Apps that integrate self-regulation after brain injury

The PaceMyDay and ReachMyGoals apps integrate principles of self-regulation to help individuals with brain injury manage their daily lives. Both apps were developed through an iterative process incorporating input from actual users who had brain injuries.

Self-regulation
Self-regulation is the process of planning, monitoring, and evaluating one's behavior in order to learn from and optimize end results over time. The purpose of each of the three primary components is described below:

- Plan — Consider various aspects of a situation and establish a plan
- Monitor — Check progress on the task and the quality of one's performance as plans are implemented
- Evaluate — Use information gathered from the planning and monitoring phases to evaluate and modify future plans

How can apps integrate self-regulation?
The PaceMyDay (PMD) and ReachMyGoals (RMG) apps were developed to help individuals with brain injury learn to apply self-regulation techniques to track and monitor progress associated with two common brain-injury-related issues: energy management/fatigue (PMD) and goal setting (RMG).

Planning
PaceMyDay integrates planning by encouraging users to plan their day each morning (after waking and assessing their overall sleep, fatigue and energy levels based on their responses to the Wakeup Questionnaire), rather than the night before. This provides users the opportunity to be more realistic about the number of daily tasks they may be able to successfully complete, helping to reduce undue stress/ anxiety and optimizing self-awareness.





ReachMyGoals encourages users to create SMART (specific, measurable, attainable, relevant, timely) goals, including start and due dates and specific tasks necessary to complete each goal.

In addition, both apps include fields for notes and/or strategies that will accumulate over time, providing a history to assist with planning, memory, and tracking successful strategies. For example, including strategies in the PaceMyDay app such as "open Dictionary.com" can

help orient the user to important aspects of the task “Write report.”

One final example of the integration of the planning stage of self-regulation involves the user identifying what she believes to be her optimal duration for a task—the number of minutes the user believes she can stay focused and still have some energy left.



Monitoring

Monitoring is integrated throughout both apps. For instance, in PaceMyDay, as users begin and end each task, they are prompted to identify their current energy level (1-5). This encourages the user to be aware of their energy/fatigue both before initiating a task and after the task is attempted. Their actual task durations are captured and can be used to help monitor the amount of time spent on tasks. After working on a task for the selected duration, users are encouraged to choose an appropriate break activity and duration to help re-energize before returning to their task list or moving on to something else.



ReachMyGoals integrates monitoring by including a special list of upcoming tasks limited to only those tasks due in the next 3 or 5 days. This helps to filter out tasks that need to be done in the future, allowing users to focus on those tasks needing to be addressed right away. In addition, the RMG app incorporates weekly check-ins to help users monitor the successes and challenges associated with each goal. The resulting journals can be shared with others to help with accountability.

Evaluating

The process of evaluating is sometimes overlooked; consequently, individuals tend to continue with the same plan regardless of the outcome(s) over time. Both apps integrate the evaluation process in a variety of ways, capturing relevant information and encouraging review and consideration for future task planning. For example, tasks and breaks from the PMD app can be automatically added to the device calendar to help users become more aware of the number and type of tasks worked on and breaks taken in relation to scheduled appointments, meetings, etc. A simple review of the calendar can provide insights for the user and/or professionals with whom they work.

Each app provides the ability to generate reports that can be shared with doctors and other professionals, as well as family members, to help track and evaluate overall energy and goal progress. In turn, this encourages improved self-awareness and the interaction of self-regulation strategies.

The PaceMyDay and ReachMyGoals apps are available through the iTunes store and include comprehensive online training courses for professionals and individuals with brain injury. For further information, visit bestconnections.org or contact Michelle Ranae Wild at michelle@bestconnections.org.