

AT Village: Quality Improvement and Community Solutions for Adaptive Technology



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Background

Durable Medical Equipment (DME) and Adaptive Technology (AT) can prevent prolonged hospitalization for medical complications such as pressure sores in an adolescent with spina bifida and missed school days for escalating behaviors in an autistic teen who needs noise-cancelling headphones, a communication device, or a weighted blanket for sensory concerns.

Access to sports and recreation equipment (such as adaptive cycles) is important to both physical health and preventative mental health, not to mention inclusion and social participation. Only a small number of adaptive technologies are paid for via health insurance.

Community resources for obtaining equipment are not currently well integrated with medical care teams that prescribe adaptive technologies.

Objectives

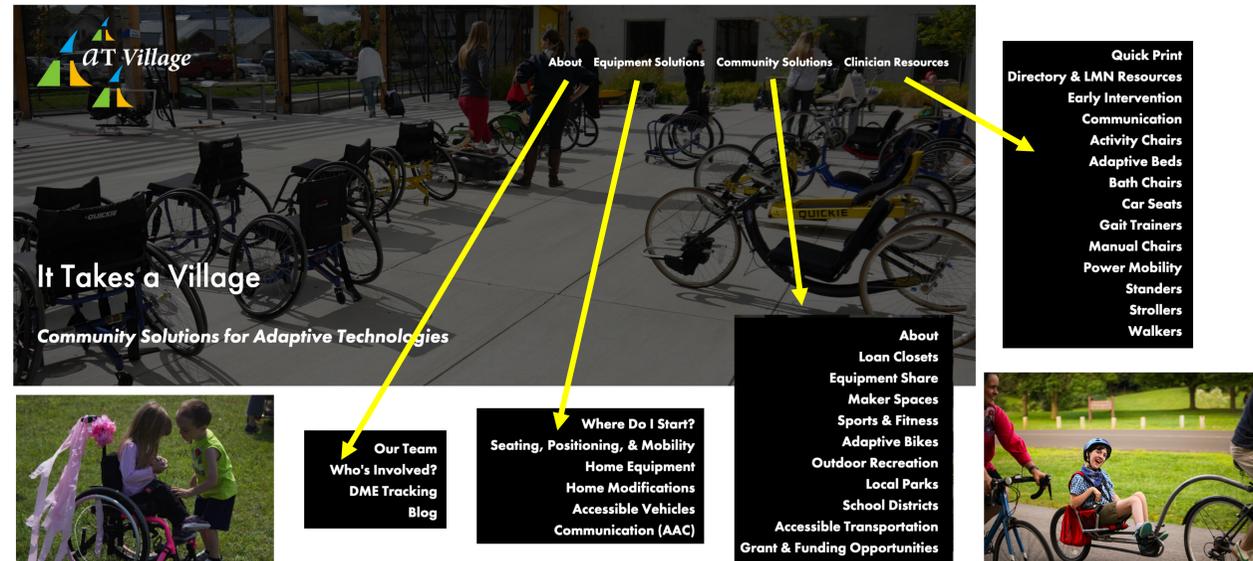
AT Village (ATVillage.org) is a quality improvement initiative that seeks to improve families' experience with the DME process, to promote interprofessional collaboration, and to develop community standards for timely delivery of DME for children with developmental disabilities.

Methods

Setting: Golisano Center for Special Needs at SUNY Upstate Medical University in Syracuse, NY and surrounding 16 county catchment area.

Personnel: A part-time equipment navigator, a full-time physical therapist, and a full-time developmental pediatrician whose practice is focused on the care of children with spina bifida, cerebral palsy, and other mobility impairments.

Intervention: Year-long community-wide quality improvement initiative operationalized as a web resource that links medical providers with patients and families and with more than 800 pediatric physical therapists, occupational therapists and speech therapists in CNY.

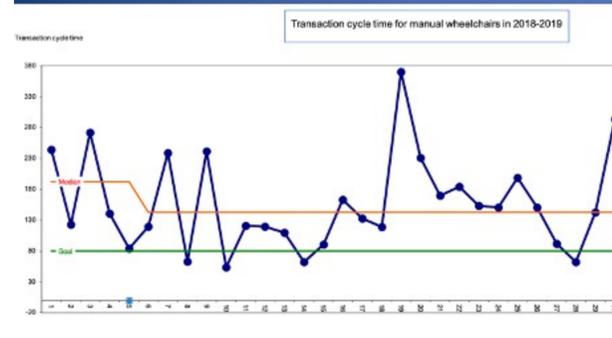


We developed a tracking system for DME orders in the Electronic Medical Record. We then obtained baseline data for time-to-delivery of DME we had prescribed during a two-year period prior to launch of AT Village. After conferring with local vendors, therapists, and families we established our Quality Improvement goals:

- Team Goal 1:** We document timespan from the date equipment is recommended by a medical provider to the date of evaluation by PT/ATP. Our goal for this timeframe is 14 days.
- Team Goal 2:** We document timespan from equipment evaluation to delivery of DME (transaction cycle time). Our goal for this timeframe is 80 days.

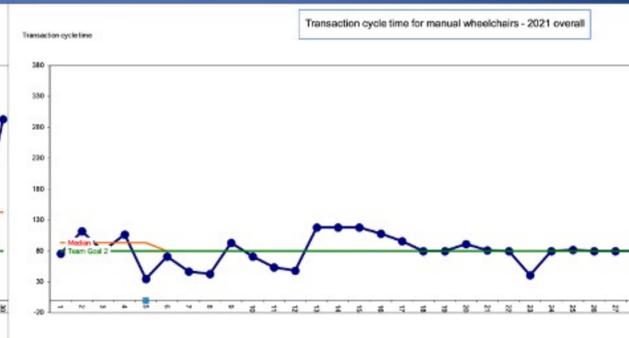
We prospectively track our progress with meeting QI goals by using a Run Chart Template that was developed by Richard Scoville, PhD. Data entered into this template is exported into an easy-to-read graphic is shared on the AT Village website. A red line on the run chart indicates our median time for DME delivery. A green line shows our target goal.

Baseline Transaction Cycle Time



Team Goal 2: 80 days
Baseline median: 142 days
Baseline range: 54 – 370 days

2021 Transaction Cycle Time



Team Goal 2: 80 days
2021 median: 80 days
2021 range: 71 – 94 days

Community Solutions

Quarterly Zoom meetings with school-, community-, and hospital-based physical, occupational, and speech therapists, care managers, physicians, lobbyists, and OPWDD representatives have been conducted to discuss run charts, to identify strategies for working together, and to plan advocacy efforts. In these meetings we also share information about community resources for accessing equipment that may not be covered by insurance such as loan closets, equipment shares, maker spaces, non-profits, schools, and sports teams.



Policy Implications

- Timeline data collected via Epic's Slicer Dicer functionality may be leveraged at the local, regional, and state levels to advocate for increases to public funding streams for DME/AT.
- Crowd sourcing Letters of Medical Necessity and engaging in bidirectional information sharing with therapists can help to reduce insurance denials.
- Community-wide quality improvement initiatives can be replicated at other centers to support collaboration across systems of care, to foster community engagement, and to achieve timely delivery of DME.

