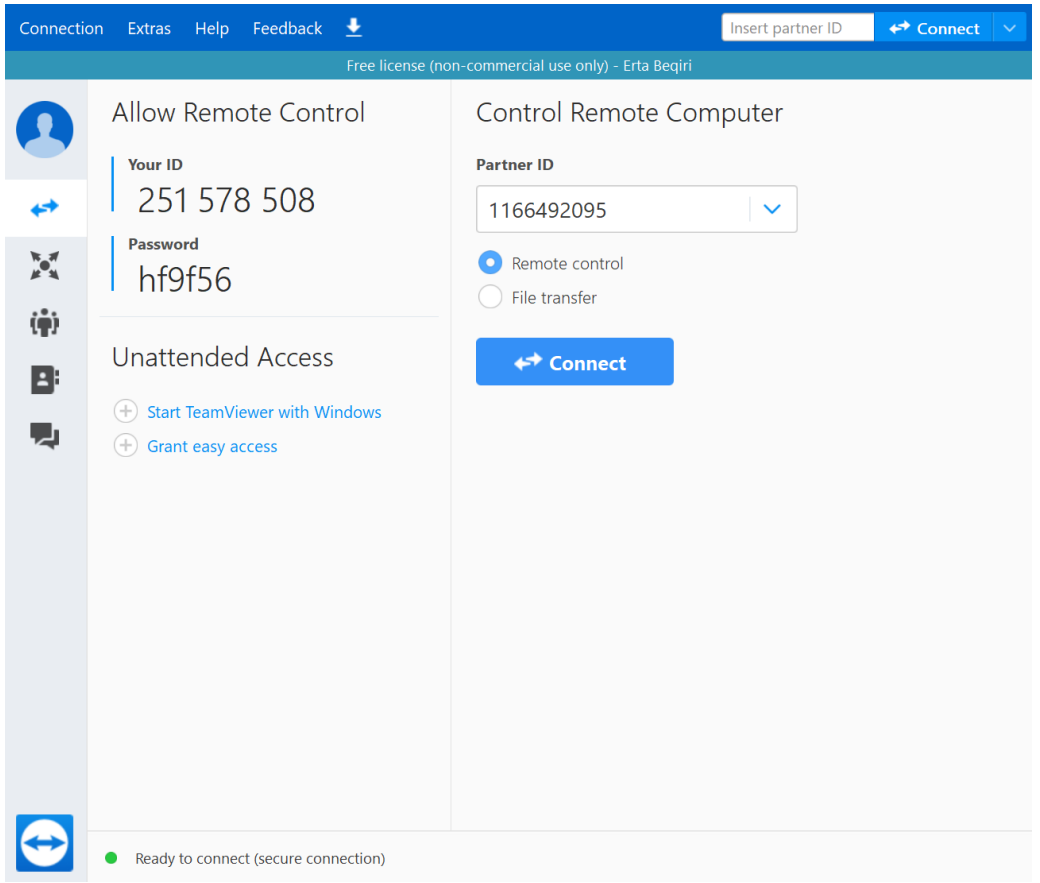




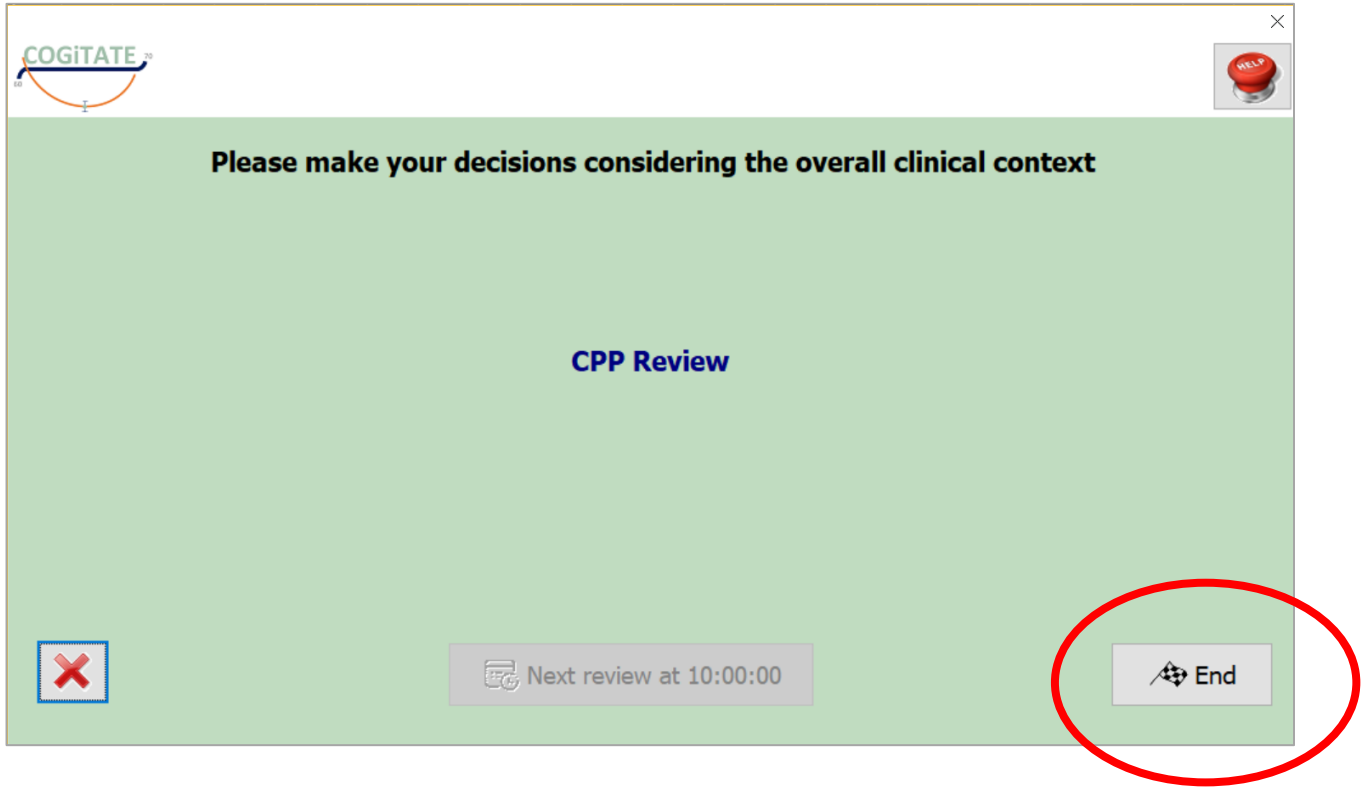


Remote setting up and troubleshooting





End the study

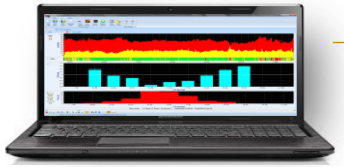


Data collection: multicentre collaborative tools

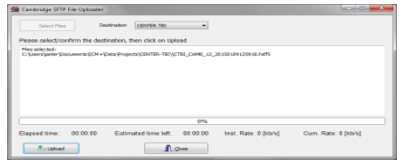
Bedside monitors

ICU 1

