INVEST IN EARLY MOBILITY TO INVEST IN PATIENTS — AND YOUR BOTTOM LINE.

Learn how. Take a closer look at three cases.

Early mobility has far-reaching benefits for patients — and hospitals.¹ Medical facilities with early mobility interventions often have sizable annual net savings, thanks to²⁻⁵:

- Reduced ICU and hospital length of stay (LOS)
- Fewer complications from ICU immobility and ventilators
- Shorter hospital bed stays

Evidence shows that investing in early mobility interventions pays dividends for patients, staff, and administration.²⁻⁶

Here are three examples of institutions that invested in early mobility intervention — and got significant financial returns.
STANDARDIZING THE PROTOCOL

Case Study #1

According to a published study, the following program was successful at Wake Forest University Medical Center, North Carolina.1

The initial investment:
• Wake Forest gathered a mobility team including critical care nurses, physical therapists, nursing assistants, and intensivist physicians.
• The mobility team created a protocol standardizing early physical therapy (PT) in mechanically ventilated ICU patients.
• They determined whether PT was feasible and safe within 72 hours of ICU admission and within 48 hours of endotracheal tube intubation.
• Direct inpatient costs for the protocol group, including the mobility team’s salaries, totaled $6,805,082.

The participants:
• Approximately 330 patients enrolled in the ICU mobility program over a two-year period.
• Patients who met the eligibility criteria received an automatic referral for PT — even if they were not awake and alert.
• Patients unable to actively participate received passive motion exercises three times per day from mobility technicians until they were able to actively participate.
• 80 percent of medical ICU patients received one or more physical therapy sessions during their stay, compared with 47.4 percent of the usual care group.
• 91.4 percent of patients in the protocol group initiated physical therapy in the ICU, compared with 12.5 percent of the usual care group.

Compared with patients receiving usual care, early mobility patients experienced:
• 1.4 fewer days in the ICU
• 3.3 fewer days in the hospital overall
• No adverse events associated with patient mobility activities

Financial outcome:
• Compared to the cost generated by the usual care group, the early mobility protocol group saved a total of $504,789.
BUILDING A REPLICABLE MODEL

Case Study #2

According to a published study, the following program was successful at John Hopkins Hospital, Maryland.2,4

The initial investment:
- Johns Hopkins assembled a multidisciplinary team to design and plan an early mobility program using the “4Es” approach:
  - Engage
  - Educate
  - Execute
  - Evaluate
- The team met weekly for one year during the project’s planning phase. They included:
  - A physical therapist
  - An occupational therapist
  - A part-time mobility technician
  - A physician coordinator
  - A part-time coordinator
  - Representatives from nursing, physical medicine and rehabilitation, critical care, and neurology
- Johns Hopkins hired three new staff members to help implement early mobility:
  - A full-time physical therapist
  - A full-time occupational therapist
  - A part-time rehabilitation assistant
- The initial investment to implement ICU early rehabilitation totaled $358,475.

During the intervention study period:
- The share of Medical Intensive Care Unit (MICU) patients receiving PT or occupational therapy (OT) increased from 70 to 93 percent.
- The median number of PT/OT treatments per patient increased from one to seven.

Patients doing early mobility intervention experienced:
- 2.1 fewer days in average ICU LOS
- 3.1 fewer days in average hospital LOS

Financial outcomes:
- The program netted $817,836 in cost savings.
- Shortened LOS thanks to the early mobility program saved a total of $1,172,312.

Outcomes beyond Johns Hopkins:
- Researchers used data from this and other early mobility programs to generate 24 financial outcome scenarios.
- The scenarios varied based on the number of hospital admissions, direct-variable costs per day, and LOS reductions.
- The financial analysis revealed:
  - 20 of 24 scenarios (83 percent) resulted in net cost savings.
  - Net costs totaled $88,000 in the most conservative scenario.
  - Net savings totaled up to $3.76 million in the best-case scenarios.
TARGETING PATIENT OUTCOMES

Case Study #3

According to a published study, the following program was successful at New York University Langone Medical Center, New York.¹

The initial investment:

- In 2013, administrators decided to focus resources on rehabilitation therapy services in the ICU after noticing a plateau in patient outcomes.
- The medical center added services aimed at:
  - Improving communication
  - Improving cognition
  - Improving swallowing function
  - Early use of speaking valves
- To optimize this early mobility effort for 27 ICU beds, the center added:
  - 5 full-time-equivalent physical therapists
  - 2.5 full-time-equivalent occupational therapists
  - 1 speech-language pathologist
  - 2 rehabilitation aides
- The cost in increased staffing totaled $655,336.

During the study period, early mobility patients experienced:

- 60 minutes of additional rehabilitation therapy services — greatest increases in occupational therapy and speech-language pathology
- 20 percent decrease in ICU LOS, from an average 4.6 to 3.7 days
- 43 percent decrease in floor bed LOS, from an average 6 to 3.4 days

Financial outcomes:

- LOS reductions generated direct cost savings of $2.2 million.
- Net cost savings totaled $1.5 million.

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HOSPITAL LENGTH OF STAY WAS LOWERED

Early-mobility interventions led to significant decreases in hospital LOS across the board.