

Using time-driven activity-based costing to identify value improvement opportunities in Complex Rehabilitation Technology evaluations

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Introduction

Seating & Mobility clinic at Center for Assistive Technology (CAT) at UPMC Rehabilitation Institute

- Individuals with mobility limitations are provided specialized and customized mobility devices (i.e., manual or powered wheelchairs)¹
- Devices are referred to as Complex Rehabilitation Technology (CRT)
- An extensive interdisciplinary approach guided by physical and/or occupational therapists and stakeholders

What are productivity standards?

- Percentage of time dedicated to direct patient care
 - Measures “effectiveness and efficiency”²
 - Does not consider indirect time (i.e., documentation, ordering equipment, phone calls, collaborations, etc.)
- Recent influx of policy changes have increased productivity standards³
- Threatens quality of care provided by clinicians
 - Increased patient caseload
 - Decreased time spent with each patient
 - Decreased time for non-billable tasks

Productivity standards at CAT

75%

Productivity

1.5 hr

Initial CRT evaluation

4

Patients

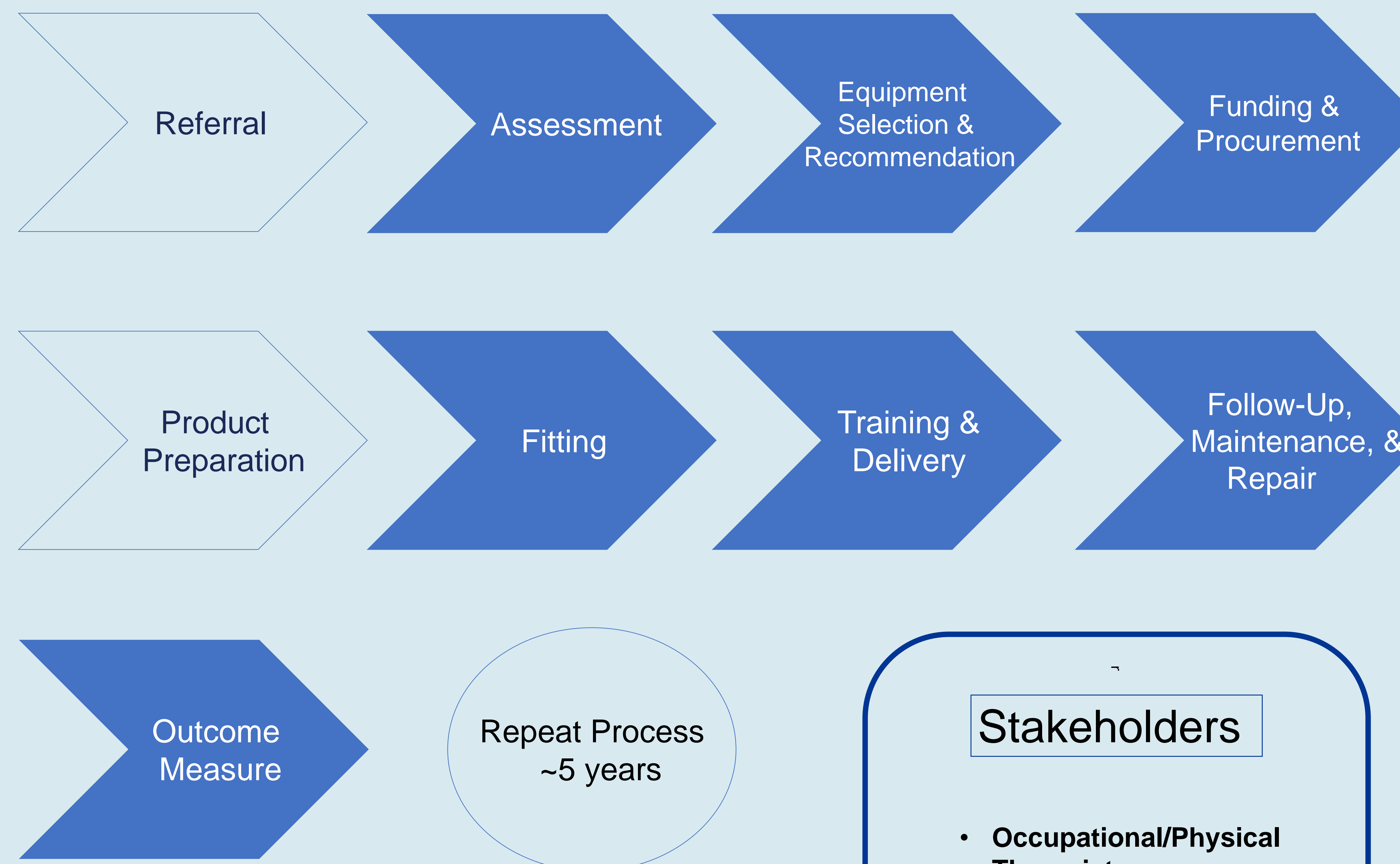
Time-driven activity-based costing (TDABC)

- Costing tool that measures total time required to complete each step in the service delivery of healthcare⁴

Objectives

- Use TDABC to measure the amount of time a clinician at CAT takes to complete all required tasks for a standard evaluation for CRT for a single patient
 - Timing will include reimbursable and non-reimbursable tasks
- Understand how productivity standards are being met by CAT clinicians
- Evaluate effects of increased productivity standards with quality of care for CRT evaluations

RESNA CRT Service Provision Guide⁵



Methodology

- Use TDABC to follow all CAT therapists through RESNA CRT service provision guide during manual or powered wheelchair evaluations
- Identify and time all reimbursable and non-reimbursable tasks that occur throughout the process
- Analyze total time with met productivity standards

Stakeholders

- Occupational/Physical Therapists
- Client
- Seating & Mobility Specialists
- Physician
- Assistive Technology Professional
- Supplier
- Manufacturer
- Insurance/Payers

Impact on Policy

- Increased demands on direct patient care
- Increased patient caseload
- Increased work outside of direct patient care³
- May result in reprimands/warnings for therapist if unable to comply²

Impact on quality of care

- Increased significant stress to practitioners to comply to standards²
- Decreased time with each patient results in decreased time for clinical judgment, rapport, and quality of care³
- Restricted time for therapists to thoroughly comply with RESNA service provision during clinic times
- Contribute to clinician burnout²
- Client cancellations, no-shows, and late arrivals outside of therapist control

Considerations/Implications for CAT

- Explain why traditional outpatient therapy clinics (pediatrics, neuro, etc.) typically handle a higher patient caseload
- Understand how productivity standards are currently met by therapists
- Justify a change in productivity standards and performance-based incentives related to therapist efficiency

Next steps & Future considerations

- Understand all tasks required by stakeholders in a seating and mobility clinic
- Increased time with clients and reduced caseloads may help improve quality of care and stakeholder collaboration²
- Performance-based incentives related to patient experience and clinical quality may have a positive effect in care coordination²

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