Laptop with ICM+



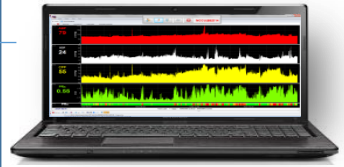
Data Upload Form



File Server in a coordinating centre

ICU 2

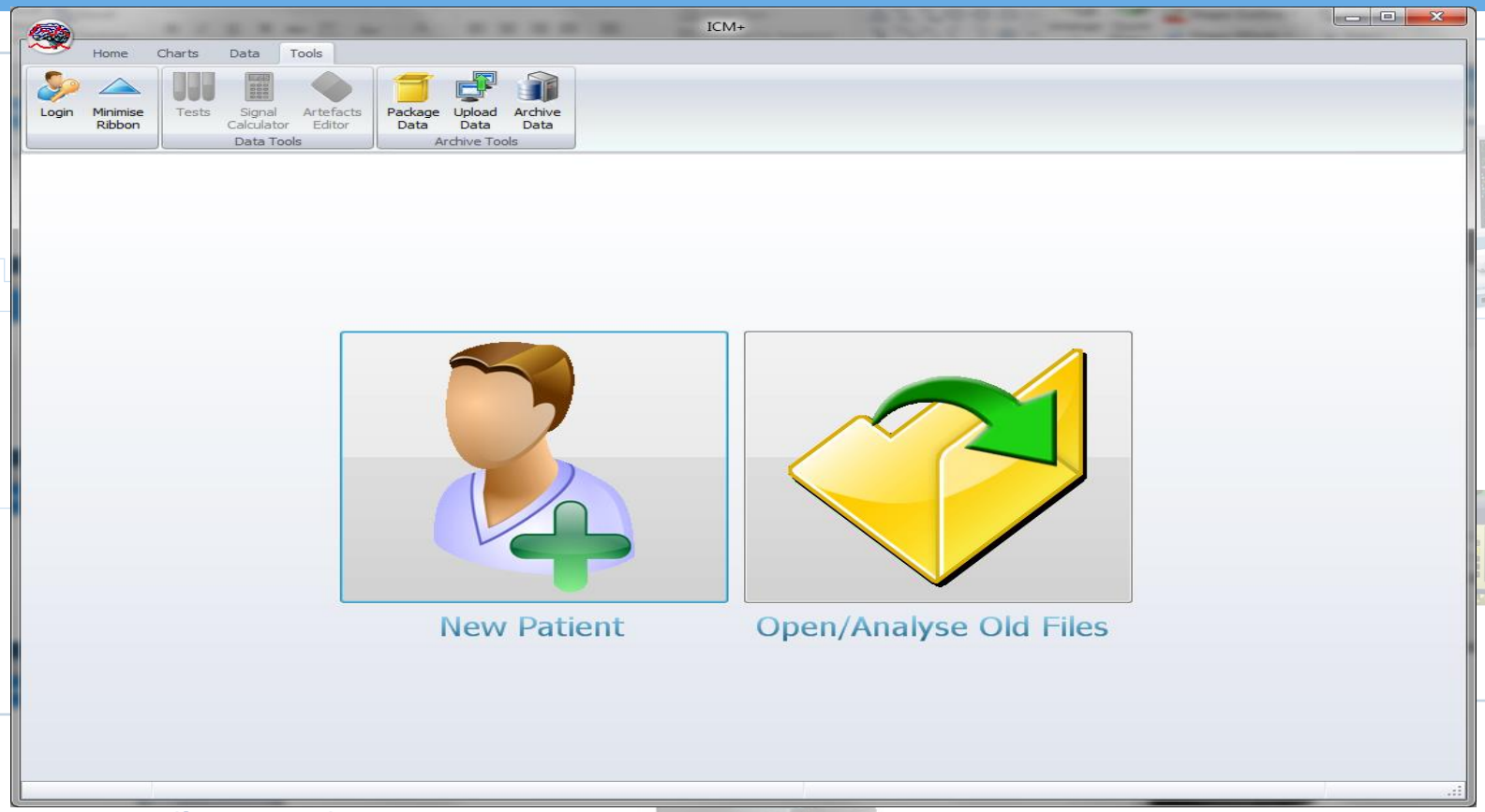
Laptop with ICM+



Bedside monitors

Data collection: multicentre collaborative tools

Bedside monitors

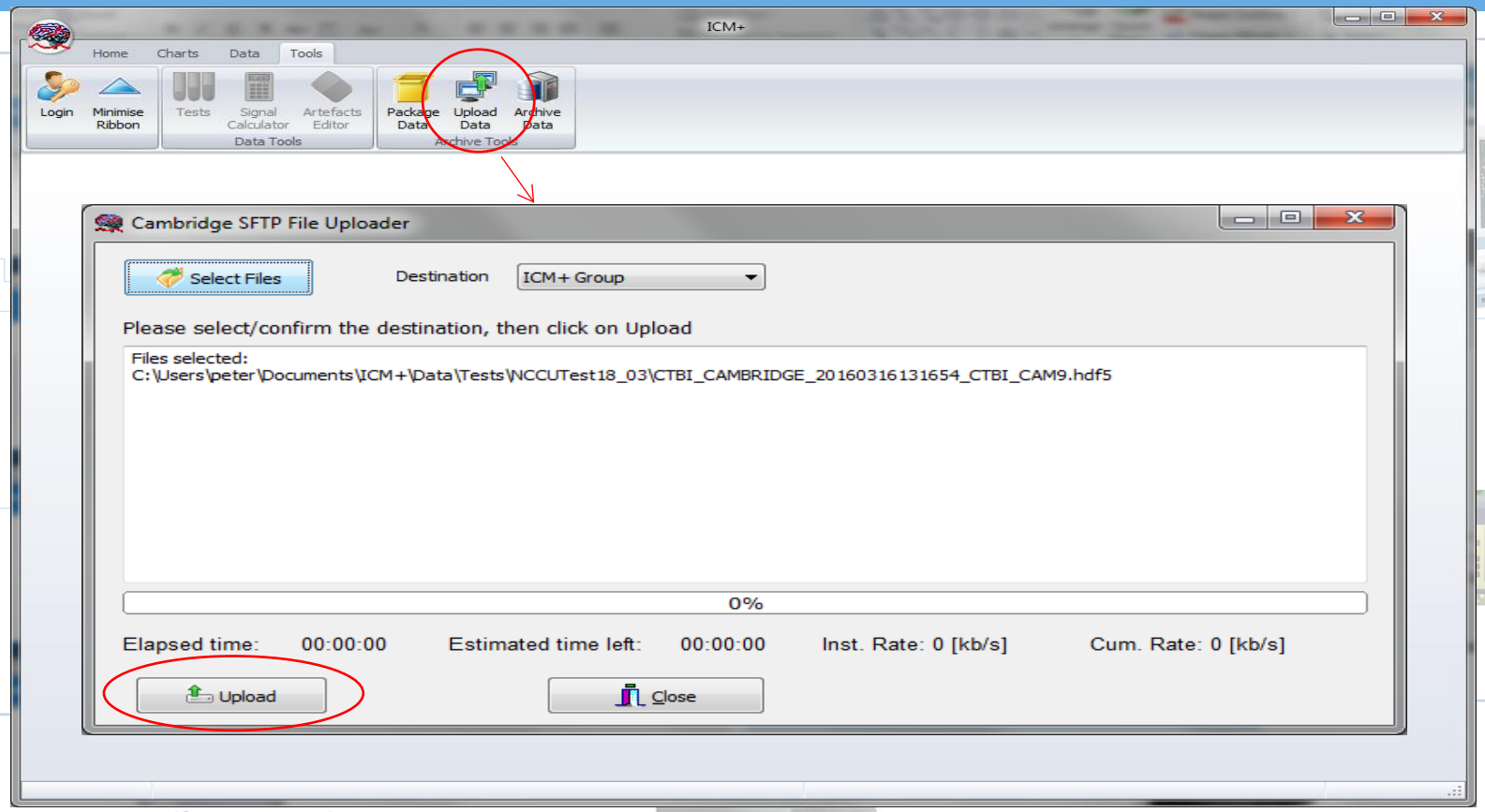


