Steps of the CR processes Emerging differences of the CR processes during longitudinal management of patients suffering of multimorbidity according to Charlin et al. (2012) Management of multiples issues: Analysis of the different aspects of the GPs prioritise patient's problems beforehand, because he knows his or her patient's medical history. (Prioritising) patient and the context GPs try to make links between the new symptoms or problem observed and the chronic diseases. (Articulation) from the very beginning GPs evaluate from the beginning the opportunity to discuss certain issues with his or her patient. (Anticipation) to perform an initial Depending the opportunity and first cues, some problems are already set aside by GPs. (Anticipation) Detect the early representation of the Patients' involvement: problem (e.g., in the cues GPs integrate these clues according to the characteristics of his or her patient. waiting room). **Key message**: Because of the GP's knowledge of his or her patient, this step becomes more important. Clarification of patient, Management of multiples issues: other healthcare Patients and GPs discuss and share the priorities including other healthcare professional requests. (Prioritising) professionals and Problems are not analysed separately and GPs make links between new problem and chronic illnesses. (Articulation) physician requests to Some problems are definitively set aside and rescheduled according to priorities. (Anticipation) establish priorities Determine the Some chronic problems have to be regularly discussed (e.g. treatment burden). (Anticipation) objectives of the depending on urgency, Patients' involvement: relevance and encounter • Including patients' choices and request is essential effectiveness. **Key message**: This step is a key to the management reasoning regarding the various problems of multimorbid patient. Detailed analysis of the Analysis of selected problem using CR path: selected problem using Both the analytical and intuitive approaches seem to be involved in the management reasoning. clinical reasoning Selected problem is set from a new perspective to identify a new disease, but GPs also make link between the problem processes: intuitive and and chronic illnesses. (Articulation) analytical processes. * Priorities between patients' problems have to be re-establish according to the degree of urgency and feasibility of solving Categorise for It focuses on the selected problem analysed. (Prioritising) the purpose of knowledge for action **Key message**: In contrast to understanding and identifying a new problem (e.g. diagnosis), this step is mainly used to action (illness scripts). ** analyse aspects of chronic problems. After selecting the Management of multiples issues: hypothesis to be • Different actions are possible to investigate or act on the selected problem. (Prioritising) explored, a plan of GPs try to coordinate the actions of the different problems to be more effective. (Articulation) action is decided upon. • Wherever possible, urgent actions should be used to carry out future actions (e.g. annual blood tests). (Anticipation) Select the Patients' involvement: purpose of • Multiple ways to solve problems required to obtain patients' opinion to decide on the appropriate action. action **Key message:** The selection of an action plan and its ongoing implementation might represent a large part of the management reasoning.

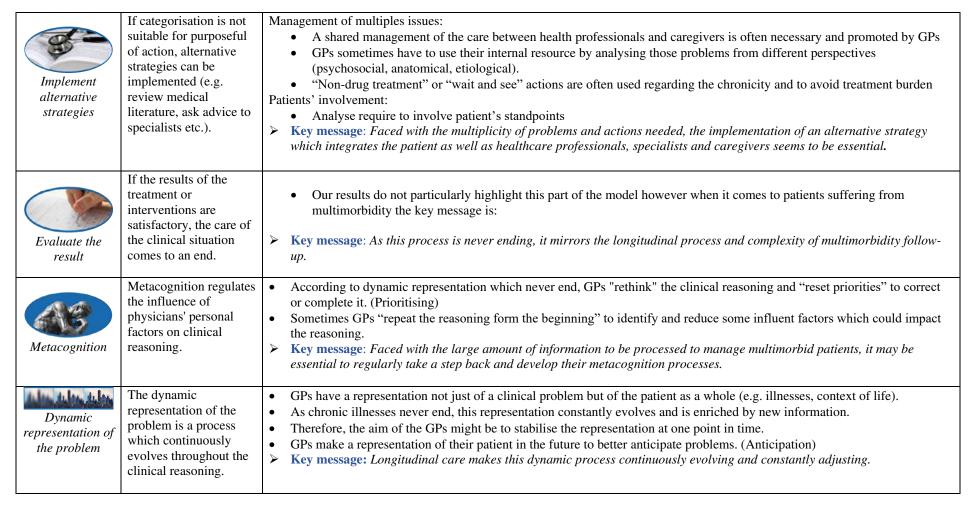


Figure S2. Comparison between the diagnostic reasoning and the management reasoning processes according to the model (graphical representation) of Charlin. (6) CR = clinical reasoning, GP = general practitioner.

^{*} Intuitive process is the clinical reasoning path which is involved an immediate recognition of the problem. Analytical process is the clinical reasoning path where hypotheses have to be confirmed or invalidated afterwards.

^{**} Clinical scripts are a specifically organized knowledge of clinical tasks.