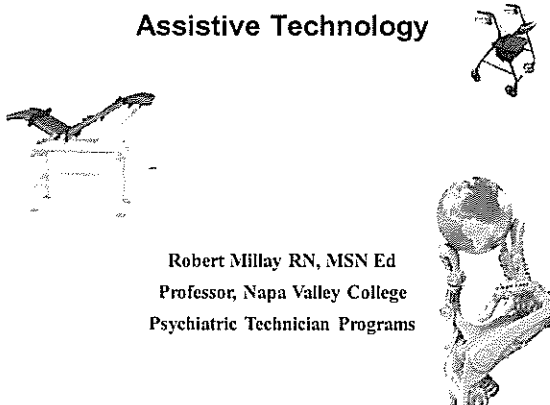


**Assistive Technology**



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Psychiatric Technician Programs

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**Overview**

- Definitions of assistive technology (AT) and assistive medical technology
- Types and examples of rehabilitative and medical AT
- Types of conditions with need for AT
- Assessment, acquisition, and training; universal design
- Funding; durable medical equipment (DME) and limitations on purchase




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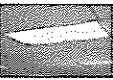
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**Definitions and Overview**




Assistive technology

- 1. Assistive devices:...
- 2. Adaptive/alternative technology:...
- 3. Augmentative devices: ...

Medical assistive technology

Three types: 1. 2. 3.




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**Technology for Medical Assistance**

Replace or augment a vital body function


Examples:

- 1
- 2
- 3
- 4
- 5
- 6

a

b

Examples: supplemental oxygen, continuous positive airway pressure, chest physiotherapy, nasal cannulae, positive end expiratory pressure



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**Technology for Medical Assistance**  
*(continued)*

Monitoring/surveillance devices


- 1
- 2

Nutritional (gastrointestinal) fluid assistance

- 1
- 2
- 3
- 4

IV fluid assistive devices

- Catheter (central line), peripherally inserted central catheter, subcutaneous infusion port



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**Assistive Technology for Disabilities:  
Principles and Examples**

Universal design


Design for...

Technology for physical disabilities

- 1.
- 2
- 3

Technology for sensory impairments

- 1
- 2
- 3



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### Assistive Technology for Disabilities: Principles and Examples (*continued*)

Technology for communication impairments (AAC)...

- 1
- 2
- 3

Technology for cognitive, attentional, and learning disabilities

Computer-based instruction

- 1
- 2
- 3




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### Assessment for Assistive Technology

Interdisciplinary team:...

Begin with low tech...

Functional evaluation of the individual

ICF (WHO, 2007),

Wee-FIM (Wong et al., 2005)

Ensure good match/usefulness:

MPT (Scherer, 1998a),

QUEST 2.0 (Demers, Weiss, & Ska, 2002),

PIADS (Day, Jutai, & Campbell, 2002;

Jutai et al., 2006)

- Training in the use of the device
  - Pre-use training: demos, simulators
  - Monitoring




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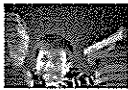
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### Effects of Assistive Technology on Family and Community

- Increases...
- Improves...
- Social isolation risk
- Prolonged use of some significant AT devices can lead to...
- Home care option depends on...
- Arrange therapy before...
- Develop individualized family service plan or ...




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### Effects of Assistive Technology on Family & Community (cont'd)

Funding issues

- 1.
- 2.

Primary funding: insurance:

School:

- 1
- 2

Coordinate payment for AAC devices



Advocacy information

- [Tech Act sites.](#)
- [AbleData.](#)
- Council for Exceptional Children

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### Summary



- Role of assistive technologies
  - Facilitate, improve day-to-day living
  - Replace/augment vital bodily function
  - Provide access at early age
- Challenges
  - Financial/emotional stress
  - Training and arrangements best done pre-discharge
- Future
  - Increased access; universal design influences
  - Improved technology

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