I. Create Virtual Patients from Clinical Data

1) Raw clinical data:
   - BG measurements
   - Insulin time/rates
   - Enteral and parenteral dextrose time/rates

2) Fit data: Use integral based parameter ID to generate $S(t)$ profile of insulin sensitivity profile

II. In Silico Virtual Patient Simulation

3) Virtual trial simulations
   Run different controllers on cohort of “virtual patients” to generate BG responses

4) Compare results
   Collate and compare BG responses between protocols/patients

Control simulation outputs:
- Insulin rate
- Dextrose rate (Enteral and/or parenteral)
- Time to next measurement …according to rules of protocol