Bedside monitors

File Server in a coordinating centre

Data collection: multicentre collaborative tools

Bedside monitors

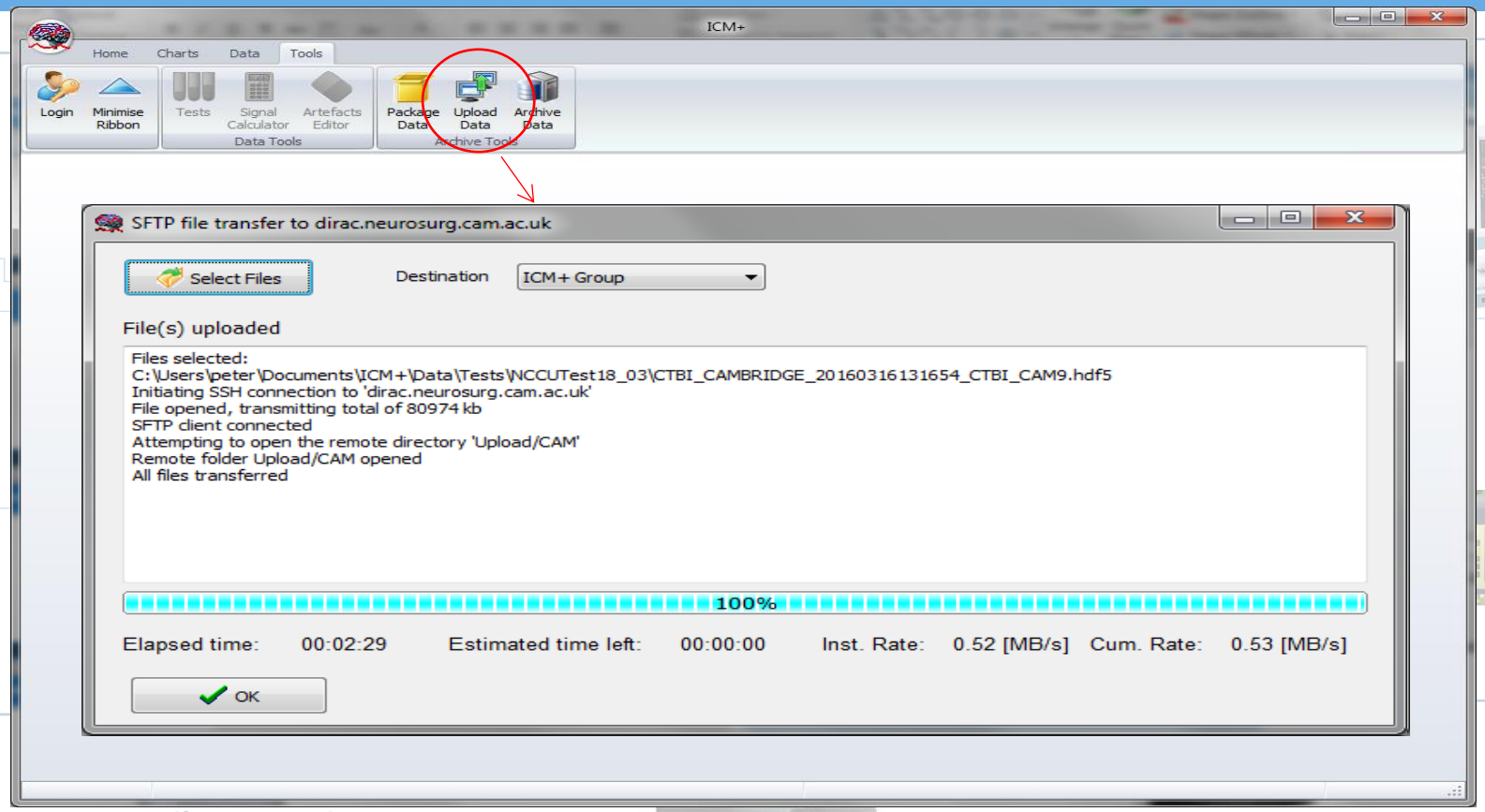


Bedside monitors

File Server in a coordinating centre

Data collection: multicentre collaborative tools

Bedside monitors



Bedside monitors

File Server in a coordinating centre

Conclusions

- I showed you how we ran a prospective interventional **RCT with ICM+:** you can do the same for any other trial.
- **ICM+ is not a black box:** it does what you ask it to do! You need to know exactly how it works for your specific project, details are important! In particular if you make interventions based on its functioning
- **Please test** everything!
- The software in this case works as **integrated in a clinical setting:** don't forget it, make things work together.
- Keep the main actors involved and trained (**clinical team**) and they will love the study as much as you do ☺