

Table 1. Structured data collection form based on the HandRehab+ work system

HandRehab+ Work System	QUESTION	EXAMPLE
Person	Who performs the task?	Post-operative orthopedic patients (e.g., recovering from hand, wrist, or elbow surgeries).
	What skills/education are required to complete the task?	Basic reading and smartphone navigation skills
	How does the worker know the task needs to be started?	App notifications and dashboard prompts for daily exercises and assessments.
	What feedback does the worker receive?	Progress dashboards, badge rewards, exercise streak counters.
Task	What is the goal of the task?	Complete exercises, report symptoms, submit exercise recordings, and track recovery progress.
	What is the beginning of the task?	Opening HandRehab+ app and starting the daily pre-exercise survey.
	What is the end of the task?	Completing exercise sessions, post-exercise survey, and submitting optional notes.
	Steps to complete the task?	Log in → Complete Pre-Exercise Survey → View Exercises → Perform/Record → Post-Exercise Survey → Earn Badge.
	Variations in task order?	Some patients may skip video uploads or optional comments.
	Optional steps?	Exercise video upload and open-text comment box.
	Commonly skipped steps?	Open comments and grip strength logging if unavailable.
Technology	What tools/technologies are used?	Smartphone (iOS/Android), internet access, device camera.
	Minimum technological requirement?	Device with internet access and touchscreen.
Environment	Where is the task completed?	Patient’s home, outpatient rehab center, or any safe exercise area.
	Relevant location features?	Well-lit, clear space for safe exercise performance and video recording.
Organization	What protocols exist?	Rehab plans assigned by licensed therapists; HIPAA compliance enforced for all PGHD.